

Three Semesters during the Pandemic: How the Educational Process Changed According to the University Students

Author: Antoaneta Getova

Abstract: The pandemic of COVID 19 was a catalyst for unprecedented social change in many spheres, including the higher education. In most countries, including Bulgaria, the classes were held online not only during the first lockdowns in the spring of 2020, but also during the next two semesters. The fast and forcible transition to online education led to various changes in the educational process in the universities in Bulgaria that respectively had their impact on all the participants in the process, especially the students. The main purpose of the paper is to analyze if and how the university students in Bulgaria accept these changes and what is their attitude towards the new and unexpected educational approach, which is one of the main factors for understanding the changes in the educational process itself.

Keywords: online learning, online survey, social relations

JEL: I

1. BRIEF INTRODUCTION TO THE PROBLEM

The pandemic of COVID 19 put the universities in many countries, including Bulgaria, in unprecedented situation: in the spring of 2020 they should transfer practically the whole educational process online (with a very rare exceptions). The online learning is not a brand new phenomenon in the higher education; in most Bulgarian universities also there were different programs that follow this approach¹. What is new in this pandemic situation, however, is the fact that the main part of the educational process should be held online. Also, this transition online had to be made very fast and in the middle of the academic year; even more, what was considered as temporary situation continued in the whole 2021 and even there is a possibility to continue in the new academic year (2021-2022) in most Bulgarian universities. Even for these facts, the online learning shouldn't be considered only as part of the emergency situation that will disappear with the end of the pandemic, but also as potential factor for changing the educational process in the

¹ For example, in the biggest Bulgarian universities existed departments that offered programs of distance an online learning both in Bachelor and Master degrees even before the pandemic.

Bulgarian universities as a whole. While in a way forcibly introduced, the digitalization of the educational process in Bulgaria led to some facilitations as: more flexible agenda, easier access to resources for the students (including records of the lectures and seminars), easier administration of the educational process, etc. It also led to some problems as difficulties during the communication online, lack of technological resources that lead to the cancelation/ delaying of some lectures, etc. All these advantages and disadvantages made their impact on the participants in the educational process (both lecturers and students) so is important to know what is their attitude towards all these profound changes that even could continue after the pandemic is over.

From sociological point of view the perception of these changes is equally if not even more important as the changes themselves, as the acceptance or the rejection of these changes can also have an impact on the educational process itself. The attitude towards the online education (positive or negative) would define its future acceptance (or not) as educational approach that is not exclusively related to the emergency situation of the pandemic, i.e. it would define its social legitimacy among the participants in the educational process².

That's why the main purpose of this paper is to analyze the perception and the attitudes of the participants in the process towards such changes. This paper is dedicated to the students' attitudes especially as they are the center of the educational process.

2. OBJECT, SUBJECT AND SAMPLE OF THE RESEARCH

To complete this purpose, the author designed and made an online research during the summer of 2021 with students (and lecturers) of different Bulgarian universities³.

The research is a continuation of a pilot survey, made in 2020 with the participation of the same author (Getova, 2020). However, both surveys have different objective: while the first survey main goal was to show the consequences of the fast transition to online education, the second one is oriented towards the long time effects of the online learning that was in the end its third semester during the time of the research fieldwork.

The survey was made on the Limesurvey platform for online surveys of the Faculty of philosophy of the Sofia University "St.Kliment Ohridski". The sample consisted of 253 students from several Bulgarian universities as Sofia university, University of Library Studies and Information Technologies, National Sports Academy, University of National and World Economy and others (see Table 1).

A non-representative sample of the type of snowball sampling was used. The model is described by Biernacki and Waldorf (1981). While theoretically possible, a representative sample requires a large amount of resources for the organization of the fieldwork, while the used snowball sampling gives the opportunities even for a small team of researchers to achieve large number of respondents of various subgroups within the same target group.

² Legitimacy here is used in the meaning introduced by Weber: a social acceptance of particular phenomenon (Weber, 1978, 213:215).

³ The full text of the report is available at: <https://phls.uni-sofia.bg/article/3052> (in Bulgarian).

Tab.1 Sample description (number of students)

University				University program type			Total
				Social Sciences and Humanities	Other	N/A	
Sofia University St. Kliment Ohridski	Grade	First year BA		21	3	1	25
		Second year BA		32	2	8	42
		Third year		24	0	2	26
		Higher grade, including MA		31	1	0	32
		Total		108	6	11	125
National Academy	Grade	Second year BA		4	6	12	22
		Third year		9	21	20	50
		Higher grade, including MA		1	0	0	1
		Total		14	27	32	73
Other	Grade	First year BA		3	1	0	4
		Second year BA		0	1	1	2
		Third year		2	2	0	4
		Higher grade, including MA		3	13	1	17
		N/A		0	0	1	1
		Total		8	17	3	28
N/A	Grade	First year BA		3	0	3	6
		Second year BA		4	0	3	7
		Third year		1	1	1	3
		Higher grade, including MA		4	1	5	10
		N/A		0	1	0	1
		Total		12	3	12	27
Total	Grade	First year BA		27	4	4	35
		Second year BA		40	9	24	73
		Third year		36	24	23	83
		Higher grade, including MA		39	15	6	60
		N/A		0	1	1	2
		Total		142	53	58	253

Source: Getova, 2021, full text of the report is available at: <https://phls.uni-sofia.bg/article/3052>

The variety in the demographic profile of the sample (see Table 1) gives access to different point of views and larger pool of opinions about the themes included in the survey, so the chosen model of sampling can be considered as effective regarding to the purposes of the survey.

3. MAIN HYPOTHESES

As the main purpose of the analysis is to show how the educational process changed according to the students, the main hypotheses should be the following:

- Generally, the attitude of the students towards the online education is positive. However, most of them still prefer the traditional in-person education because some disadvantages and technological restrictions of the online approach

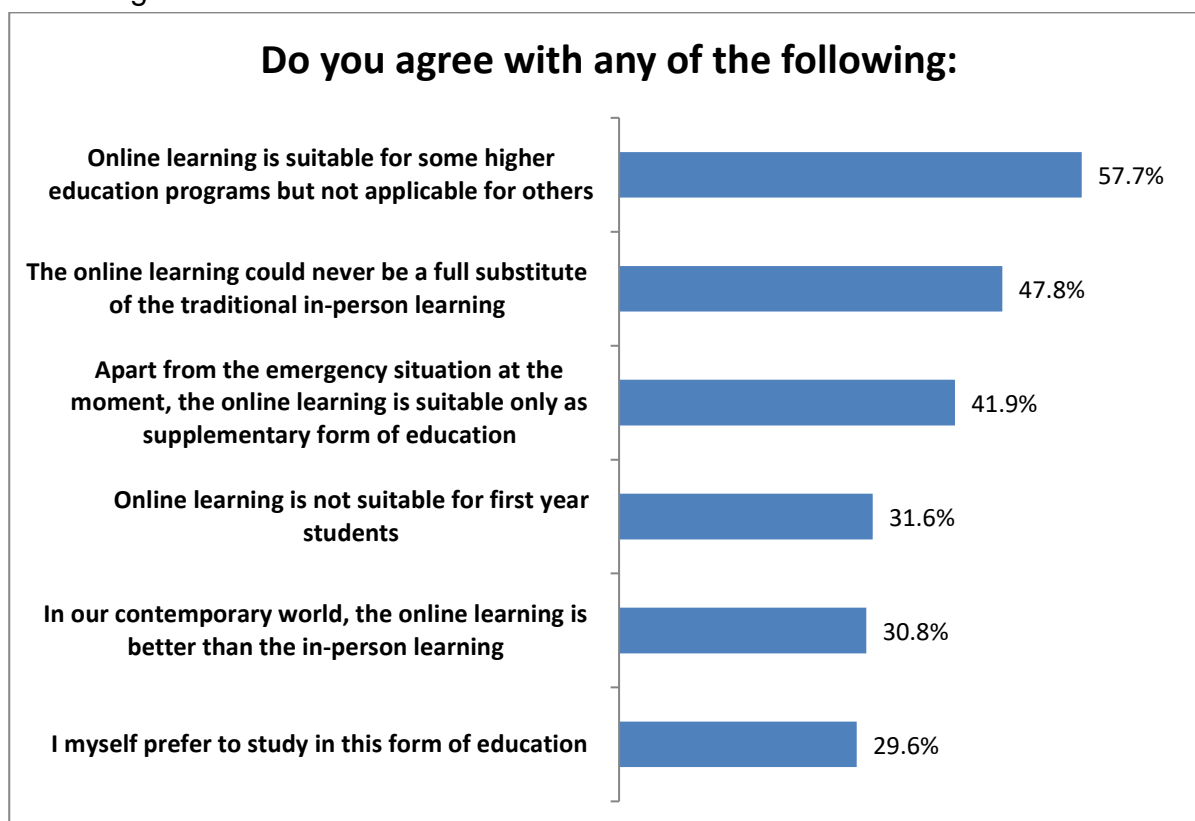
- Despite these disadvantages the students consider that the online education wouldn't cease to exist in the Bulgarian universities with the possible end of the pandemic, even more, it would be the dominant approach in the near future.

4. ANALYSIS OF THE RESULTS

Regarding to the methodology described above, some clarifications should be made in the beginning of the analysis. The results obtained in the survey shouldn't be extrapolated to the general population of all Bulgarian students due to the model of sample used in the survey. However, these results can be used to describe the main tendencies relate to the attitudes of the students towards the online learning and its future in the Bulgarian university education.

First, is important to know if the students at all consider the online learning as appropriate approach for university education. While this question was never asked directly, it can be concluded that most of the students approve the online learning but they don't consider it as universal: according to them it is suitable for some university programs, but not for others (see Fig.1). The students weren't asked for details: what kind of programs are not suitable for online learning but from the open answers can be concluded that these have to be programs with bigger number of practical classes (like biology, chemistry, medicine or sports). These are also the programs that in reality had in person classes during the academic year in most Bulgarian universities. Most of the respondents in the survey (56%) study humanitarian or social sciences, but even the majority of them agrees with this statement.

Fig.1: Attitudes towards online education



Source: Getova, 2021, full text of the report is available at: <https://phls.uni-sofia.bg/article/3052>

Also, there is no correlation between the program of the students and their attitude to this statement: the Cramer's V coefficient between the type of university program and the mentioned statement about the online learning within the sample is under 0.3.

Are these programs with practical lessons really incapable to be placed online completely is a question that is yet to be decided. It is important to say that students in such programs who took part in the survey had the majority of their lessons online, so programs as chemistry, biology and sports also can be held online (excluding these practical or laboratory lessons).

The online learning is generally considered as the more advanced and versatile approach in the education as it allows access to much more resources in and out of the classes, easier application of different technological facilitations, etc. However, only 30% of the participants of the survey agree with the statement that it is the better approach of education (see Fig.1). This not so big enthusiasm towards the online learning could be explained with the fact that most of the students in the survey have 3 semesters experience with the online learning (only 14% of the sample are in their first year in the university) so they base their opinion on this personal experience. It is important to analyze what were the biggest problems their faced during these 3 semesters, respectively what are the biggest disadvantages to studying online to understand why the majority of students don't consider this approach as the better one

Also, almost half of the students think that the online learning could never fully substitute the traditional in person learning (see Fig.1). This statement cannot be analyzed without taking in consideration what the students think about its main strengths and flaws because it is the key to understand why the students are not sure that the online learning could fully substitute the in person education in the future.

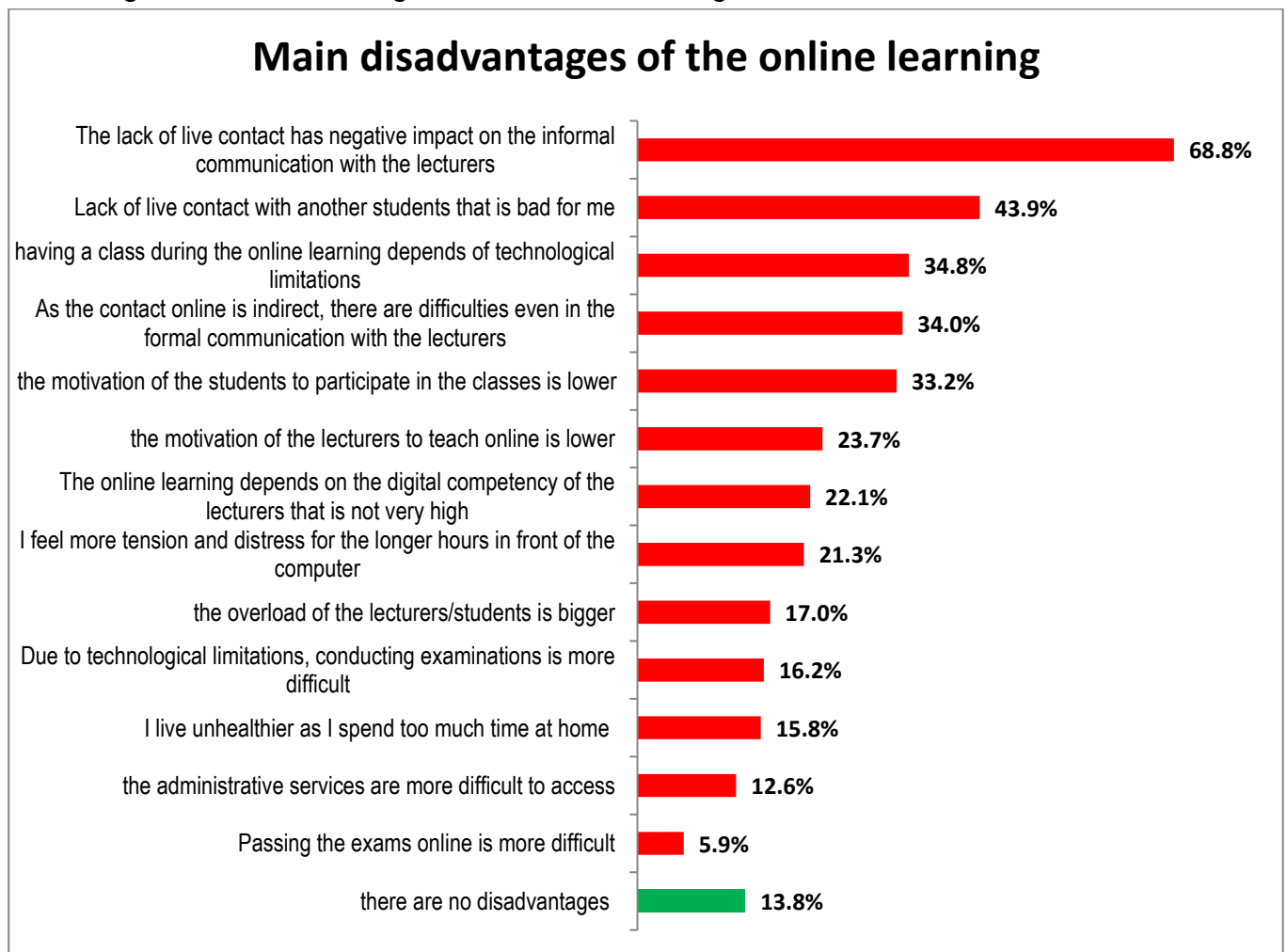
It is no surprise then than only 30% of the students prefer the online learning (instead of the traditional one). So what are the biggest problems that the students faced to form such opinion?

The main problems that the students encountered during the online learning are unsurprisingly the technological ones, mostly related to crash in the platform or other technological restrictions and limitations in the platforms used during the classes. It is important to say that there are differences between the first and the second year of the online learning in this aspect. While the technological issues are mentioned as problems in both years, one of the frequently mentioned problems about the first year is the fact that the students and the lecturers are both unprepared for the unprecedented situation with the online learning. In the second year this is rarely mentioned as problem as obviously the larger experience with the new approach of education made them accustomed to it. In the second year, the decreasing motivation by both sides (lecturers and students) are relatively frequently mentioned in the spontaneous answers of this question. On the other side, almost 50% of the students who had three semesters of online learning did not mention any particular problem impeding the educational process online during their study.

This open-ended question mentioned above however, is dedicated to the problems within the process of online learning. To understand the students' perception of the online learning as a whole and respectively why most of them for now wouldn't choose it as preferable approach of education is important to know what flaws they see in it.

The disadvantages of the online learning according to students are presented in Fig 2.

Fig.2 Main disadvantages of the online learning



Source: see Fig.1

As it can be seen in the figure, the main flaw of the online learning, according to the students lays on its essence: the remoteness of the communication that leads to dissatisfaction. The students mark different aspects of the communication online as disadvantage: the formal communication with the lecturers due to the fact that the contact between the sides is not direct (it depends on the technology) but also the informal one, that was always present during the in time classes. The lack of live contact with another students also increases the sense of "remoteness" no matter that most of the students mentioned that they have informal virtual communication with their colleagues. 82% of the students use social media chats (Viber, Facebook, etc.) to communicate informally with

another students in their program but this virtual communication while being direct (in live time) and informal (these channels are not used for communication with the lecturers) cannot compensate the lack of live contact for the students.

Less than $\frac{1}{4}$ of the students evaluate the lecturers' technological competence as low (and respectively as source of obstacles to conduct the classes online), so the lack of digital skills is not a significant factor that would lead to problems in the online education (at least, according to the students). However, the online education itself is not only a "transgression" of the in person classes online: this new, virtual environment in some cases require radical change of the pedagogical approach in the classes online. While this problem is not articulated by the students, it can affect negatively the final result of the educational online process.

The informal communication with the lecturers, while is not exclusively part of the educational process itself, is obviously crucial for the learning process from the point of view of the students. While in person such informal communication can happen "naturally", most often during the breaks between the classes, in the online learning there is no place for real breaks; so one of the challenges in the future should be to organize the process in such way that the informal communication could be possible even in the situation of "remote connection". Such practices already exist during the academic events as conferences (and similar) that are held online: there are special sessions dedicated to informal topics as discussing films and other cultural events or organizing virtual pubs and clubs.

It should be also noticed that less than $\frac{1}{5}$ of the students that participated in the survey were obliged to enter the classes with active cameras (and not only audio connection). While this could be a consequence of some technological limitation of the platform, it also increases the sense of remoteness and incompleteness of the communication during the classes online.

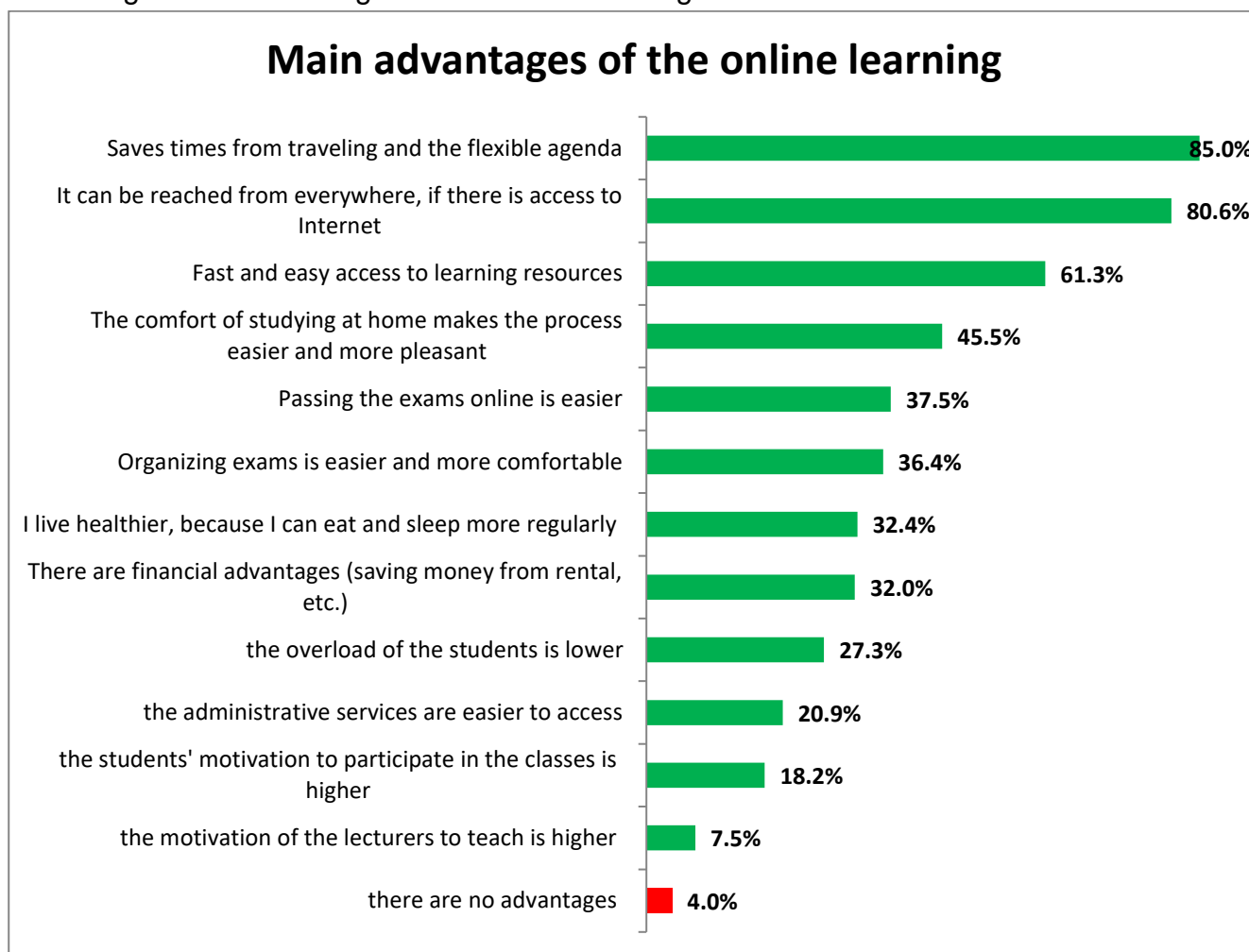
More than $\frac{1}{3}$ of the students also consider the technological problems/limitations of the online learning as disadvantage, as the strong technological dependency of the online learning can lead to cancelation/delaying of some lectures.

While the students criticize some aspects of the online learning process, only 10 of all 253 choose the option that the online learning has no advantages at all (i.e. it has mostly disadvantages). It can be concluded that despite the flaws described above the students encounter also enough advantages in the process. These advantages can be seen in Fig.3.

The main advantages of the online approach according to students are related to the formal aspects of the online learning much as the disadvantages are related to the informal ones. The first advantage (mentioned of 85% of the survey participants) is that it saves time: first from travel to the point where the lectures should take place if the learning process was in campus and second, in the more flexible agenda. The flexibility of the agenda is not a product of some objective, new way of making the list of classes during the day but of the simple fact that the students are not obliged to be present physically in some place, so they can still enter the lecture at least as listeners being on traveling or in

some cases even at work. This actually gives them more opportunities to participate in the classes no matter what their personal obligations and occupations are.

Fig.3 Main advantages of the online learning



Source: see Fig.1

The accessibility of the online classes (according to 81% of students) from practically every place with internet also is considered as big strength of the online learning. Another aspect that most of the students consider as advantage is the easy access to resources. In this case, they rarely have to go the library as the resources are stored directly in the platform or in another shared space as Google drive; also, there are easy and accessible opportunities for the lectures to be recorded and this was mentioned even in the open ended questions as very important advantage of studying online.

The opportunity of studying at home is considered also as big advantage, not only because of the comfort of the personal space where the students are during the classes. Almost 1/3 of the students also consider this approach as the healthier one and this looks a bit paradoxical as spending too much time in home generally is not considered as healthy way of living (and respectively only 16% of students agree with this general statement). However the motives of these 32% to think this is the healthier approach are

that studying at home gives them the opportunity to sleep more (the online learning saves the time for traveling and preparing for the lectures) and also to eat more regularly. The latter can be considered more as disadvantage of the organization of the in campus learning in the Bulgarian universities than a real advantage of the online learning itself, because in most university agendas there are no pauses exclusively reserved for lunch break or similar.

Another facilitation of studying at home is the financial one, especially for students that go to study in another city: they save money from rentals, transport, etc. It is important to mention that while the students of private universities are few in this sample, they mentioned in the open ended questions that the taxes they pay should be lower during the online learning and respectively as they are not for now, the students consider this as flaw of the online learning process in their university. If the students in general consider the online learning as the cheaper approach, then this can be a very attractive aspect for some university programs in the future.

Significant part of the students sees as advantage the exams during the online learning: not only their organization but also the exams themselves are considered as easier to take online. It is not clear, however, if the latter is not a product of more opportunities to “cheat” (i.e. easier access to internet sources during the online exam) or it is because of some technological limitation the tasks that the lecturers include are just simpler. It is important to say that the lecturers consider the cheating during the exams as relatively easy, so they think that this is a flaw in the online education and not an advantage.

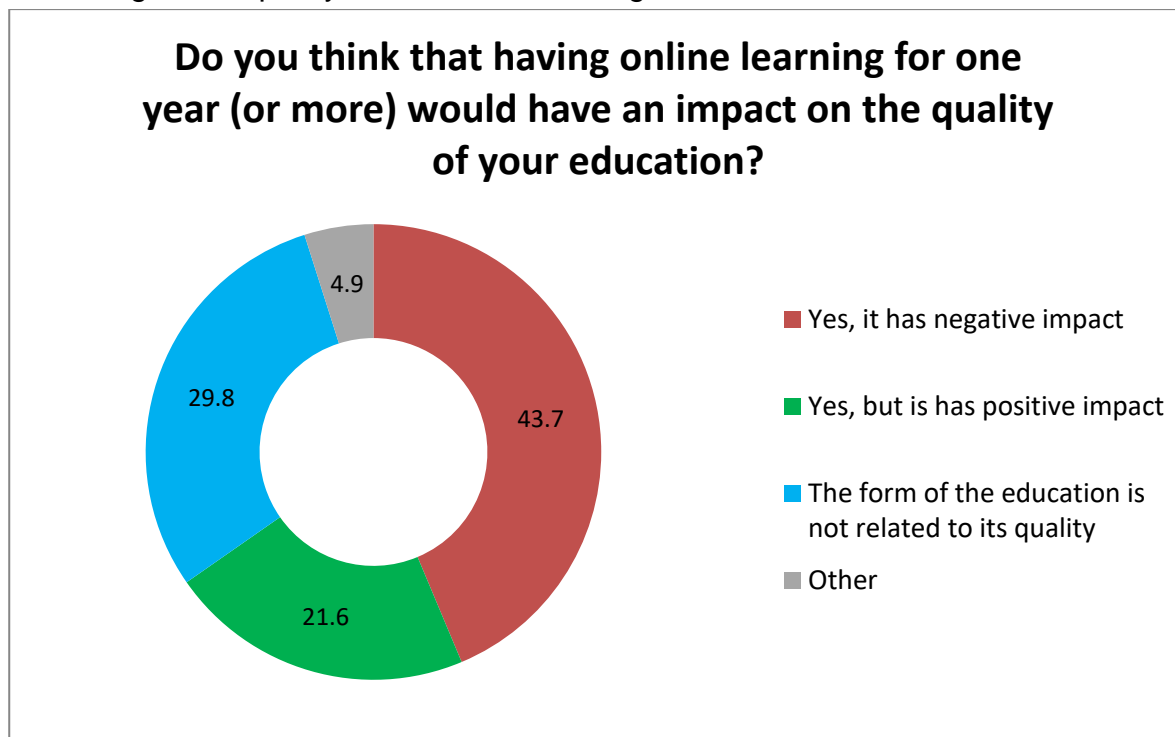
All those facilitations available in the online learning however won't necessarily lead to more frequent or active participation of the students in the educational process. Only 18% of the students think that the motivation for participating in the classes is bigger during the online classes but 33% think that is lower. This presumable paradox can be easily explained if the problems and the disadvantages of the online learning are taken in consideration. The motivation for participation depends not only on some technological facilitation but also on more personal sides of the learning process: if it is interesting enough, or if it gives more opportunities for easy communication and according to the students is all reverse.

If the problem of the motivation persists also in the future it would be one of the biggest challenges of the online education (if it continues to be used as approach even after the pandemic).

Another important factor is how the students evaluate the quality of the education they received during the online learning as their attitude towards the quality would define their attitude to the approach itself. While 30% think that the environment (virtual or in person) doesn't affect the quality of the education, 44% think that the online learning at least till now would have negative impact on the quality of their own education as is shown in Fig.4. This attitude is not necessarily related to their general perception of the online education as a whole: which is mostly positive, regarding to the many advantages they noticed in it. It can be a result of the way the online learning was executed: the fast and unprepared transition in 2020, the emergency situation that led to many limitations in most

classes (including technological ones), the stress and the impact of the pandemic as whole, etc. etc.

Fig.4 The quality of the online learning



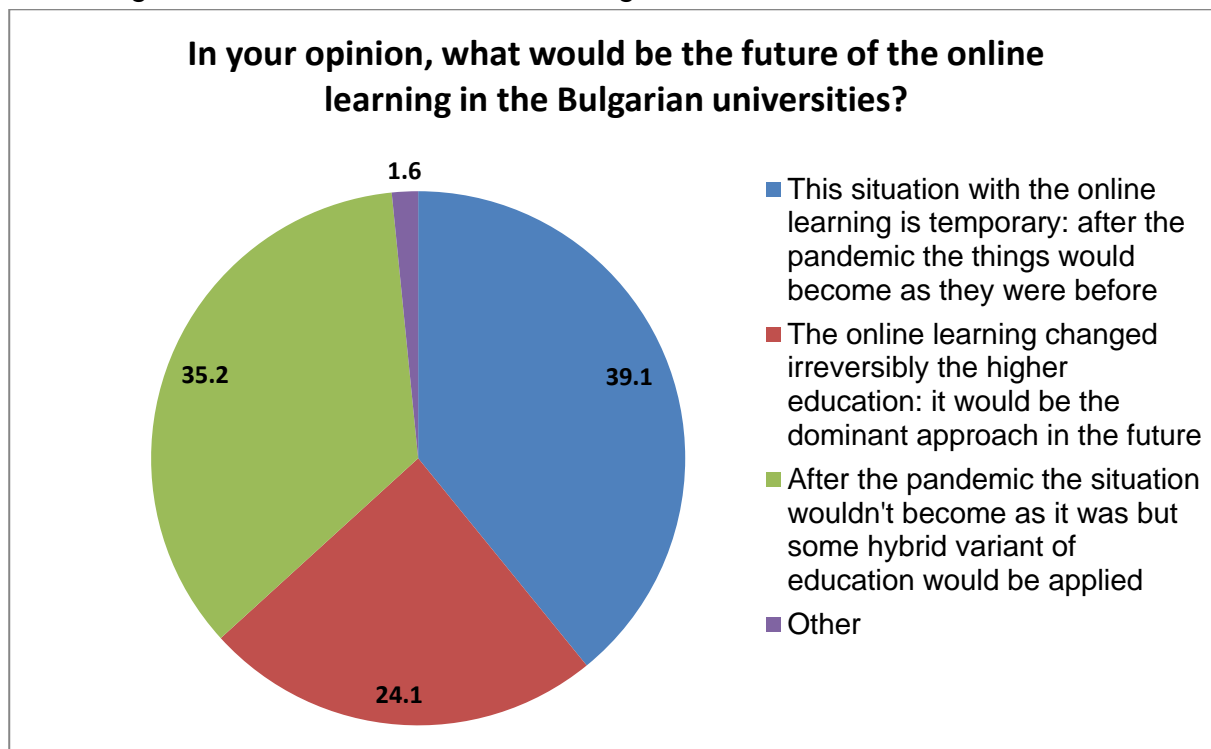
Source: see Fig.1

However such attitude can explain why so few of them prefer the approach of studying online against the traditional one.

Last, but not least, what students think about the future of the online education in the Bulgarian universities after the pandemic?

The results of this question can be seen in Fig.5. It can be concluded that the students' opinions on this topic are divided. Some of them think that after the pandemic the situation would "normalize" (become as it used to be), others think that the change is irreversible and the online learning would be the dominant approach in the near future. There is (although a weak) correlation between those who prefer the online education as approach and those who think it would dominate in the future: the Cramer's V is 0.34 so it can be considered more like desirable situation from their part than a vision for the future. The biggest share of students thinks that a hybrid approach would be used even after the end of the pandemic but as the differences between the three groups are not big, the conclusion should be that the students are not sure about the future of the higher education: most of them think that at least some "aspects" of the online education (included in any form of hybrid/online learning) would be kept even after the end of the pandemic.

Fig.5 The future of the online learning



Source: see Fig.1

5. CONCLUSIONS

The analysis of the data confirmed the first hypothesis: the students have an overall positive attitude towards the online education but most of them still prefer the traditional approach. The reasons behind this are related mostly to the limitations of the communication online and the limitation of the technology in the educational process. For example, poor connection can lead to restriction of the communication during the real time online classes to audio only and respectively such problem could never exist during the in person approach. Big problem is also the practical lack of direct informal communication with the lecturers. These flaws of the online learning approach explain why still less than 1/3 of them prefer this approach instead of the traditional one.

However, most students do not think that the online education would disappear with the end of the pandemic; at least a hybrid variant would be kept as approach in the Bulgarian universities, as was stated in the second hypothesis. This means that most of

the students agree that the situation in the higher education is already changing and this change would outlive the pandemic as well.

The data analyzed in the paper was collected about the academic year 2020-2021. However, in the new academic year, 2021-2022, the online learning continues in most Bulgarian universities at least for the first semester. So it is important to continue the monitoring of the students' perceptions and attitudes towards the online approach even for the mere reason that there would be groups of students whose education would be held mostly online even if this is the last year of mass online learning in Bulgaria.

References

1. Biernacki, P. and Waldorf, D., 1981. Snowball Sampling: Problems and Techniques of Chain Referral Sampling Sociological Methods and Research vol.10, N2, Sage Publications, pp. 141-163
2. Getova, A., 2020. Problemi i predizvikatelstva pred distantsionno obuchenie po vreme na izvanredno polozhenie. Rezultati ot prouchvane na distantsionno obuchenie v SU i NSA), [online] Available at: <<https://phls.uni-sofia.bg/article/3052>> [Accessed 30.11.2021)
3. Getova, A., 2021. Naglasi i ochakvamia kam onlain obuchenieto prez votirata godina na pandemiata, [online] Available at: <<https://phls.uni-sofia.bg/article/3052>> [Accessed 30.11.2021)
4. Weber, M., 1978. Economy and Society, University of California Press.