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Original research paper

PUPILS' ATTITUDES TOWARD DISTANCE EDUCATION DURING THE COVID-19 PANDEMIC

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ABSTRACT

The educational context has been disrupted by the ongoing COVID-19 pandemic. The aim of the study was to explore attitudes of pupils in Serbia toward distance education during the pandemic. Specifically, we aimed to explore the cognitive component of pupils' attitudes through their perception of positive and negative aspects of distance education, the motivational component based on the expressions of how distance education affects pupils' motivation to learn, and emotional component through verbal expressions of emotions toward distance education. The sample for the study included 110 pupils attending primary (5th to 8th grade) and secondary schools in Serbia. A semi-structured interview was employed. Data were analysed using qualitative content analysis. The findings suggest that majority of pupils have negative attitudes toward distance education and that they find insufficient interaction between teachers and pupils to be the major shortcoming of distance education. Positive aspects of distance education which could be preserved after the pandemic according to the participants' views are: communication between teachers and pupils using information technologies (IT), technical possibilities for a better presentation of learning topics and permanent availability of learning materials on online platforms. The study revealed the lack of intrinsic learning motivation and deficiencies in pupils' self-regulation of learning which are important to be overcome as they impede pupils' academic development both in distance and in classroom education.

Key words:
online learning, distance learning, students' perspectives, pandemic, qualitative study

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INTRODUCTION

The educational context, as well as other spheres of life, has been disrupted by the ongoing COVID-19 pandemic. As a response to the pandemic, educational systems worldwide have adopted various modalities of distance education using information technologies (IT). In Serbia, a combination of classroom education and distance education has taken place. The predominant modes of distance education have been the use of online platforms and other means of internet-based communication, and television broadcasting of lectures.

The education in Serbia has taken different forms since the beginning of the pandemic. During the first wave, from March to April 2020, all primary and secondary school pupils attended distance education. Afterwards, primary school pupils of grades 1 – 4 attended exclusively classroom education. Older primary school pupils and secondary school students mostly attended a combined model, although parents had the opportunity to decide for their child between distance and combined model. The combined model was realised by splitting the classes into the groups which alternatively had classroom or distance education. The exclusively distance education model was reintroduced during some periods of high disease incidence.

Distance education refers to "all forms of learning and teaching in which those who learn and those who teach are for all or most of the time in different locations" (Moore, 2003, p. ix). A definition of distance education which gives more account of educational processes states: "distance education covers forms of study that are not under the continuous, immediate supervision of tutors present in classrooms or on the same premises as their students but that nevertheless benefit from the planning, guidance and teaching of a tutorial organisation" (Holmberg, 2003, p. 80).

Distance education has been present in certain societies for more than two hundred years. Since the introduction of computer-based communication technologies during the last decades, online education (education based on Internet as a communication channel) has become a predominant mode of distance education. Online education is provided at all levels of education, either in a form of fully online programmes or blended programmes, combining online and classroom teaching and learning (Borup, Chambers & Stimson, 2019)

Hodges et al. (Hodges, Moore, Lockee, Trust & Bond, 2020) warn that it is not justified to refer to the adoption of online modes of education during the pandemic simply as online education. Online education is the term used for educational processes which are thoroughly planned and prepared, and designed based on scientific models. In contrast, the shift to online education during the pandemic was urgent and unplanned. The authors propose the term emergency remote teaching for these temporary, improvised educational solutions.

Bearing in mind this caveat, we assume that theoretical approaches to distance education may help to elucidate the educational processes which have taken place during the pandemic. The Transactional distance theory of distance education proposed by Moore (1983, 2018) has been applied to online and blended forms of education (e.g. Huang, Chandra, DePaolo & Simmons, 2016; Zilka, Cohen & Rahimi, 2018). The theory focuses on three dimensions of education process: structure, dialogue, and autonomy. Structure refers to the degree of flexibility of educational objectives and methods, i.e. to the extent to which educational process can accommodate to individual needs and preferences of learners. Dialogue between teachers and learners is a form of interpersonal interaction which is constructive and in which both teachers and learners are respectful towards one another and contribute to the education process. Autonomy is viewed as the extent to which learners make by themselves decisions regarding what and how to learn. According to the theory, transactional distance in the process of education is determined by dialogue and structure. Transactional distance increases with the increase in structure, whereas it decreases with the increase in dialogue. There is an assumption of the inverse relationship between dialogue and structure: when structure increases, dialogue decreases and vice versa (Saba, 2016). In educational processes with high transactional distance, more learners' autonomy is required, whereas low transactional distance provides more support for learners who are less capable to regulate their own learning.

Researchers of distance education agree that that form of education brings more autonomy and independence to students and that it is necessary that students take more responsibility for their learning in distance – compared to classroom education (e.g. Saba, 2003). Accordingly, we presume that conceptualisation of self-regulated learning and learning motivation may be relevant for understanding pupils' distance learning.

Zimmerman defines self-regulated learning as "the self-directive process by which learners transform their mental abilities into academic skills" (Zimmerman, 2002, p. 65.). He states that self-regulation of learning is not a personal trait, but involves the selective use of specific processes adapted to the particular learning task. Self-regulation includes the following components: setting specific proximal goals for oneself, adopting adequate strategies for obtaining the goals, monitoring one's performance for signs of progress, restructuring one's physical and social context to make it compatible with one's goals, managing one's time use efficiently, self-evaluating one's methods; attributing causation to results, and adapting future methods (Zimmerman, 2002).

Self-regulated learning depends on learning motivation (Zimmerman & Moylan, 2009). One of the theoretical approaches to learning motivation is the Self-determination theory developed by Deci and Ryan (1985; Ryan & Deci, 2000). The theory distinguishes between intrinsic and extrinsic motivation. Intrinsic motivation

refers to engaging in an activity because it is inherently interesting or enjoyable. While intrinsic motivation is unitary, there are four types of extrinsic motivation, which differ in the degree of self-determination (Grolnick, Gurland, Jacob & Decourcey, 2002). External regulation refers to the least self-determined motivation which is under the control of external rewards and punishments. The second type of extrinsic motivation is introjected regulation which denotes that external demands have become self-demands. Individuals with this form of motivation act in certain ways in order to avoid feelings of guilt or shame. Identified regulation refers to regulation based on valuing certain activities. The most self-determined form of extrinsic motivation is integrated regulation which means that certain behaviours are undertaken because they belong to an individual's system of values.

Attitudes of the participants in the process of education are important factors of that process and thus warrant investigation. Attitudes are defined as relatively stable dispositions to think, feel and act in a certain way toward a certain object (Trebješanin, 2018). They have cognitive, emotional and action or motivational component The cognitive component of the attitude refers to the knowledge about the object, the emotional component consists of emotions related to that object, and motivational component refers to the tendency to act in accordance with the attitude. Research investigating attitudes towards distance education during the pandemic has mostly concentrated on the university education (e. g. Adnan & Anwar, 2020; Dolenc, Šorg & Ploj Virtič, 2021; Unger & Meiran, 2020). Education is necessarily related to the broader social and cultural context suggesting the need to pursue investigation of education during the pandemic in different countries. Several studies in Serbia addressed this topic by focusing on attitudes of university students (Đorđević, Pavlović & Vesić-Pavlović, 2020; Prodanović & Gavranović, 2020), parents of children with special needs (Bašić, Maćešić-Petrović, Arsić & Gajić, 2020; Jerkić & Stanković, 2020), and secondary school students (Vučetić, Vasojević & Kirin, 2020). Predominantly questionnaires with close-ended questions were employed in these studies.

We aim to contribute to this field of study by investigating attitudes of primary and secondary school pupils in Serbia toward distance education during the COVID-19 pandemic using interview method, which may provide a broad and nuanced insight into various aspects of pupils' attitudes.

METHOD

The aims of the study are to investigate pupils' attitudes toward distance education during the COVID-19 pandemic, pupils' suggestions for the improvement of the practice of distance education and their views on the ways in which education process should be organised after the pandemic.

In accordance with the aims of the study, and the conceptualisation of attitudes as consisting of cognitive, emotional, and motivational component, the research tasks are the following:

- To investigate the cognitive component of pupils' attitudes, i.e. what they consider to be positive and negative aspects of distance education during the pandemic.
- To investigate the emotional component of pupils' attitudes, i.e. what emotions they verbally express toward distance education during the pandemic.
- To investigate the motivational component of pupils' attitudes, i.e. their motivation for learning in distance education, and factors which, according to their opinion, determine that motivation.
- To establish what pupils recommend for the improvement of distance education during the pandemic and whether there are elements of distance education that should be incorporated in the educational process after the pandemic according to pupils' views.

The Transactional distance theory (Moore, 1983, 2018) postulates that distance education requires more pupils' autonomy in pursuing educational goals. Given that pupils have no previous experience with this form of learning, and thus may lack skills of self-regulated learning, we hypothesise that negative attitudes toward distance education prevail among pupils.

According to the Transactional distance theory (Moore, 1983, 2018), dialogue between teachers and pupils is a significant component which positively contributes to the educational process. Considering that distance education during the pandemic has been followed by diminished opportunities for interaction between pupils and teachers, we hypothesise that recommendations of pupils for the improvement of the distance education process will be related primarily to the increase in teacher-pupil interaction.

The convenience sample for the study included 110 pupils (68 females and 42 males) attending primary (5^{th} to 8^{th} grade) (n = 55) and secondary schools (n = 55) in Serbia, predominantly in Belgrade (n = 56). The number of participants per grade ranged from 12 to 15. Among secondary school students, 26 attend grammar schools and 29 vocational schools (four-year programmes).

Participants were recruited through personal contacts of students of special education and rehabilitation. Written informed consents were obtained from participants' parents before conducting interviews. The interviews were conducted by the authors of the study. individually, using online video calls, during April 2021.

The semi-structured interview was constructed for the purposes of this study, covering the topics in accordance with the aims of the study. The predefined questions of the interview are presented in Appendix 1. Additional questions were asked depending on the participants' answers. We endeavoured not to use suggestive questions. A cognitive component of the attitudes toward distance education was investigated through questions referring to positive and negative aspects of distance education as perceived by the participants. A motivational component was assessed based on the questions concerning the effects of distance education on pupils 'motivation for learning, and factors which contribute to these effects. The interview did not contain specific questions devoted to the emotional component of the attitudes. This component was investigated based on verbal expressions of emotions which appeared in participants' answers to various interview questions. Further questions of the interview referred to suggestions for the improvement of the practice of distance education; and to views on the ways in which education process should be organised after the pandemic.

The audio recordings of the interviews were transcribed verbatim. Data were analysed using qualitative content analysis (Schreier, 2012). The analysis included the following steps: 1) building a concept- and data-driven frame of coding consisting of categories and subcategories; 2) segmentation of the material into the units of coding; 3) coding, i.e. determining subcategories to which units of coding belong.

The frame of coding included the following categories of topics contained in participants' answers: general attitude toward distance education; emotions toward distance and classroom education; positive aspects of distance education; negative aspects of distance education; motivation for learning in distance education; factors which positively contribute to learning motivation in distance education; factors which negatively contribute to learning motivation in distance education; recommendations for the improvement of distance education; the preferred way of education after the pandemic; and the reasons for the preferred way of education after the pandemic.

A thematic criterion was used to divide the material into the units of coding. In qualitative content analysis themes correspond to subcategories of the coding frame. Each expression of a theme was considered a unit of coding. Thus, the units of coding were of different structure, they were sentences, parts of sentences, or consisted of more than one sentence.

The two authors independently coded the material. The overall agreement (for all units of coding) was 90%. Disagreements were resolved by discussion.

RESULTS

A preliminary analysis of the data suggested that the answers of primary and secondary school pupils do not differ in important ways. For that reason, the following analyses were performed on the whole study sample.

The frequencies and percentages presented in the following results refer to participants who expressed certain themes. Since the participants could express more themes related to some categories, we did not calculate total frequencies and percentages for these categories (Tables 2, 3, and 5–7).

The categories of a general attitude toward distance education, discerned through the answers to the question "What do you think about distance education?" are presented in Table 1. We note that the general attitude could not be determined in the answers of all participants, because some participants responded to this question by focusing on specific aspects of distance education.

Table 1: General attitude toward distance education

Category	N	%
Positive general attitude	13	11.8
Positive general attitude, but classroom education is better	5	4.5
Negative general attitude	47	42.7
Distance education has both positive and negative aspects	14	12.7
Distance education is good for the pandemic circumstances	9	8.2
Not sure	1	.9
No expression of a general attitude	21	19.1
Total	**110**	**99.9**

The negative general attitude toward distance education is the most prevalent. It is expressed by almost a half of the participants. About 12% of the participants have the general positive attitude. Other participants express a moderate attitude, stating the following: that distance education has both positive and negative aspects, that it is good but that they find classroom education better, or that distance education is adequate during the pandemic.

Cognitive component of the attitudes toward distance education

A cognitive component of the attitudes toward distance education was examined through the questions referring to positive and negative aspects of distance education as perceived by the pupils. Positive aspects of distance education, according to the participants, are presented in Table 2. As can be seen, over one half of them express that they like the comfort of attending lectures from home (e.g. "I like it when I can lay in bed and listen to lectures") and not having to commute to school (e.g. "I am there in just one click"). Almost a quarter of the participants state that they like that there is less to learn, and easier to learn and get good grades in distance education, compared to when they go to school. Approximately 13% of pupils point that learning materials may be better presented through the use of technology in distance education and/or that they find it suitable that learning materials (lectures, presentations) are available to them at any time on internet platforms. A small number of pupils point that they like more autonomy in organising learning. Also a small number of students state that they like using computers and enlarging their knowledge on IT during distance education.

Table 2: Positive aspects of distance education, according to the participants

Category	N	%
Comfort and more free time	62	56.4
Use of IT and expanding knowledge on IT	4	3.6
Easier to learn and to get good grades, less learning is expected	26	23.6
Learning materials presented in a better way thanks to technology and available at any time	14	12.7
More autonomy in organisation of own learning	2	1.8
Miscellaneous	5	4.5

Negative aspects of distance education, as seen by the participants, are presented in Table 3. The most often mentioned (by approximately two thirds of the participants) negative aspect is the lack of teachers' explanations. Some pupils state that teachers send them learning material and do not hold online lectures. These pupils complain that it is hard to learn some subjects without interaction and without possibility to pose questions when they do not understand something. Other pupils, who do have online lectures, point that explanations during online lectures are harder to be understood. Related to this complaint, is the one about the insufficient communication with teachers or other pupils concerning learning that is also often

expressed by the participants (approximately 28%). As they observe, teachers do not communicate with them, they do not answer their questions on time, and do not provide enough information regarding pupils' obligations. Some pupils express that they miss the exchange of ideas regarding learning subjects with other pupils. About 40% of the participants state that it is harder to learn, and that they learn less in distance compared to classroom education. Approximately one third of the participants point that they dislike the lack of contact with school friends and teachers in distance education, and about the same number of students say that they are less motivated and/or concentrated during distance learning. Approximately 10 % of pupils complain that it is harder to learn in distance education because they lack external control in terms of tests, and teachers' expectations. Less frequently are mentioned the following shortcomings of distance education: organisational problems (e.g. teachers do not stick to timetable), exhaustion due to long work using IT, problems related to technology, and less effort exerted by pupils or teachers.

Table 3: Negative aspects of distance education, according to the participants

Category	N	%
Lack of social contacts	38	34.5
Harder to learn, less is learned	45	40.9
Organisational problems	8	7.3
Lack of teachers' explanations	71	64.5
Hard to work using IT	4	3.6
Lack of external control	13	11.8
Lack of communication with teachers and other pupils concerning learning	31	28.2
Lack of pupils' or teachers' effort	7	6.4
Lack of motivation, concentration	37	33.6
Problems related to technology	8	7.3
Miscellaneous	3	2.7

Emotional component of the attitudes toward distance education

Some of the participants' answers contained expressions of an emotional tone toward distance or classroom education. The categories of answers are presented in Table 4.

Table 4: Emotions toward distance and classroom education

Category	N	%
Positive emotions toward distance education	9	8.2
Positive emotions toward classroom education	16	14.5
Negative emotions toward distance education	9	8.2
No expression of an emotional tone	76	69.1
Total	**110**	**100.0**

It can be seen in Table 4 that approximately one third of the participants express an emotional tone toward distance or classroom education. A positive emotional tone toward classroom education is expressed by approximately 15% of participants in answers such as "I like much more when we go to school", "We can't wait to get back to school", and "We all miss those nice times". The same number of participants, approximately 8%, express positive (e.g. "Everything is super". "It's cool") and negative emotions toward distance education (e.g. "This is unbearable", "I don't like it").

Motivational component of the attitudes toward distance education

Motivational component of the attitudes toward distance education was examined through the questions regarding pupils' motivation to learn during distance education compared to their motivation during classroom education and factors which influence motivation. The great majority of pupils (92%) estimate that their motivation is lower in distance learning, 8% say that their motivation is at an equal level, and there are no participants who think that their motivation is higher in distance- compared to classroom education. Beneficial factors which contribute to motivation during distance education were pointed by two participants. One of them expressed that autonomy in organising own learning has positive effects on her motivation, and the other that she is motivated because it is interesting to use IT. Factors which, according to participants' opinions, negatively influence motivation for learning during distance education are presented in Table 5.

Table 5: Factors which negatively affect motivation for learning in distance education

Category	N	%
Lack of control and reinforcement by teachers	31	28.2
Lack of time structuring, no deadlines	25	22.7
Possibility to obtain good grades by cheating	11	10.0
Lack of feeling that they attend school	10	9.1
Lack of contact with other pupils and teachers	9	8.2
More school assignments	7	6.4

Almost a third of the participants express that they are less motivated to learn during distance education because there is less control and less reinforcement by teachers (less tests and less knowledge checks during lessons, no praises). Approximately one quarter of participants state that motivation during distance education is lower because there is less time structure and less deadlines for finishing learning assignments. Ten percent of participants state that they learn less because it is easy to get good grades by cheating in distance education. Less frequently, participants point to a lack of school atmosphere, to diminished contacts with teachers and other pupils, and to more school assignments as factors that undermine their motivation to learn.

Recommendations for improving practice of distance education

Participants' recommendations for improving practice of distance education are presented in Table 6.

Table 6: Participants' recommendations for improving practice of distance education

Category	N	%
More teacher-pupil interaction	35	31.8
More interesting learning topics and activities	15	13.6
Technology related improvements	12	10.9
Better organisation of the educational process	6	5.5
More understanding from teachers	4	3.6
More monitoring of pupils' learning by teachers	4	3.6
More interactions between pupils	1	.9
Miscellaneous	9	8.2

The most frequent (by approximately 30% of pupils) recommendation for improving distance education refers to more interaction between teachers and pupils. Foremost, pupils suggest that all teachers should hold online lectures which would enable interchange between teachers and pupils. Besides, they point to the need that teachers more regularly and promptly respond to pupils' inquires through IT communication. Pupils (about 14 %) also suggest making learning materials more interesting using technical possibilities, as well as creating more activities in which students would be more active, such as workshops and presentations. About 11% of pupils point to the need to provide equipment for distance education to pupils who cannot afford it and to educate teachers and pupils regarding the use of IT. Less often mentioned recommendations are to better organise the educational process (mostly regarding respecting timetable), more understanding for pupils' difficulties and more monitoring of their work by teachers, and more interactions between pupils using IT.

Preferred mode of education after the pandemic

When asked how they would like the educational process to be organised after the pandemic, the great majority of pupils (90.7%) stated that they would like classroom education, while 8.2% stated that they would like a combination of classroom and distance education. Reasons why participants would like classroom education after the pandemic are presented in Table 7.

Table 7: Reasons why pupils would like classroom education after the pandemic

Category	N	%
Learning is better	56	50.9
Social reasons	54	49.1
Habit, normal	11	10.0

As can be seen in Table 7, about one half of the participants would like classroom education because they find it to be beneficial for learning for various reasons: better explanations and reinforcements provided by teachers, better understanding, concentration and motivation. Also about a half of the participants would like classroom education because of social contacts between pupils and between pupils and teachers. Ten percent of participants express that they would like classroom education because they are used to it, or because they find it to be a "normal", "natural" mode of education.

When recommending a combined model of education, participants see distance education as a supplement to classroom education which would provide communication with teachers through IT, availability of lectures on IT platforms and delivery of extracurricular activities for advanced pupils and pupils who lag behind.

DISCUSSION

The aim of this study was to get insights into pupils' attitudes toward distance education that has taken place during the COVID-19 pandemic in Serbia. We assume that these insights may be relevant for understanding of the current context of pupils' development, but also for the consideration of general possibilities of implementation of distance education into the regular education process.

In accordance with our hypothesis, negative general attitude prevails among the pupils. The cognitive component of the attitudes was elucidated through answers regarding positive and negative aspects of distance education. Although the pupils from the sample perceive both positive and negative aspects, the latter are stated by more participants. The lack of teachers' explanations is the most frequently pointed negative aspect of distance education. Pupils also frequently refer to insufficient communication between teachers and pupils, lack of motivation and concentration, and less teachers' monitoring of pupils' learning. From the perspective of the Transactional distance theory (Moore, 1983; 2018), the results suggest that structure of the learning process and dialogue between teachers and pupils have been

unsatisfactory in the distance education during the pandemic. These results are in accordance with the results of studies conducted in other countries which showed that students estimate the interaction between teachers and students and between students themselves to be of a low level during emergency distant education (Adnan & Anwar 2020; Todri, Papajorgji, Moskowitz & Scalera 2021).

The abovementioned negative aspects of distance education during the pandemic presumably contribute to the estimation that it is harder to learn and that learning achievements are lower in distance- compared to classroom education which is expressed by about 40 percent of participants in our study. As we employed open-ended questions, we presume that the percentage of pupils who would agree with this estimation would be much higher if we used close-ended questions.

The positive aspects of distance education, as seen by the pupils, are the following: comfort and more free time, expanding knowledge on IT, easier ways to get good grades, availability and quality of learning materials and more autonomy in organisation of own learning. These results partly confirm the results of the study by Vučetić et al. (Vučetić, Vasojević & Kirin, 2020) which showed that secondary school students in Serbia recognise the following positive aspects of distance education during the pandemic: saving time because they do not have to go to school, availability of teaching materials at any time, and opportunities for self-management of time for learning. However, the results obtained in our study show that autonomy in organisation of learning is seen as an advantage by a small number of pupils, while a greater number of pupils complain that they lack skills to organise time for learning on their own. Comfort, free time and possibility to get better grades are aspects not inherently linked to the education process. Furthermore, the experience with IT acquired through participation in distance education is rather limited. Therefore, we may conclude that educationally significant positive aspects of distance education, according to pupils' views, are better presentation of learning materials and their permanent availability on online platforms.

Emotional component of the attitudes toward distance education was verbally expressed by about a third of the participants. Among them, pupils mostly expressed positive emotions toward classroom education, whereas they less often expressed both positive and negative emotions toward distance education. The low frequency of expressions of emotions toward either distance or classroom education resulted from the fact that the interview did not include specific questions on emotions. Further research should concentrate more thoroughly on this component of attitudes toward distance education.

Regarding the motivational component, the great majority of pupils from the sample (over 90%) have lower learning motivation during distance compared to classroom education. Lack of teachers' control and monitoring of pupils' learning, lack of deadlines and time structuring and the possibility to obtain good grades by cheating, are most frequently referred to by pupils in our sample as factors that

impede their motivation for learning. Some of the pupils express that they value learning, but nevertheless find it hard to get motivated without external control and reinforcements in terms of grades, praises and teachers' expectations This suggests that majority of pupils haven't developed intrinsic learning motivation. We assume that this phenomenon, already present in our educational system, has become more evident during distance education, in which more autonomous learning is required (Saba, 2003). Indeed, it was established that secondary-school pupils in Serbia mostly do not perceive education as motivating, that learning activities have primarily an instrumental value for them (Pešić, Videnović i Plut, 2013), and that they spend most of their free time in activities aimed at fun and relaxation (Pešić, Videnović i Plut, 2012). There are also concerns regarding insufficient intrinsic motivation of pupils in other countries, such as the USA (e.g. Gilman & Anderman, 2006).

A small number of the participants express that they are as motivated in distance, as in classroom education. Even these pupils rarely express intrinsic motivation for learning. Rather, they refer to external rewards such as good grades and successful preparation for faculty entrance exams. As we see, the majority of pupils in our sample express external regulation of learning motivation, referring to the importance of grades or praises by teachers for their learning motivation. One participant in our sample expressed introjected regulation as learning motivation by referring to feelings of guilt which motivate her to learn when she is at school, but which are absent in distance education: "When we are at school, we are face-to-face with a teacher and we feel embarrassed and guilty if we do not know the answer. When we are online, teacher is at some other place and we don't have such a feeling". Identified regulation can be discerned in a small number of participants who expressed that learning itself is important to them, while there are no indices of integrated regulation among participants in this study. Although our method does not allow us to make precise estimations about pupils' motivations, we assume that our results do show that external regulation of learning prevails in the sample.

Several types of responses, which are frequently stated by participants in the study, suggest that majority of pupils have insufficient self-regulation of learning. They complain mostly about the lack of external structuring and control by teachers of their learning during distance education. They also express that their concentration is worse during distance-compared to classroom lectures. Some of them point that during classroom teaching teachers scaffold their attention. Further, they frequently express that the lack of time structuring in distance education negatively affects their learning because they lack learning skills of goal setting and efficient time use, as in the following statement: "I have no feeling that we are at school. As if we were on holidays. I postpone my learning until the last moment". A very small number of pupils express that, after a period of adaptation, they have managed to self-regulate learning. These students point out more autonomy in organisation of their learning as a positive aspect of distance learning, e.g. "On that week, when I don't go to school,

I can better devote myself to my obligations, learning for tests and working on some additional assignments. I can't manage it so well when I go to school."

Intrinsic motivation, as well as more self-determined types of extrinsic motivation, contribute to positive outcomes in terms of academic achievement, persistence, and psychological well-being (Howard, Bureau, Guay, Chong & Ryan, 2021). Self-regulation of learning is also an important factor of academic achievement (Pintrich & Zusho, 2002). Findings obtained in this study suggest that these factors are low among pupils and that it would be important to support pupils' development in these domains.

Concerning recommendations for the improvement of distance education, as we expected, more teacher-pupil interaction was the most often stated recommendation. This is in accordance with the Transactional distance theory which postulates the importance of the dialogue in the educational process. Moreover, the participants frequently suggested organisational and technological improvements, as well as more interesting learning topics and activities. The structure of the educational process is also an important aspect according to the Transactional distance theory, which refers to the flexibility vs. rigidity of educational objectives and methods. In accordance with the theory, the obtained data show that pupils would like these aspects of educational process to be more adapted to their interests. Online platforms provide opportunities for performing various learning activities. These possibilities could be used by teachers in a greater extent.

Finally, the data obtained in this study revealed what aspects of distance education would be beneficial to be preserved, according to pupils' perception, once the pandemic is over. These are the following: additional communication with teachers through IT, permanent availability of lectures on IT platforms and online delivery of extracurricular activities for certain groups of pupils. The perspective of pupils could be taken into account, along with the perspective of teachers, when designing possible future incorporation of elements of distance education into the general education process.

Limitations and implications for further studies

In the present study, we focused on pupils' views on distance education during the pandemic. As Dolenc et al. (Dolenc, Šorgo & Ploj Virtič, 2021) noted, teachers and pupils may have different views on that process. Future studies should investigate both pupils' and teachers' perspectives. Also, as our study encompasses a relatively small sample of students, predominantly from Belgrade, the generalisability of the results is constrained. We assume that the study provides data which may be used to construct questionnaire measures of attitudes toward distance education during the pandemic which could be applied in larger and in terms of sociodemographic variables more diverse samples.

CONCLUSION

The interviews which provided data for this study were conducted when participants had approximately one year of experience with distance education due to the COVID pandemic. We assume that this period was long enough for them to gain insights into the various aspects of that education as it had taken place until that time and to form relatively stable attitudes toward it. The use of open-ended interview method provided the possibility to get broad insights into those attitudes in the present study. The obtained findings suggest that most students hold negative attitudes toward distance education during the COVID-19 pandemic. The most frequently stated negative aspects of distance education refer to insufficient interaction between teachers and pupils regarding learning topics. Increased communication should be realised through more online classes, and more opportunities provided to pupils to discuss learning topics with teachers and with other pupils through online platforms.

The present study revealed the lack of intrinsic motivation and insufficient skills of self-regulated learning among pupils. These challenges, which have been accentuated during distance education, are also present in the regular context of education, and efforts should be made to support pupils to overcome them. As the pandemic and a combined model of classroom and distance education are still going on, this may provide an opportunity for pupils to develop skills of self-regulated learning. Guidance and scaffolding by teachers, educators and school psychologists would be an important factor in this process.

Participants in the study find the following positive aspects of distance education which could be incorporated in education after the pandemic: more additional interaction with teachers using IT, presentation of learning materials through IT, and permanent availability of learning materials on IT platforms.

APPENDIX

Predefined questions of the semi-structured interview on attitudes toward distance education constructed in this study

1. Have you attended classes in a combined form or only online during this school year?
2. What do you think about distance education?
3. Is there something that you especially like in distance education compared to classroom education?
4. Is there something that you especially dislike in distance education compared to classroom education?
5. Is there a difference between distance education and classroom education in terms of how well you can learn some subjects? If yes, what is the difference?
6. Is there a difference between distance education and classroom education in terms of how much you are willing to learn? If yes, what is the difference?
7. Why is your wish to learn different/the same in distance education and in classroom education?
8. What would you recommend in order to improve distance education?
9. How would you like education to be organised after the pandemic? Why would you like that?

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ОТНОШЕНИЕ УЧАЩИХСЯ К ДИСТАНЦИОННОМУ ОБУЧЕНИЮ ВО ВРЕМЯ ПАНДЕМИИ КОРОНАВИРУСНОЙ ИНФЕКЦИИ (COVID-19)

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Аннотация. Образовательная среда претерпела значительные изменения во время продолжающейся пандемии коронавирусной инфекции (COVID-19). Целью данного исследования было изучить отношение студентов в Сербии к дистанционному обучению в течение этой пандемии. Нами были поставлены следующие задачи: изучить когнитивную составляющую отношений учащихся, имея в виду их восприятие положительных и отрицательных аспектов дистанционного обучения, изучить мотивационный компонент на основе высказываний учащихся о том, как дистанционное обучение влияет на их мотивацию к обучению и исследовать эмоциональную составляющую, основанную на вербально выраженных эмоциях в отношении данной формы обучения. Выборка состояла из 110 учеников начальных классов (с 5 по 8 классы) и учеников средних школ в Сербии. Было использовано полуструктурированное интервью. Полученные ответы были проанализированы с помощью качественного контент-анализа. Результаты показывают, что большинство учеников отрицательно относятся к дистанционному обучению и что основным недостатком этого вида обучения является недостаточное взаимодействие между учителями и учениками. По мнению учащихся, дистанционное обучение имеет также и некоторые положительные аспекты, которые могут остаться и после окончания пандемии. Они относятся к использованию информационных технологий (ИТ) при общении между учителями и учениками, к лучшему представлению тем для обучения с использованием информационных технологий, а также к постоянной доступности учебного материала на онлайн-платформах. Полученные данные указывают на отсутствие интринсивной (внутренней) мотивации и на недостаточно развитую саморегуляцию у учащихся в процессе обучении, что надо преодолеть, в связи с тем, что они отрицательно влияют на академическое развитие, не только во время дистанционного обучения, но и когда занятия проводятся вживую, в классе.

Ключевые слова: онлайн-обучение, дистанционное обучение, восприятие учащихся, пандемия, качественное исследование.