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I-YES Improve Your Emotional Skills (2015-2017)

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01 - Analysis Report

Authors: All partners of I-YES project

Coordination activity: Petru Major

University













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Objectives

One of the main objectives of the I-YES project is to reduce school failure by increasing student's academic performance through the improvement of classroom behavior and social competence, the increasing of student's attentiveness, student's deeper commitment to school and the increased time devoted to school work. In order to achieve this objective, I-YES sought to identify:

- (a) Their main emotional and social skill needs and deficits;
- (b) The main difficulties of teenagers in succeeding academically at school;
- (c) How emotional problems interfere with academic performance.

Data collection

The data analyzed in this report was collected within the I-YES project by the six partners from France, Germany, Greece, Italy, Portugal and Romania. The University of Târgu-Mureş was responsible for developing the research tools and ensure that the proper scientific standards are used in analyzing and interpreting the data. The final decisions regarding the research instrument were achieved via inputs from all partner institutions.

Instruments

The research employed both quantitative and qualitative instruments, namely questionnaires and focus-groups.

The student questionnaire measured three sets of variables:

- (a) Socio-emotional skills based on Goleman's Four- Cluster Emotional Competency Model (i.e., self-management, relationship management, social-awareness, and self-awareness)
- (b) Behavioral problems at school and school atmosphere
- (c) Students' perception of the attitudes towards school and learning expressed by relevant social actors (i.e., parents, teachers, peers, and community).

The teacher questionnaire measured trainers' perception of trainees' socio-emotional skills: self-control, perseverance, relationships management, empathy, school interest, and self-awareness.

The focus groups measured the same variables but instead of closed ended items, they gathered more elaborate and detailed information and captured issues generated by the respondents.

Samples

Trainee questionnaire sample. The student questionnaires have been applied to a total of 263 teens. The national subsamples included 46 participants from France, 34 from Germany, 35 from Greece, 45 from Italy, 65 from Portugal and 38 from Romania. Of the 259 participants who specified their gender, 44.4% were males and 55.6% were females. Participants' age ranged between 14 and 29, with a median of 18; 67.3% of them live in urban areas, whereas 30.4 reside in rural areas.

Trainer questionnaire sample. The teacher questionnaires have been applied to a total of 155 trainers. The national subsamples included 30 participants from France, 36 from Germany, 15 from Greece, 46 from Italy, 18 from Portugal and 10 from Romania.

Trainee focus group sample. The focus groups collected information from a total of 113 trainees. In Germany the focus groups were conducted on 23 participants aged 16-25 undergoing educational training in landscaping, housekeeping and ornamental gardening. In Italy the focus groups were conducted on 14 full-time students aged 15-17. In France the focus groups were conducted on 8 students aged 18-25. In Portugal, the focus groups were conducted on 33 teenagers aged 15-24, enrolled in a 3 years course at ISQ training. In Romania, the focus groups were conducted on 35 participants aged 19-22, who were first year students at several departments of the Petru Maior University.

Trainer focus group sample. The focus groups collected information from a total of 38 trainers (9 from Germany, 5 from France, 7 from Italy, 10 from Portugal, 7 from Romania).

Analytic strategy

What measures did we took to ensure the scientific soundness of the analyses? The scientific analysis of data is a complicated process that is prone to a series of errors. We sought to address appropriately most problematics issues:

(1) One important source of error is to test only the reliability of the scales, without looking at data dimensionality. In order to cope with this issues, we first tested the structure of the data using factor analyses and then constructed subscales according to the results. Factor analyses confirmed the intended structure of the questionnaire with

the exception of the variables behavioral problems, school atmosphere, and wellbeing, were the results showed that the items cannot be explained by a single factor. Consequently, we divided the items into the corresponding subscales. The final set of scales together with their corresponding reliabilities (Cronbach's alpha) and descriptive data are showed in Table 1 from the Appendix. For almost all scales the reliabilities ranged from acceptable to very good. Lowers scores were recorded only for relational well-being and community attitudes toward school and learning.

- (2) Another important source of error is that analyses are often performed without checking if the data satisfy key criteria. For example, in our case, while univariate skewness and kurtosis ranged within acceptable limits, but three multivariate normality tests (Royston, Henze-Zirkler, and Mardia) suggested that data are not multivariate normal.
- (3) An important source of error is that analyses often do not take into account statistical power. To offer a clear idea of how much potential error there is in our results we performed and reported statistical simulations.
- (4) To overcome important methodological limitations, experts strongly urge scientists to also report confidence intervals and effect sizes. While we respected these standards we also performed our analyses within a structural equation modeling framework, which has a series of potential advantages compared to more traditional analytic methods. Specifically, because the multivariate non-normality problem could not be fixed easily (e.g., by eliminating multivariate outliers) we decided to conduct the analyses using robust methods with the *lavaan* (from *latent variable analysis*) package in R.

Results

Students' emotional and social skill needs and deficits

Main findings

Regarding the first objective of the research, the analyses of the quantitative and qualitative data revealed that the main needs and deficit of the students concern the following four important social and emotional processes:

- (1) Self-management skills, especially the self-management of negative emotions (e.g., sadness, anxiety). Students needs concerned (I) the onset of emotions (e.g., students were unhappy that they experience negative emotions in circumstances that should not automatically generate such emotions), (II) the offset of emotions (e.g., students were unhappy by their inability to suppress negative feelings) and (III) their aftermath (students expressed discontent the disruptive cognitive and behavioral consequences of negative emotions). Moreover, students' responses also made apparent their need for a (IV) better knowledge of what emotions are and how they operate and affect our lives.
- (2) School interest. Both students and teachers agreed that this variable represents an important need, but there was a significant discrepancy in how these groups explained the issues. Whereas students tended to attribute the problem to the behavior of the teachers (e.g., lack of teacher involvement in class, uninteresting teaching methods and contents), teachers attributed the problem mainly to negative peer influence.
- (3) *Self-awareness*. Both students and teacher responses indicate that self-awareness skills are represent an essential variable that needs to be improved in order to obtain better results at school. Especially teacher tend to attribute many school related issues to a lack of self-esteem or self-confidence. Students themselves tended to talk less often about such needs and those who did mention low self-awareness tended to also report additional issues, like behavioral problems at school.
- (4) Well-being at school. The questionnaire data showed that students' well-being had three main dimensions and school related well-being had the lowest average scores, suggesting that students are significantly less content with their experiences at school than with other aspects of their social life. In the same vein, the responses collected via focus groups pointed to a similar issue, which seems closely related to that of school interest.

Technical description

The mean values of the scales can be seen more intuitively in Figure 1, which depicts the means and their associated confidence intervals. In a strict sense, the difference between two scores is statistically significant (i.e., there is a low probability to observe such data under the

null hypothesis) if the confidence intervals do not overlap (i.e., p<.01). Overall, the largest values were recorded for parental attitudes, which were close to the maximum of the scale (6.30) whereas serious behavioral issues and negative school atmosphere had the lowest scores (1.91 and 2.52 respectively). If we focus on socio-emotional skills we can notice that relationship management and empathy had significantly higher scores than the other variables, whereas self-control, school interest, and self-esteem had lower scores. Finally, differences between the variables pertaining to wellbeing and perception of school attitudes among various social actors were smaller with school related wellbeing tending to score lower than the other variables.

Gender and country differences

Main findings

Behind these general results, the analyses also found significant gender and national differences:

- (1) Compared to boys, girls tended to report less frequent behavioral and attitudinal problems at school. Nevertheless, the size of these differences was small.
- (2) Country had strong effects, especially on behavioral issues and negative school atmosphere. In essence, Greek and Romanian samples tended to report less problems at school than the other national samples, especially the French sample. Although these findings are consistent with the teacher questionnaire results and even with data obtained by educational international tests, in the end we tended to attribute these differences to sampling. After all, the focus group results revealed more similarities than differences.

Technical description

As revealed in Figure 2, for all measures, whether their differences were significant or not, males scored lower than females on positive attitudes and higher on negative attitudes. It must be stressed that in terms of the magnitude of the effects, gender was less important than country. We used as a measure of effect size η^2 (eta squared). Conventionally, values above .26 indicate strong effects, values lower than .02 indicate small effect whereas values around .13 indicate medium effects. In the case of gender, η^2 ranged between .001 and .062, whereas

for country these values ranged between .022 and .255. For gender, the largest differences were observed on perseverance ($\eta^2 = .062$), school interest ($\eta^2 = .056$), empathy ($\eta^2 = .047$) and self-confidence ($\eta^2 = .026$). For country, the largest differences were observed on serious behavioral problems ($\eta^2 = .255$), mild behavioral problems ($\eta^2 = .224$), negative school atmosphere ($\eta^2 = .177$) and relationship management ($\eta^2 = .168$). These differences are depicted in Figure 3. It can be seen that another important difference between the gender and country effects is that the first ones concern mostly socio-emotional skills variables whereas the later concern mostly negative behaviors and school atmosphere. Regarding the country effects it seems that behavioral problems seem to be most important in the French sample, whereas participants from the Greek and Romanian samples tend to report the least problematic behaviors and attitudes. In the teacher sample country was a far less important predictor (only the effect on relationship management was significant). Finally, country and gender interacted significantly on several variables and Figure 4 shows the two most important such interactions. These graphs suggest that, for negative school atmosphere and self-confidence, the effects of gender varies as a function of the nationality of respondents. Specifically, Portugal was the only country in which the general tendency of girls to score higher on positive variables and lower on negative variables was reversed whereas the French sample had a much larger discrepancy between girls and boys on self-confidence.

When interpreting these data it is important to underline that not only that we worked with convenience samples but the size of the national samples was quite small. Even under ideal sampling conditions, small samples sizes introduce a great amount of noise around the signal and, for this reason, observed effects can be way off their actual values. Figure 5a shows the results of a simulation conducted in R in which we extracted 190.000 samples (10.000 per each sample size) from populations with identical means and standard deviations. It can be noticed that for sample sizes similar to the national subsamples from our study the oscillations of the observed effect sizes (Cohen's d) around the true population mean difference are quite high and that these oscillations became gradually shorter and stabilize after samples sizes greater than 200. These simulations results imply that we should be more confident in the results obtained in the general sample and less confident in the comparisons of the national subsamples.

From these observations it does not automatically follow that the results obtained in the current samples are inherently flawed. For example, one could think that, since in general teenagers in France get higher scores at international tests than many European counterparts that fact that in our sample French teenagers reported more problematic school related behaviors this would imply that this particular sample does not speak well of the general situation in France. Similarly, Romanian and Greek teenagers generally score lower than their European colleagues in international educational tests, yet in our current sample they report some of the most positive attitudes and behaviors. Obviously, no one would expect a small sample to capture well such issues. However, as showed in Figure 5b and 5c, similar findings are revealed even by international tests that are applied to large and representative national samples. German teenagers had the highest scores at PISA 2012 and Romanian teenagers the lowest, yet Romanian teenagers reported a much stronger intrinsic motivation to learn compared to their German colleagues. Similarly, French teenagers obtained higher scores than Italian, Portuguese, Greek, and Romanian teenagers, yet they report some of the most negative learning attitudes. Moreover, in the teacher sample, the differences in relationship management had the same pattern (i.e., Romania had the highest scores and Italy the lowest).

How emotional problems interfere with academic performance

Main findings

Besides identifying the main socio-emotional needs of the students, another major objective of the research was to find out how social and emotional skills interfere with academic behaviors are attitudes and what other variables play a significant part in this respect. In order to achieve the objectives we tested several models that explored the nature and strength of these relationships. These analyses showed that:

(1) Socio-emotional skills have a significant impact on school related behaviors and perceptions. Training socio-emotional skill is likely to be associated to increases in positive school related attitudes (e.g., school interest) and decreases in negative school related behaviors (e.g., skipping classes). The socio-emotional skills with the strongest impact proved to be:

- a. Perseverance: higher perseverance was associated to less frequent mild and serious behavioral issues and to increased school interest and well-being at school.
- b. *Self-control*. Similarly to higher perseverance, stronger self-control was associated to less frequent serious behavioral issues and to increased school interest and well-being at school.
- c. *Self-esteem*. High self-esteem was associated to increased school interest and well-being at school.
- (2) Other variables also proved to be essential predictors of school related behaviors and perceptions:
 - a. Perception of the school atmosphere. Students who perceived a greater negative school atmosphere tended to report more serious behavioral issues, whereas students who perceived a greater positive school atmosphere had stronger interest in school related activities and reported greater well-being at school.
 - b. *Perception of parental support*. This variables was one of the most important inhibitor of negative behaviors at school, in the sense that perception of more supportive parental attitudes predicted less behavioral issues.
 - c. *Perception of teacher attitudes*. This variables was one of the most important stimulator of school interest and well-being at school. That is, to the extent that student perceived their teachers as more supportive of their education efforts they are happier and more interested in school activities.

These results imply that improvement on any of the critical variables is likely to also improve the academic standing of the students and that optimal results require complex, multilevel interventions.

Technical description

The results revealed by the best fitting model are described in Table 2. The model reveals both common on distinct predictors of the target variables and also a few indirect effects. Thus, among the social-emotional skills perseverance, a facet of self-management skills proved to be a significant predictor of all target variables, with the exception of wellbeing at

school. Specifically, students who reported a greater degree of perseverance in their school related activities also reported fewer disruptive school behaviors and more interest in school activities.

Self-awareness variables had mixed effects, in the sense that they had a positive effect on some target variables but a negative effect on others. On one hand, self-esteem was positively associated to well-being at school and self-confidence was positively associated to school interest. On the other hand, self-confidence was also positively associated with mild behavioral issues and self-esteem was positive associated with serious behavioral issues.

Negative school atmosphere was a significant positive predictor of behavioral problems, especially of serious behavioral problems a finding which suggest that problematic students behaviors are more likely in places where students perceive the existence of non-simulative learning norms and values. Positive school atmosphere also had one positive effects, namely on wellbeing at school. Positive parental attitudes were associated to less serious behavioral problems whereas positive teacher attitudes were associated to increased wellbeing at school.

Finally, although we expected more significant indirect effects, the analyses revealed that self-control and teacher attitudes had indirect effects on school interest via wellbeing at schools. That is, students with higher self-control and who perceive more positive teacher attitudes towards them report higher levels of wellbeing at schools and this variable is further associated to higher levels of school interest (the estimates and associated p values for the two indirect effects were .045, p<.02 and .070, p<.01, respectively).

To resume, the analyses of the students sample confirmed our expectations that socioemotional skill are important factors behind crucial school related attitudes and behaviors. In this particular sample self-management skills proved especially beneficial, whereas selfawareness variables had mixed effects. In the same time the analyses also revealed the importance of the students' social environment, especially their perception of parental and teacher attitudes. Overall, these findings show the importance of a holistic approach that focuses not only on individual variables but also on the learning environments in which teenagers operate.

Data from the focus groups corroborate some of these findings but also add in some different perspectives. First, the focus groups confirmed the important role played by

personal socio-emotional skills. Teenagers mentioned several strategies and techniques they use to gain or maintain emotional balance (e.g., diverting their attention to positive things when distressed, using relaxation techniques). There was an overall agreement that negative emotions have a stronger impact on behaviors and their consequences are harder to control. Some trainers pointed out that the strong influence of negative emotions and behaviors is in stark contrast to their frequency. That is, negative behavior may quite rare compared with positive behaviors, but when they appear their effects can be more visible and difficult to manage. Some participants said that one negative experiences have a negative impact on their behavior at school for an entire day, whereas other considered that a few minutes are enough to control such emotions and their effects.

Second, also similar to the results revealed by the analyses of the questionnaires, the focus groups indicate the important role played by parents in helping teenagers manage their emotions and emotional reactions. Responses from various national groups indicate that parents play a significant role both in helping attenuate the effects of negative emotions and in generating and maintaining positive emotional states.

Third, participants indicated teachers as a very important factor that shapes their academic interest and academic self-confidence and self-esteem, focusing on the need for teachers to show engagement at classes and to treat students in a fair and friendly way. It is interesting that participants from different national groups underlined the problem of the contents transmitted by teachers, accusing a very high theory to practice ratio that they found disconcerting. These teenagers actually declared that they would prefer not only contents that would make them aware of the importance of what they are learning but also different types of teaching methods, that would be more open and engaging.

Fourth, the mixed reports regarding the interactions with peers may explain why this factor was not a significant predictor in the questionnaire analyses. On one hand, teenagers reported that interactions with their colleagues play an essential role in maintaining a positive mood, in maintaining their self-esteem and in managing school related issues. On the other hand, teenagers stressed that interaction with their colleagues may also be difficult and even a source of conflict. Interestingly, teachers considered that teenagers' relationships with their peers probably represent the most important factor affecting their emotional equilibrium. In the same time, they stress that today relationships are very superficial and may fail to play the

positive influence that they should. Actually, in the Portuguese focus group the trainers attributed most negative school related behaviors to peer influence.

As in the questionnaire, teachers view students less positively than students perceive themselves. Teachers consider that students have low academic self-confidence and self-esteem and that they do not know their true potential. This is in contrasts with the apparent positive view students report both in the questionnaire and the focus-groups. Especially in the Italian group, students are described in negative terms "they don't know how to deal with them [emotions] and they have impulsive reactions, seeking physical contact, sharing with their classmates the emotion, disturbing, teasing their classmates, closing physically, speaking loudly, almost without filters and in order to be noticed, asking to leave the classroom and crying". In the same time, teachers describe their own behavior toward students in a very positive manner, orienting towards helping them with the best intentions and a great amount of tact.

Conclusions

To resume, Objective 1 was to identify the main socio-emotional needs of the students). The research suggest that the following variables are most critical in this respect:

- (1) Self-management skills, especially the self-management of negative emotions (e.g., sadness, anxiety). Students needs concerned (I) the onset of emotions (e.g., students were unhappy that they experience negative emotions in circumstances that should not automatically generate such emotions), (II) the offset of emotions (e.g., students were unhappy by their inability to suppress negative feelings) and (III) their aftermath (students expressed discontent the disruptive cognitive and behavioral consequences of negative emotions). Moreover, students' responses also made apparent their need for a (IV) better knowledge of what emotions are and how they operate and affect our lives.
- (2) *School interest*. Both students and teachers agreed that this variable represents an important need, but there was a significant discrepancy in how these groups explained the issues. Whereas students tended to attribute the problem to *the behavior of the teachers* (e.g., lack of teacher involvement in class, uninteresting teaching methods and contents), teachers attributed the problem mainly to *negative peer influence*.

- (3) *Self-awareness*. Both students and teacher responses indicate that self-awareness skills are represent an essential variable that needs to be improved in order to obtain better results at school. Especially teacher tend to attribute many school related issues to a lack of self-esteem or self-confidence. Students themselves tended to talk less often about such needs and those who did mention low self-awareness tended to also report additional issues, like behavioral problems at school.
- (4) Well-being at school. The questionnaire data showed that students' well-being had three main dimensions and school related well-being had the lowest average scores, suggesting that students are significantly less content with their experiences at school than with other aspects of their social life. In the same vein, the responses collected via focus groups pointed to a similar issue, which seems closely related to that of school interest.

Objectives 2 and 3 focused on how emotional problems interfere with academic performance and on identifying and analyzing other variables that impede academic success. The analyses found the following main predictors:

- (1) Socio-emotional skills have a significant impact on school related behaviors and perceptions. Training socio-emotional skill is likely to be associated to increases in positive school related attitudes (e.g., school interest) and decreases in negative school related behaviors (e.g., skipping classes). The socio-emotional skills with the strongest impact proved to be:
 - a. Perseverance: higher perseverance was associated to less frequent mild and serious behavioral issues and to increased school interest and well-being at school.
 - b. *Self-control*. Similarly to higher perseverance, stronger self-control was associated to less frequent serious behavioral issues and to increased school interest and well-being at school.
 - c. *Self-esteem*. High self-esteem was associated to increased school interest and well-being at school.
- (2) Other variables also proved to be essential predictors of school related behaviors and perceptions:

- a. Perception of the school atmosphere. Students who perceived a greater negative school atmosphere tended to report more serious behavioral issues, whereas students who perceived a greater positive school atmosphere had stronger interest in school related activities and reported greater well-being at school.
- b. *Perception of parental support*. This variables was one of the most important inhibitor of negative behaviors at school, in the sense that perception of more supportive parental attitudes predicted less behavioral issues.
- c. *Perception of teacher attitudes*. This variables was one of the most important stimulator of school interest and well-being at school. That is, to the extent that student perceived their teachers as more supportive of their education efforts they are happier and more interested in school activities.

Based on these findings we recommend interventions focused on one or more of the highlighted socio-emotional skills. Given the complex features of socio-emotional skills revealed by the focus groups we further recommend that the intervention program should match this complexity in order to achieve their aims. That is, for each socio-emotional skill, interventions should work at level of knowing

- (1) about the emotions (i.e., activities designed to teach students the nature and functions of emotions)
- (2) to identify emotions (i.e., activities designed to enable students to use their knowledge of emotions in order to be able to correctly identify them both in themselves and in other persons)
- (3) to use emotions (i.e., activities designed to give students the tools to understand and exploit the interaction between emotional dynamics and school related activities)
- (4) to control emotions (i.e., mindfulness and other activities designed to offer students strategies and techniques that control the onset and offset of emotions).

Appendix

Table 1 Descriptive statistics of student questionnaire's scales. Values in parentheses represent the means from the teacher sample

	Subscales	Items	Reliability	Mean	SD	Skewness	Kurtosis
Self-management	Control	Q1-Q5	.73	4.65(4.73)	1.13	-0.32	-0.23
	Perseverance	Q6-Q8	.70	5.03(4.47)	1.17	-0.38	-0.28
Relationship management	Relationship management	Q9-Q11	.68	5.30(4.64)	1.22	-0.84	0.61
Social-awareness	Empathy	Q12-Q13	.80	5.29(4.58)	1.41	-0.79	0.27
	Interest	Q14-Q18	.81	4.77(4.78)	1.29	-0.45	-0.19
Self-awareness	Self-confidence	Q19-Q21	.79	5.02(4.25)	1.16	-0.51	-0.06
	Academic self-esteem	Q22-Q25	.73	4.75	1.10	-0.26	-0.34
Behavioral problems	Mild problems	Q26-Q28	.75	2.73	1.40	1.09	0.55
	Serious problems	Q29-Q32	.77	1.91	1.16	1.6	2.21
Parental attitudes	Parental attitudes	Q35-Q37	.62	6.30	0.98	-1.61	2.29
Teacher attitudes	Teacher attitudes	Q38-Q41	.81	5.08	1.28	-0.73	0.27
Peers attitudes	Peers attitudes	Q42-Q45	.69	5.15	1.21	-1.13	1.82
Community attitudes	Community attitudes	Q46-Q47	.53	4.83	1.32	-0.47	-0.12
School climate	Positive values	Q50-Q52	.67	5.27	1.15	-0.62	0.18
	Negative values	Q53-Q54	.75	2.52	1.50	0.95	0.18
Well-being	School	Q56,57,60	.71	4.83	1.11	-0.42	0.09
	Friends	Q61-62	.55	5.02	1.18	-0.51	-0.01
	Personal	Q55,58,59	.63	5.63	1.12	-0.93	1.01

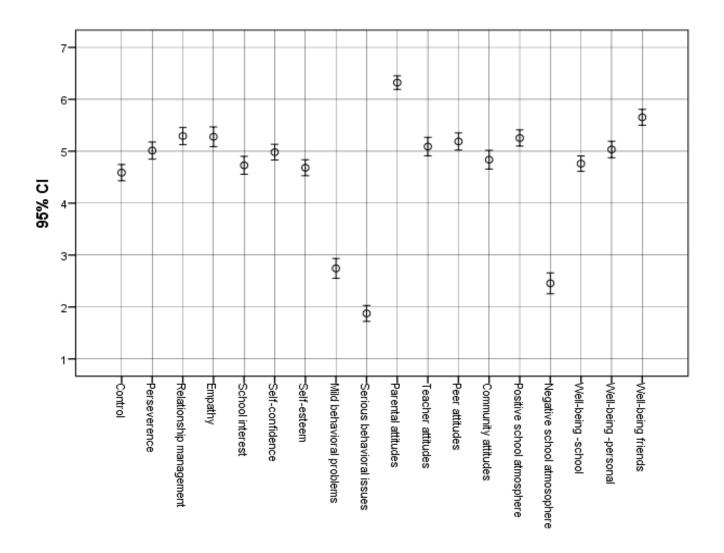


Figure 1. Means and 95% confidence intervals of the student's questionnaire's scales

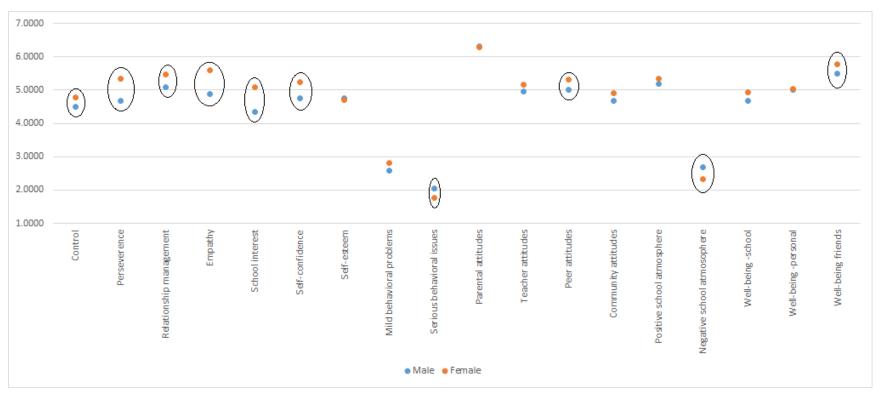


Figure 2. Means of the student's questionnaire's scales by gender. Circled differences are statistically significant a p<.05.

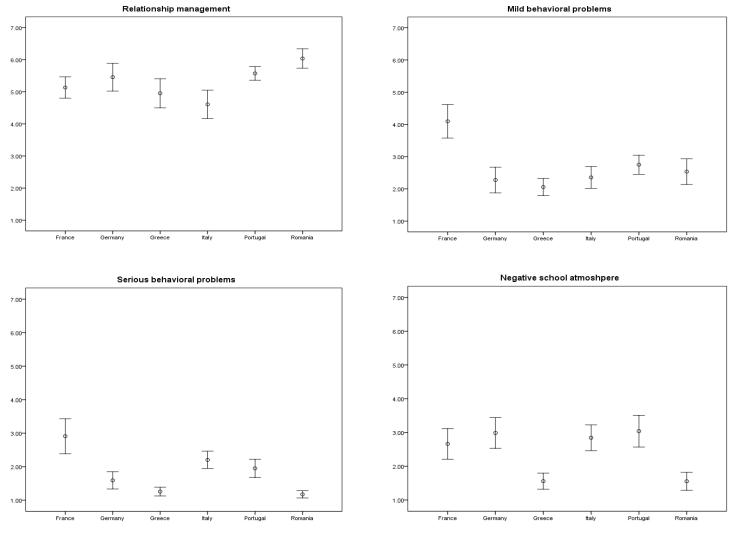


Figure 3. Means of the variables for which country had the largest effects.

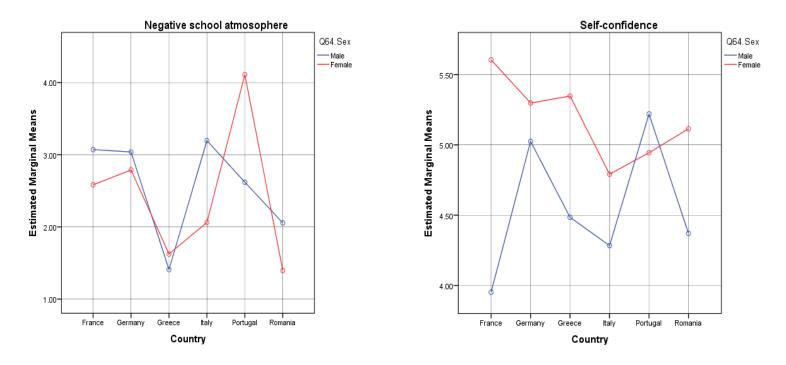
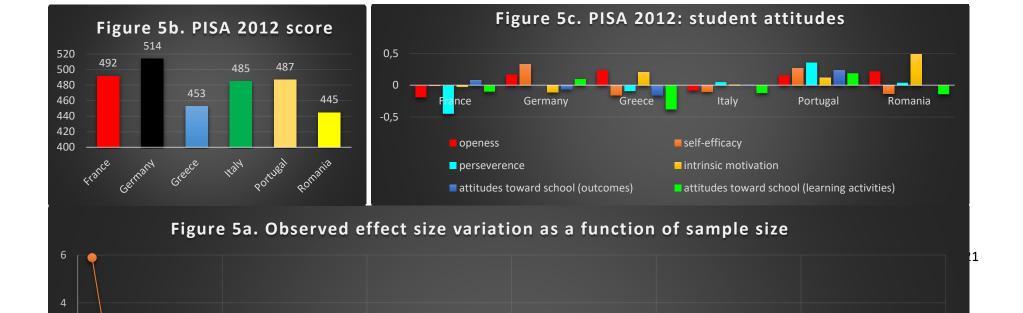


Figure 4. Interaction of country and gender on perceived negative school climate and self-confidence.



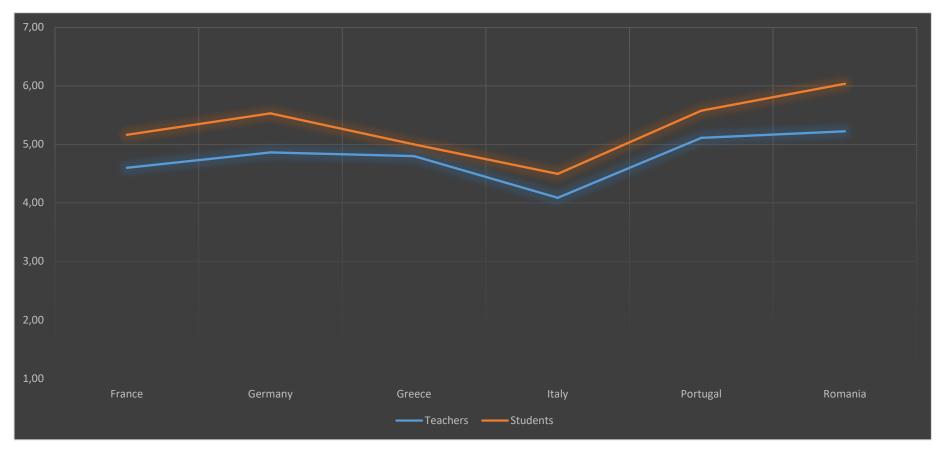


Figure 6. Means scores among student and teacher sample on the relationship management variables



Table 2. Predictors of behavioral problems, negative school atmosphere and school interest (χ^2 =22.57(20), p<.40, NNFI=.99, RMSEA=.022, 95% CI (.00, .056), SRMR = .027)

	Estimate	Std.Err	Z-value	Р	Standard
I. Mild behavioral issues					
Perseverance	-0.232	0.09	-2.562	0.01	-0.194
Self-confidence	0.23	0.077	2.976	0.003	0.19
Community attitudes	-0.155	0.062	-2.5	0.012	-0.147
Negative school atmosphere	0.184	0.061	2.997	0.003	0.199
II. Serious behavioral issues					
Self-control	-0.178	0.064	-2.768	0.006	-0.176
Perseverance	-0.153	0.065	-2.349	0.019	-0.156
Self-esteem	0.18	0.064	2.824	0.005	0.173
Parental attitudes	-0.263	0.079	-3.315	0.001	-0.225
Community attitudes	-0.124	0.049	-2.548	0.011	-0.142
Negative school atmosphere	0.29	0.051	5.686	<0.001	0.382
III. Wellbeing at school					
Self-control	0.204	0.049	4.153	<0.001	0.207
Self-esteem	0.25	0.057	4.395	<0.001	0.248
Teacher attitudes	0.316	0.054	5.886	<0.001	0.364
Positive school atmosphere	0.149	0.058	2.589	0.01	0.153
IV. School interest					
Self-control	0.137	0.074	1.859	0.063	0.121
Perseverance	0.478	0.066	7.236	<0.001	0.436
Self-confidence	0.106	0.062	1.714	0.087	0.095
Teacher attitudes	0.126	0.054	2.318	0.02	0.126
Wellbeing at school	0.222	0.064	3.497	<0.001	0.193