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Prospective study on the attitude toward school of secondary school students in the post-pandemic period

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Abstract. This paper is aimed to study the attitude of secondary school students towards school. The research was conducted on a sample of 437 secondary school students and 42 teachers, who teach them. Students were given a questionnaire to identify their attitude towards school from five perspectives: students' self-perception from an academic point of view, students' attitude towards the school itself, attitude towards teachers, the importance they attach to goals, motivation, and self-regulation. Group interviews with teachers explored the relationship between teachers and students, how teachers relate to students, how they perceive students, how school assessments are done, how they provide feedback to students, as well as issues of improving students' attitudes towards school. The results of the study revealed certain associations between students' attitudes towards school and teachers' perception of it.

Keywords. academic self-perception, students' attitude towards teachers, students' attitude toward school, motivation, self-regulation.

1. Theoretical landmarks

Children's attitudes are very important and affect their psychological statuses, such as feelings, self-esteem, stable behavior, and educational performance (Sa'di, 2001).

The attitude toward school consists of the self-reported interest of the students and the pleasure towards the school and the courses. Studies have shown that young people are more interested in learning. Children's cognitive attitude toward school demonstrates statistically significant associations with achievement. Students' interest in courses is related to the use of self-regulatory strategies and motivation. The student's attitude toward the courses is influenced by the interest in the course and by the perception of the relevance of its future usefulness. A negative attitude toward school can influence school performance (McCoach, 2002).

The most important factors that influence adolescents' attitudes towards school are their mental state and level of conscientiousness, and academic performance is influenced by the characteristics of parents rather than students, although their effects can be better described as moderate (Heaven & Newbury, 2004).

There are differences in students' attitudes towards school depending on geographical location. Thus, Murphy et al. (2006) argue that Irish students prefer all learning subjects, while those in Oman do only half of them. If Irish girls have a more positive attitude, there are slight differences between the boys and girls in Oman. Both Irish and Oman students prefer

experiments and practical work and are more optimistic as they gain experience. Tyson (2002) suggests that black students start school very much achievement-oriented and engaged in the schooling process.

Research by Erkman et al. (2010) showed that the perception of teacher acceptance was significantly positively correlated with self-image, sub-scales of attitudes towards school (academic self-perception, attitude towards teachers, towards school, assessment of motivation, and values), and school results. The study also shows that the acceptance of teachers perceived by students and academic self-perception was the only significant precursors to the academic achievement of boys. For girls, only academic self-perception was significantly associated with school results. The bottom line is that the perception of teachers' behavior varies by gender.

The study conducted by Papanastasiou (2002) identified the existence of three external factors that can be precursors of students' attitudes towards sciences learning: the family's educational environment, the students' encouragement, and the school climate. The way teachers teach can be a predictor of students' attitudes towards science.

Structural analysis by Abu-Hilal (2000) reveals that attitudes towards school influence achievements, but only indirectly. The level of aspirations has a significant direct effect on achievements.

Holfve-Sabel (2006) concludes from his study that the attitude of students towards school is better than 35 years ago because in the past there was an emphasis only on theoretical knowledge, but now the focus is on the aspects of interaction in learning, and children are more interested.

Several instruments have been developed to assess children's attitudes towards school. The Student Attitudes Toward School Safety Measures (SATSSM) was developed as a new tool through which the attitude towards high school students can be accurately assessed. This instrument has 30 items, operationalized on a Likert scale from 1 (strong disagreement) to 5 (strong agreement). SATSSM can also be adapted for use in middle school and can provide important information about students' attitudes towards research, meditation, and supervision (Young et al., 2002).

Another instrument is the "Children's Attitudes to School Scale" (CATSS), developed by Sa'di (2001) to measure students' attitudes towards school. The tool has 15 items, on a scale of 1 to 3. The reliability of the internal consistency was estimated for this scale using the Alpha Cronbach coefficient. CATSS was applied to children in Jordan. The study concluded that there are children at all levels and of both sexes who have a negative attitude towards school.

It is very important to identify the hidden reasons that determine the negative attitude of students towards school. Often this attitude is influenced by the negative attitude of parents towards the school. However, the variations in children's attitudes towards school are strongly in line with differences in age and gender, not with the field of schooling (Sa'di, 2001).

"The Scale of Educational Attitudes" (SEA) is a tool for assessing students' opinions toward school, developed by Azman (2005). The different attitudes will place students in four categories: disinterested students, interested in having an occupation, interested in studying, and interested in having a profession.

Those in the first category do not recognize the importance of education, and therefore do not do their homework, are not interested in anything related to school, are unruly, and consider school boring. Their motivation is extrinsic.

Those in the second category admit that it is good to get a diploma, but only for the reason of being able to practice a trade, not because they are interested in education. They are

performance-oriented, and have learning skills, but consider many of the school subjects uninteresting. Their motivation is both intrinsic and extrinsic.

The third category is students who like to learn, are interested in many areas of knowledge, do their homework conscientiously, and recognize both the importance of education and studies. Their motivation is intrinsic.

The fourth category is constituted of students who have a high level of motivation and learning orientation and have set themselves high targets from a professional and academic point of view that they want to achieve. This tool has been validated for each subsection, with all scores being significant ($p < .01$). The results provided by "The Scale of Educational Attitudes" can be used by teachers to improve the educational process by adapting the curriculum to the real needs of students (Azman, 2005).

To examine the factors associated with the school feelings of kindergarten and first-grade children, researchers Valeski and Stipek (2001) proposed a tool called Feelings About School (FAS). It measures children's perceptions of academic competence, their feelings about the teacher, and their general attitude towards school. FAS has 12 items, operationalized on a Likert scale from 1 (not good) to 5 (very good). In general, in kindergarten and the first year of school, the attitude of children is positive, and their feelings about their relationship with teachers are more positive in the first grade, compared to kindergarten. Children's perception of their competence is a predictor of attitudes towards school.

Studies conducted by Mombourquette (2007) revealed that students' school performances were positively correlated with the involvement of parents in the school life of students. Parents need to set expectations for their children that they can meet. Children should not be protected from making decisions, from assuming responsibilities, but should be encouraged in these directions. Parents need to help their teenage children understand their personalities and possibilities, overcome their limits, expanding their horizons.

2. Research methodology

In this study, we used two data collection instruments: a standardized questionnaire for students, which provides scores on different subscales of their attitude towards the school, and a semi-structured interview addressed to teachers, which resulted in certain information on how teachers perceive students' attitudes towards school, compared to the online and face-to-face periods. The data collected using the questionnaire was processed in IBM SPSS version 26.0 statistical analysis program.

2.1. Sample

The selected sample was 437 secondary school students, out of which 226 girls and 211 boys. The ages were between 10 and 16 years, most of them being 13 years old, representing a percentage of 27.69%. The grade distribution was relatively uniform: in the fifth grade there were 105 students, which represents 24.03%, in the sixth grade there were 102 students, which represents 23.34%, in the seventh grade there were 122 students, which represents 27.92%, and in the eighth grade there were 108 students, which represents 24.71%.

2.2. Data collection instruments

2.2.1. The Questionnaire of Attitude towards School. Although numerous scales measure students' attitudes towards school, I chose for this study the questionnaire developed by McCoach (2002), the "School Attitude Assessment Survey – Revised" (SAAS-R). The tool has 35 items, initially operationalized on a Likert scale from 1 (total disagreement) to 7 (strongly agreed). To make it easier to complete the questionnaire, we have reduced the scale to 5 levels,

as follows: 1 – total disagreement, 2 – little to agree, 3 – no agreement, no disagreement, 4 – agree, 5 – strongly agreed.

The results of the tool highlight the students' attitude towards the school viewed from five perspectives: the students' self-perception from an academic point of view, the student's attitude towards the school itself, the attitude towards the teachers, the importance they attach to the goals, the motivation and self-regulation.

The 35 statements are grouped as follows: academic self-perception (questions 2, 3, 5, 11, 13, 20 and 22), attitude towards teachers and classes (questions 1, 9, 14, 16, 17, 31, 34), attitude towards school (questions 6, 7, 12, 19, 23), the importance given to targets (questions 15, 18, 21, 25, 28, 29), motivation and self-regulation (questions 4, 8, 10, 24, 26, 27, 30, 32, 33, 35).

The School Attitude Questionnaire has been validated for each of the five scales, the values obtained being higher than 0.8, which demonstrates a good fidelity of the instrument (see Table 1).

Table 1. Alpha Cronbach Coefficient for the School Attitude Questionnaire

Reliability Statistics

	Cronbach's Alpha		
	Cronbach's Alpha	Based on Standardized Items	N of Items
Academic self-perception	,827	,828	7
Attitude towards teachers	,878	,879	7
Attitude towards school	,926	,926	5
Goal valuation	,819	,821	6
Motivation and self-regulation	,855	,860	10

2.2.2. *Focus groups with teachers.* To identify certain aspects of the relationship between teachers and students, but also the teachers' perception of students and the school before the Covid-19 pandemic and after it, reflected in the online school activities, we organized focus-group meetings with teachers from different schools. The main objectives of this activity were: to identify the students' attitudes towards teachers and teachers towards students, to investigate aspects related to the evaluation of students, as well as to outline an image of the teacher as he is and how he would like to be.

To start the discussion, I prepared some open questions through which I found out information about the teachers regarding their names, seniority in education and the school, hobbies, and other aspects of personal life that they wanted to reveal. Then the discussion gradually focused on introductory and transition questions to activities related to school, about the children they work with, and later focused on the central topic of the meeting: the students' attitude towards school. The closing questions investigated the teachers' opinions on the job they practice, the positive and negative aspects they notice, and suggestions for the future.

3. Results and discussions

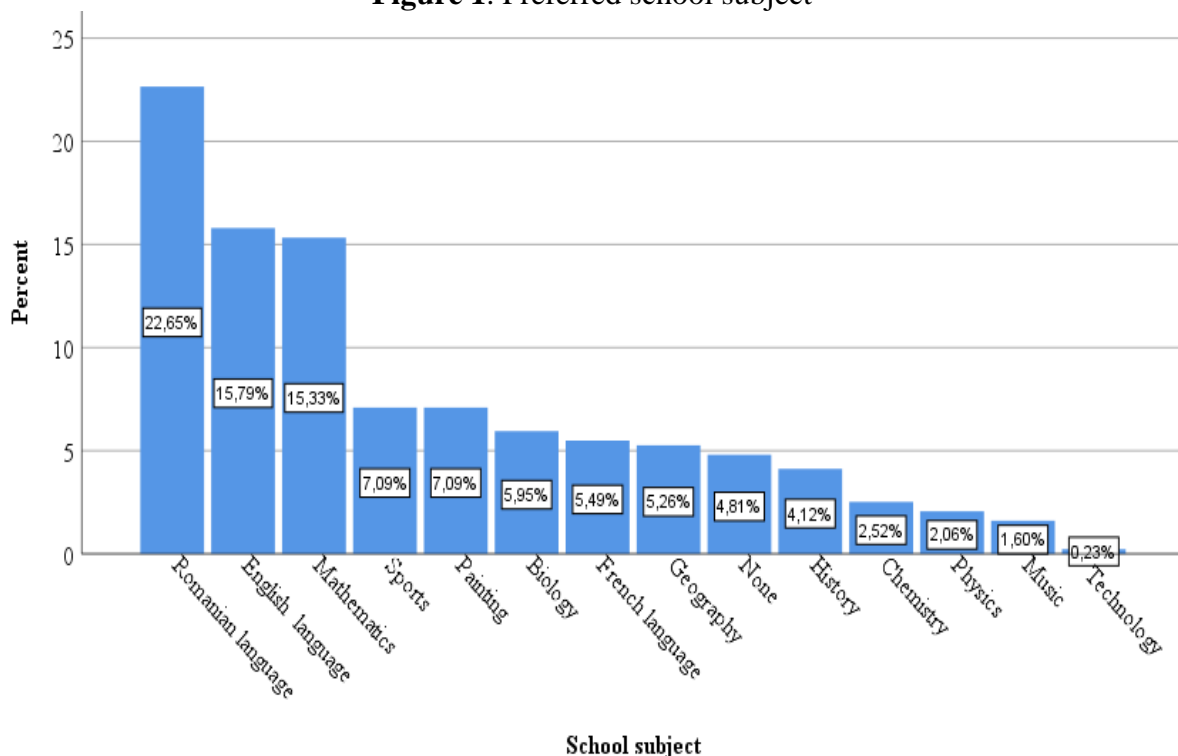
First of all, issues related to the composition of the family and the absence of parents due to their departure to work abroad or their absence were analyzed. Thus, 4 students do not have a mother, of which 1 girl and 3 boys, 41 students have no father, of which 23 girls and 18 boys. Most students have both parents at home with them, but 7.78% of students have fathers left to work abroad, 1.37% have their mothers left, and 1.14% have both parents left, these children being left in the care of grandparents or other relatives. Analyzing the percentage of parents who left to work abroad, it is observed that the majority of children have both parents at home (89.70%), but there are more fathers left than mothers (7.78% compared to 1.37%).

The statistical frequency analysis found that 45.77% of students learn for the sake of the teacher, which leads to the presumption that teachers have a strong impact on students' learning preferences. In terms of how the teaching activities are carried out, 77.12% want to physically go to school and only 22.88% prefer online learning.

Most of the students (46.68%) spend 1-2 hours doing homework, 29.29% need 2-3 hours, 13.96% do their homework in a time of more than 3 hours, and 10.07% need less than 1 hour for this activity.

Regarding the students' preference for certain school subjects, a rather large difference can be observed between the first three and the others. Students' preferences for classes in Romanian (22.65%), English (15.79%), and Mathematics (15.33%) may be justified by the importance that students attach to these school subjects, especially from the perspective of national assessments in these subjects (see Figure 1).

Figure 1. Preferred school subject



3.1. Attitude towards the school of secondary school students

The School Attitude Questionnaire has five dimensions: *Academic Self-Perception*, *Attitude towards teachers*, *Attitude towards school*, *Goal valuation*, and *Motivation/Self-*

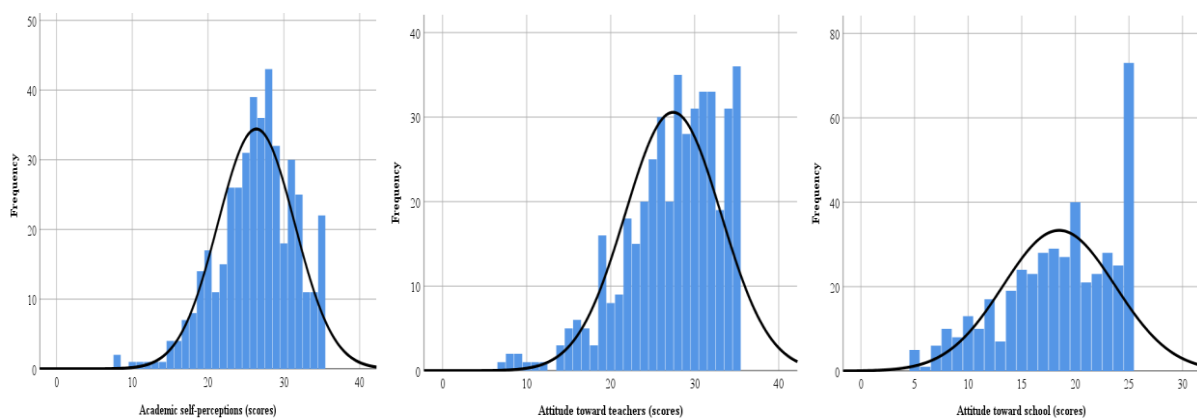
Regulation. Each dimension is described by certain items, valued on a Likert scale from 1 to 5, whose score is summed up, obtaining the scores for each of them. The values of the averages of the five dimensions are located in the upper half of the intervals of each of them (see Table 2).

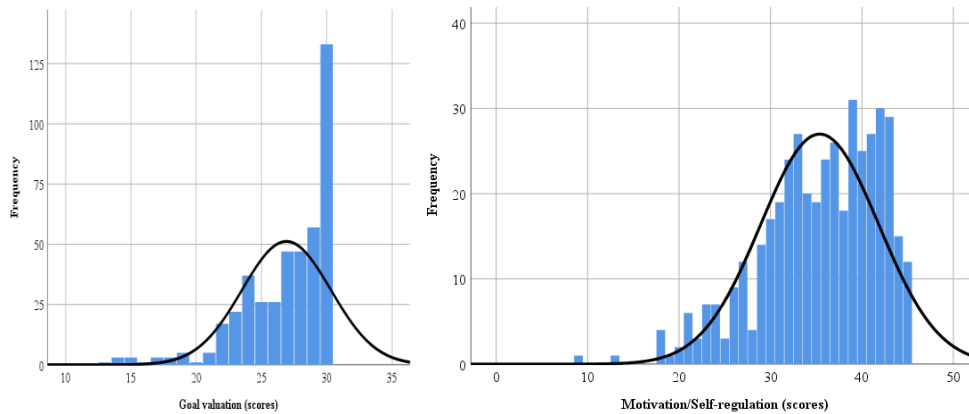
Table 2. The minimum, maximum and average values of the dimensions of attitudes towards school.

		Academic self-perception	Attitude towards teachers	Attitude towards school	Goal valuation	Motivation/ Self-Regulation
N	Valid	437	437	437	437	437
	Missing	0	0	0	0	0
Mean		26,37	27,43	18,49	26,92	35,38
Median		27,00	28,00	19,00	28,00	36,00
Range		27	28	20	17	36
Minimum		8	7	5	13	9
Maximum		35	35	25	30	45

In the frequency analysis of attitude toward school, the distribution of the scores of the five scales of the School Attitude Questionnaire is observed (Figure 2). Even if the averages are located in the upper half of the range, there is a possibility that its value will be influenced by the maximum extreme values of the range, especially for the dimensions of *Attitude towards school* and *Goal valuation*.

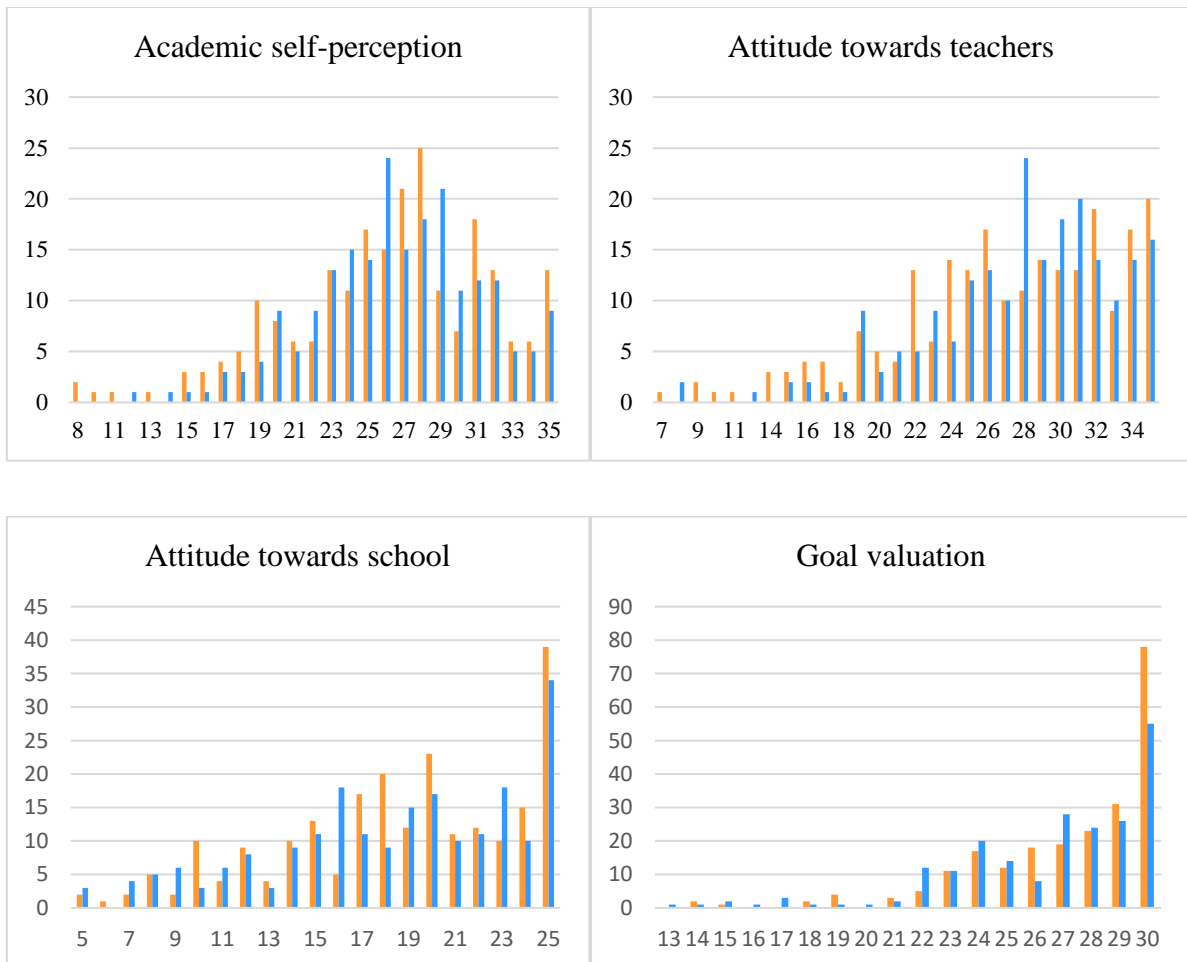
Figure 2. Frequency analysis Attitude towards school for each of the five scales: Academic self-perception, Attitude toward teachers, Attitude toward school, Goal valuation, Motivation/Self-regulation

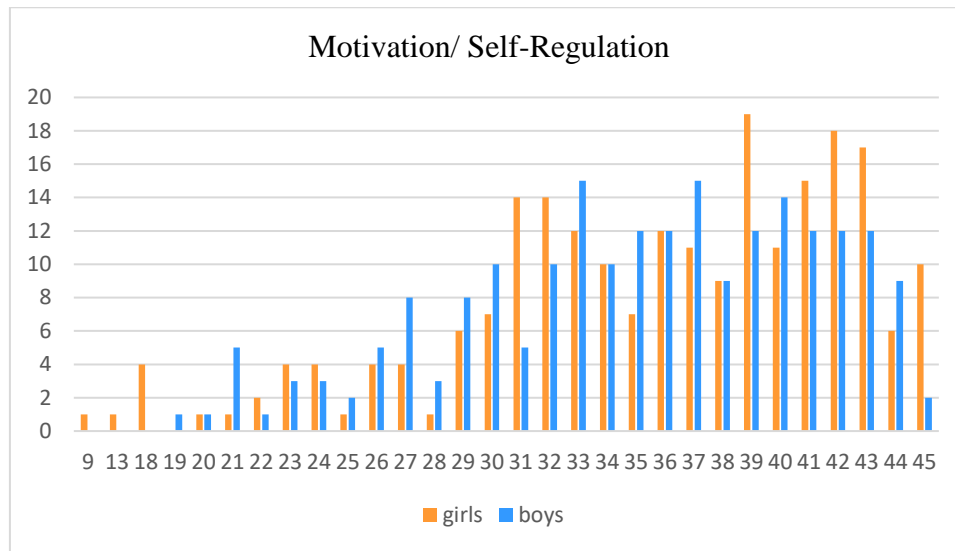




It is also found that more girls than boys generally scored higher on each of the five dimensions of attitude towards school, and for the *Motivation and Self-Regulation* dimension, the difference is even greater (see Figure 3). The horizontal axis of each graph indicates the scores obtained on each scale, and the vertical one, the number of students.

Figure 3. Frequency analysis Attitude towards bribery





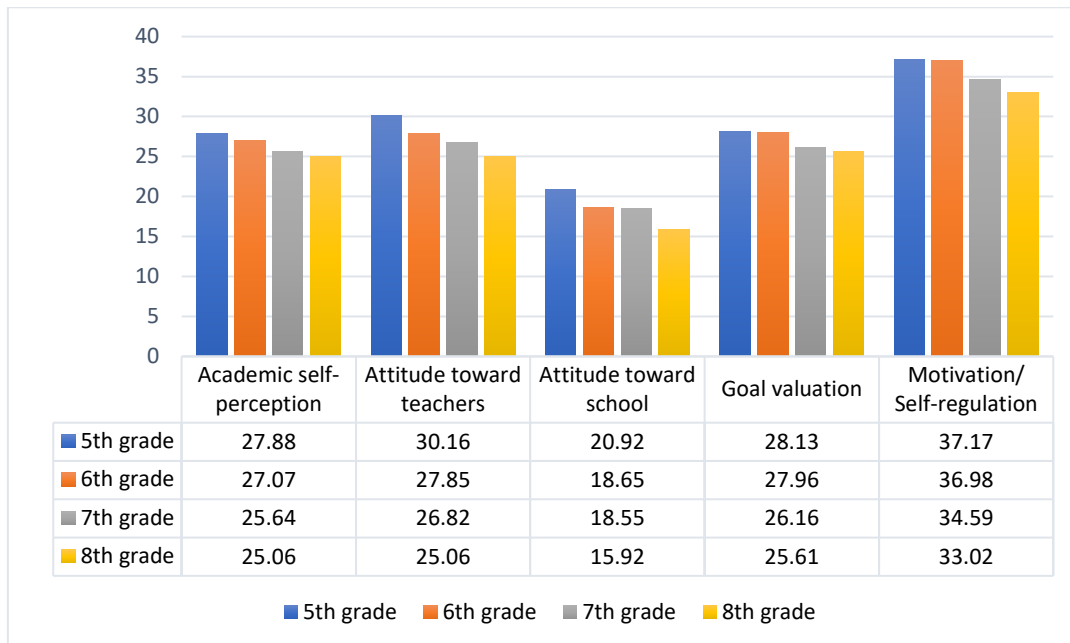
Observing Table 3, we discover that there are no significant differences between the averages achieved by boys and girls for the five dimensions of attitudes towards school, although they are slightly smaller in girls for academic self-perception and attitude towards teachers and slightly higher in the goal valuation and the level of motivation/self-regulation.

Table 3. Environments of attitudes towards the school of boys and girls

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Academic self-perception	boys	211	26,58	4,569	,315
	girls	226	26,17	5,490	,365
Attitude towards teachers	boys	211	27,88	5,239	,361
	girls	226	27,01	6,086	,405
Attitude towards school	boys	211	18,37	5,322	,366
	girls	226	18,60	5,153	,343
Goal valuation	boys	211	26,59	3,550	,244
	girls	226	27,23	3,242	,216
Motivation/ Self-Regulation	boys	211	35,09	6,125	,422
	girls	226	35,65	6,759	,450

By conducting a primary analysis of the differences between the average scores of the dimensions of the students' attitude towards the school according to the class, there is a decrease in all of them from the fifth grade to the eighth grade (see Figure 4). Thus, for academic self-perception, the average decreases from 27.88 to 25.06, for the attitude towards teachers from 30.16 to 25.06, for the attitude towards the school from 20.92 to 15.92, for the goals valuation from 28.13 to 25.61, and for motivation and self-regulation the average decreases from 37.17 to 33.02. Looking at this situation, a legitimate question arises: what are the causes that can justify this regression? What happens during the four years of middle school?

Figure 4. Average scores of the dimensions of attitudes towards school, by grade



3.2. Teachers' perception of students and school

To identify the relationship between teachers and students, how teachers relate to students, how they perceive students, how they do school assessments, how they provide feedback to students, as well as aspects of improving students' attitudes towards school, we conducted six focus-group meetings in which we interviewed 42 teachers.

Thus, the group interviews conducted were of a structured type, with predetermined questions, but there was also some freedom for the interviewees to present their ideas and personal opinions regarding related topics. Teachers with different specializations participated: Physical Education, Mathematics, Romanian Language, Biology, French, Music, Technological Education, but also school psychologists, who perform school counseling classes.

Based on the answers we received from the teachers, I obtained certain information, following the sequence of the questions formulated. I listened carefully to each recording of the meetings to notice details, particular or general aspects of the teachers' opinions, and to identify the common points or different aspects pointed out by them.

Generally, the perception of the interviewees is that the school in which they work is good, but less than half of them consider that the students they work with are conscientious. The opinion of most teachers is that students no longer take school seriously, as previous generations did. One of the professors stated that from one generation to the next there is a progressive decrease in interest in reading, so that even diligent students no longer have an interest in the readings of classical writers and prefer easy, shorter and, unfortunately, superficial readings.

Teachers think that the students' relation to school tasks varies depending on the grade level, the home environment, the intellectual level of the students and their parents, and their support and model. Thus, about 60% of them do their homework daily and only 40% learn every day, these percentages varying depending on the subject matter taught. Very few students ask for further explanations or ask when they do not understand. Teachers admit that there is often not enough time in class for all the explanations that would be needed, and this would be a reason why students give up asking. Another reason why students don't ask is related to the

image they want in front of their peers, many of whom think they embarrass themselves if they admit they didn't understand.

Related the discipline of the students in the class, varies depending on the teacher, on how he relates to the students. Thus, some of those interviewed claim that students are unruly both during breaks and in classes, and others state that in their classes students are good, but most of them admit that in extracurricular activities such as excursions, all students are responsible, and their behavior is different. Another aspect that emerged from the discussions was the reaction of the teachers to the students' indiscipline. Most of the teachers do not accept the indiscipline of the students, they feel disturbed and apply various methods of correction, from verbal observations to lowering the grade. However, there was a teacher who stated that he was not bothered by the students' indiscipline and regarded this behavior as a cry for help from them. He claimed that indiscipline is caused by certain deprivations that they acutely feel, deficiencies of different natures of students, most often emotional and affective.

All the interviewed teachers use different evaluation methods, both in the form of written and oral tests, portfolios, or projects, but also the case study, based on the readings studied at the school. As for how to announce the grades obtained from the evaluations, the opinions were divided: some teachers consider it better to announce the name and the grade in front of the whole class, arguing that anyway the students communicate with each other and all find out what grade each colleague receives, while other teachers support the confidentiality of the grading, so as not to affect the students' image towards themselves and towards the collective to which they belong. All teachers admit that they often justify giving a certain grade when asked.

Teachers believe that students' attitudes towards the school can be influenced by several factors. This is where certain aspects come in that could be overlooked by adults, but for children, they are extremely important. Starting from the basic human needs to the most complex and individualized peculiarities, a sufficiently extensive list can be drawn up. If a child is hungry or cold, if he is tired, sick, worried about the situation at home or the harassment of his colleagues, if he feels marginalized because he considers himself ugly, too weak, too fat or has some visible physical defect that makes him the target of verbal or physical attacks, if he is frustrated or dissatisfied with different situations – all these can be factors that diminish the ability to concentrate at lessons. The consequences can be more serious or less serious and do not necessarily all occur in one student: inattention to classes, limited or partial understanding of the contents presented, poor results in teaching, low grades, personal dissatisfaction, withdrawal itself, anxiety, decreased interest in learning, dissatisfaction that can generalize beyond the school field, the development of an unfavorable attitude towards school, teachers and the list goes on. Also, the family and school climates can have significant influences on students' attitudes towards school.

Among the qualities evoked for shaping the image of the ideal teacher were: professionalism, empathy, love for students, permanent professional actualization, the ability to adapt to the emotional and intellectual needs of students, the adaptation of teaching methods and strategies according to the level of the class through individualization and differentiation and, last but not least, the development of a friendly relationship with the students. All these steps can lead, in the opinion of the interviewed teachers, to an improvement in the students' attitude towards the school and even in the school results.

To outline the profile of the ideal student, the teachers evoked qualities such as spontaneity, availability/ openness, sincerity, playful spirit, seriousness, conscientiousness, and perseverance, these being, moreover, qualities that teachers appreciate in their students.

In the conclusion of these discussions, most of the teachers stated that if they were at the beginning of their careers, they would still want to be teachers and would encourage other young people to choose this career. The most beautiful argument to this statement is that a teacher never gets old, he is always young because he continuously learns and lives between and through the students he learns.

3.3. Analysis of the concordance between the student's attitude towards school and the teachers' perception of it

Although the data were collected by both quantitative and qualitative methods, a correlation between them can be achieved.

First of all, I analyzed the frequency of above-average scores given by students for the elements of the *Academic Self-Perception* scale compared to teachers' responses on the level of competencies that teachers can achieve with their students. Analyzing the maximum scores given by students to the seven items of the scale, it was found that 25.6% of students consider that they are intelligent, 32.3% believe they can quickly learn new ideas in school, 25.9% think they are intelligent, 29.7% that they are good at learning new things in school, only 12.8% that school is easy for them, 23.6% consider that they can understand complex ideas from school, and 52.6% think they can achieve maximum performance. Figure 6 illustrates these variations. On the other hand, the teachers' responses showed that less than half of the students can reach maximum performance. These differences may suggest that sometimes students can overrate themselves.

Table 4. The frequency of the scores given by students for the items of the academic self-perception scale

Score	Percent AT02	Percent AT03	Percent AT05	Percent AT11	Percent AT13	Percent AT20	Percent AT22
1	2,1	2,3	2,3	2,3	7,6	4,3	2,5
2	9,8	7,8	9,6	8,2	16	9,6	4,6
3	21,3	19,2	21,5	20,8	39,8	25,2	16,7
4	41,2	38,4	40,7	38,9	23,8	37,3	23,6
5	25,6	32,3	25,9	29,7	12,8	23,6	52,6
Total	100	100	100	100	100	100	100

I then analyzed the frequency of the maximum scores given by students for the elements of the *Attitude towards teachers and courses* scale compared to the teachers' responses on this issue. The analysis of the scores shows that 25.2% of the students consider the school subjects interesting, 40% think they learn hard, 41.6% love their teachers, 40.3% the learning process seems interesting, 36.4% of the students consider that the teachers care about them, 45.5% that their teachers are competent and 32.5% are satisfied with the school subjects. These results can be found in Table 5.

Table 5. Frequency of scores awarded by students for the elements of the Attitude towards teachers and school subjects

Score	Percent AT01	Percent AT09	Percent AT14	Percent AT16	Percent AT17	Percent AT31	Percent AT34
1	3,7	1,1	2,3	3	3	3,7	4,1
2	11,9	6,2	8	9,2	8,5	4,8	11,9
3	26,3	15,6	13,7	18,8	19,5	17,4	24
4	33	37,1	34,3	28,8	32,7	28,6	27,5
5	25,2	40	41,6	40,3	36,4	45,5	32,5
Total	100	100	100	100	100	100	100

On the other hand, more than half of teachers say that students accept school tasks and do them out of obligation, not out of pleasure, and only three-quarters of students solve their homework constantly. Also, most of the teachers, state that only a quarter of the students asks for additional explanations for the homework or exercises in the classroom. In terms of stimulating interest in the lesson, half of the teachers say that they often use innovative strategies, and different teaching and evaluation methods. By placing together all this information coming from both directions, there is a unitary perception of the relationship between teachers and students.

Lastly, I analyzed the frequency of the maximum scores given by students for the items of the *Attitude towards school* scale compared to the teachers' perception of this topic. Observing the scores presented in Table 6, it is found that only a little more than a quarter of the students have the best attitude towards the school, but that, assimilating the above-average scores, they exceed by at least half of the number of students.

Looking from the other perspective of teachers, they believe that students had a better attitude towards school before the period of online learning, caused by the Covid-19 pandemic and that most students, as a result of this experience, prefer face-to-face learning. This is also confirmed by the students' responses (77.12%). During the online learning period, most teachers used learning platforms such as Google Classroom or Microsoft Teams. Although only four students claim they did not have devices on which to watch the lessons online, teachers say that only three-quarters of the students said they had. This difference suggests that some students did not connect to the lessons, claiming that they did not have devices.

Table 6. Frequency of scores given by students for the items of the Attitude to School scale

Score	Percent AT06	Percent AT07	Percent AT12	Percent AT19	Percent AT23
1	5,5	4,6	5,5	4,3	6,4
2	12,1	12,6	12,6	11,7	14,4
3	19	22	22,9	18,3	22,4
4	28,8	28,8	30	33,2	25,4
5	34,6	32	29,1	32,5	31,4
Total	100	100	100	100	100

4. Conclusions

The prospective study on the attitude towards the school of secondary school students in the post-pandemic period was conducted on a population of 437 secondary school students and their teachers.

For data collection, I used a standardized tool that we applied to students, namely the "School Attitude Assessment Survey-Revised", developed by McCoach (2002) translated and validated for the Romanian language. The questionnaire identified five dimensions of students' attitudes towards school: *Academic self-perception, Attitude towards teachers, Attitude towards school and courses, Goal valuation, and Motivation/Self-regulation.*

After the data processing in the IBM SPSS Statistics 26.0 program, statistical frequency, and descriptive analyses were done, which painted a general picture of the attitude of middle school students towards school. Several frequency analyses were also run according to demographic variables and on the items of the questionnaire scales. The sample on which the analyses were carried out was relatively homogeneous, in the sense of distribution into approximately equal groups both by gender and by grades.

To identify from another perspective the attitude of the secondary school students towards the school, the information provided in the group discussions (focus-group meetings) with the teachers from the schools where I applied the questionnaires was processed. From the answers provided by the teachers, it emerged that good communication and relationship between students and teachers have positive consequences on the school results and the student's attitude towards the teacher as a person, towards the subject taught, fa a state of homework and concerning school activities in general. Also, certain concordances were highlighted between the responses of students and teachers.

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