This is not (the New) Normal. Students' Attitudes Towards Studying During the COVID-19 Pandemic and the Determinants of Academic Overload

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Abstract: The measures taken to combat the pandemic COVID -19 suddenly changed the way of studying in many countries around the world. Because of the abrupt change, faculties did not have time to develop strategies for implementing online study, so faculty were busy finding new ways to teach their courses. As it turned out, many of them were not prepared for such a change. They lacked the technical understanding of how to use online tools and platforms, as well as the pedagogical knowledge of the dynamics of online teaching. In this paper we discuss how students from the Faculty of Arts at the University of Ljubljana, Slovenia, experienced the changes in the way they study. We conducted an anonymous online survey among 1,827 students from the largest faculty at the University of Ljubljana. The survey took place in February and March 2021. The results show that there were differences between students in their assessment of the appropriateness of different teaching approaches regarding various factors, which highlights the conditions students had at home to study. The conditions at home affected students' attitudes towards distance learning, their assessment of competence for distance learning, as well as their motivation to study and their sense of being overwhelmed. Thus, more study difficulties, negative attitudes and motivation problems were observed among students who were not provided with adequate study conditions. Nevertheless, the results of the study show that distance learning also has potential, but this potential can only be realised if all those involved in the process are provided with the right conditions. We conclude the study with four main recommendations, namely that the quality of distance learning requires (1) adequate conditions for students to participate in distance learning; (2) an appropriate choice of teaching methods is important; (3) teachers need to be didactically trained for distance learning; and (4) during distance learning, cooperation between the teacher and the students and between the students themselves should be encouraged.

Keywords: online learning, COVID-19, teaching methods, assessment, student attitudes

1. Introduction

In March 2020, as the world was faced with the outbreak of the COVID-19 pandemic, many countries put on hold their established way of educating and implemented distance schooling as part of their measures to contain the virus. According to the Director- General of UNESCO, Audrey Azoulay, the disruption to education caused by the COVID-19 pandemic was unprecedented, with more than 200 million students worldwide trapped in the "pandemic classroom" (UNESCO, 2020). The Faculty of Arts, University of Ljubljana, was one of the first faculties in Slovenia to substitute face-to-face lectures for online lectures by dean's decree before a strict lockdown was enforced across the country. A few days later, following the government's decree, the entire country came to a halt and educational processes on all levels were fully transferred online and continued as distance learning. At the time, probably no one expected this measure would go on significantly longer than initially forecasted and that it would bring so many changes with it. Due to the sudden transition, the faculties did not have time to prepare strategies for the implementation of the online study process, whilst professors were forced to look for new ways of teaching their courses themselves. As it happened, many of them were not properly trained for such transition due to their lack of technical knowledge on using online tools and platforms, as well as lack of pedagogical knowledge on the dynamics of online education. What is more, many faculties were suddenly faced with lack of suitable technological equipment and professional support (Bao, 2020). All in all, it was the students who most acutely felt those changes by having to cope with very diverse teaching methods and approaches and being forced to become quickly acquainted with a variety of web tools, applications and online environments used by their teachers to deliver their course (Katz et al., 2021). During the pandemic, this method of teaching came to be known as "emergency remote teaching" (Hodges et al., 2020).

1.1 Emergency remote teaching

The first studies on the impact of an epidemic on education systems appeared shortly after the outbreak of COVID-19. The UNICEF survey found that online learning was the most common form of distance learning and that adoption rates were higher at higher levels of education (UNICEF, 2020). Carrillo and Flores (2020) reviewed

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the literature on online pedagogy for teacher education and pointed to the need for a comprehensive understanding of how online education can integrate technology to enhance teaching and learning. Authors dealing with online learning (Bates, 2015; Means et al., 2014; Oliver, 2006) list the following conditions as prerequisites for its successful implementation: good planning (which can take several months), adequate teacher training (knowing the dynamics of working in an online environment, using appropriate methods and ways of working, managing online learning environments), the size of groups involved in e-learning, suitable technological equipment for learning online, as well as strong support service available to both teachers and students when problems arise. Given that those prerequisites were not met during the period of lock-down, the process of transition, as well as the process of conducting studies after the lock-down, turned out to be a rather stressful period for professors and students alike.

If at first it seemed that fast transition to distance education in the pandemic would be easier, given that many saw important similarities and benefits of online learning – teaching strategy that was known to be effective. It quickly became apparent there were several important differences between these two concepts of education. On top of that, the situation we found ourselves in made it clear that we cannot classify this the sudden transition to distance education as online learning, but rather as "Emergency Remote Teaching" (Hodges et al., 2020).

Hodges and his colleagues (2020) defined emergency remote teaching (ERT) a temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances. It involves the use of fully remote teaching solutions for instruction or education that would otherwise be delivered face-to-face or as blended or hybrid courses and that will return to that format once the crisis or emergency has abated. The primary objective in these circumstances is not to re-create a robust educational ecosystem, but rather to provide temporary access to instruction and instructional supports in a manner that is quick to set up and is reliably available during an emergency or crisis (Hodges et al., 2020). Due to the COVID-19 pandemic, ERT was introduced for all students of all study programmes, without giving them enough time to properly prepare for it or a possibility to use blended approaches. Furthermore, the implementation of emergency remote teaching did not allow for voluntary inclusion into this form of education. All students were forced to accept it, as it was presented as the only available method for continuing their studies.

1.2 Universities and the use of digital technologies before the pandemic

Authors who studied the use of technology in a university setting before the pandemic write that, for example, "many university students [had already been] 'digital residents', that is, accustomed to experiencing digital technologies as seamless, 'always-on' and highly participatory social spaces" (Wright et al. 2014) and that "for these students, digital environments, such as the Internet, are a way of life rather than discrete functional tools that can be turned on and turned off" (Henderson et al., 2015, p. 1). However, this does not apply to the use of technologies for the purposes of teaching and studying. Selwyn (2014) underlines that the use of digital technologies for learning and teaching has long been inconsistent – varying considerably between subject disciplines, levels of study, modes of delivery and institutions.

Accordingly, authors such as Henderson et al. (2015) and Selwyn (2016) find that "*students' use of technology in higher education is mostly limited to performing routine tasks and they often need support when using technology*", whilst O'Connell and Dyment (2016) demonstrate that students are not as digitally savvy as educators believe and that they prefer to do tasks using basic technologies such as e-mail, Google search, or word processing. As regards students, their use of technology for study purposes is related to the requirements and expectations of their professors and faculties. Students do not use technology for study purposes to a great extent, unless instructed to do so by professors who often make decisions about using technology for study purposes based on their own beliefs and understanding of technology (Jääskelä et al., 2017). In addition, the teachers' beliefs about technology can be very different and rather resistant to change (e.g., Pajares, 1992). However, academics' fears about the use of technology are needless, since Henderson et al. (2015) demonstrate that digital technologies are not transforming the character of university teaching and learning, or even significantly disturbing the student experience, which could be the reason for or represent the fear of a more systematic use of technology in a university setting for study purposes as well. Additionally, the authors write that universities have an obligation to support these beneficial aspects of students' digital studies and advise universities to continue developing their digital resource repositories, enhancing the reliability and usability of learning management systems, and expanding the availability and accessibility of other core systems (ibid).

According to Ashour (2020), to capitalize on students' enthusiasm for technology, new digital choices for teaching, assessing, and presenting course materials might be employed both in and outside of the classroom to supplement traditional approaches. Students interact with technology tools, according to the author, when they are implemented by instructors (ibid.). They must be taught in a way that is tailored to them, using a range of adaptive teaching methods as well as a variety of tools, technologies, and places.

1.3 The use of technology for study purposes as seen by students

In addition to the aforementioned erroneous belief that today's students are a digital generation with full command of digital technologies, we often come across another belief, namely that the use of digital technologies for study purposes will contribute to greater study efficiency and outcomes. However, students are rather critical of the use of technology and clearly point out its weaknesses. In a study asking the students to assess the use of online environments which they assessed as particularly impractical or useless for their studies, Selwyn (2016) identified four categories:

1. *Digital technology as a disruptive factor,* in which the use of technology was recognised primarily as a distraction of the student from studying. In this category, students listed social networks (e.g., Facebook, YouTube) and the use of smartphones as a means for procrastination during lectures or while studying.
2. *Disruptions in technology operation,* where students identified disruptions of a more technical nature (e.g., poor Internet connection, power outages, frequent charging of batteries for mobile devices), as well as professors' ignorance on how to use a particular technology. Such disruptions were perceived by students as wasting valuable time during lectures, as an obstacle to productivity, plus they made them feel there was no point in participating in such lectures. Students considered such technical disruptions and the professors' struggling when using technology as an obstacle to their own academic pursuits.
3. *Digital technology as a problem,* where persistent barriers to the use of technology were identified. Students reported suffering from physical exhaustion, headaches, and eye problems due to staring at the screen for hours on end. Within this category, students perceived incongruence between the time spent for such studying and the effect or contribution of this manner of studying. Students often attributed these problems to inconsistent design and organisation of such forms and methods of education.
4. *Harmful digital technology*, which included both poor quality teaching materials (poor document resolution, poor video quality) and bad learning experience in courses supported by digital technology (i.e., ill-conceived online activities which do not facilitate gaining deeper insight and reflection in students). Within this category, students often mentioned poor quality of presentations used by professors during lectures. The professor's bland reading of the text from a PowerPoint presentation, as well as too much text in the presentation distracted the students and reduced their willingness to participate in such lectures. Students pointed out that the unsatisfactory use of technology by professors reduced the quality of the pedagogical process itself (Selwyn, 2016).

Selwyn (2016) emphasises that statistically significant differences were observed between students in groups which assessed the identified categories differently. The groups comprising men and younger students assessed to a larger extent that digital technology can be a disruptive factor in studying, whilst senior students and those with a higher-grade point average perceived digital technology as more harmful than other groups.

Similar and other also some additional problems with distance learning have been reported in surveys evaluating students' experiences during COVID-19. Research shows that students not only need to overcome technological difficulties, but also need support to prepare for the lecture and teacher's support to stay engaged (Giannoulas et al., 2021; Velde et al., 2021).

Ashour (2020) writes that the reckless use of technology for study purposes *"has shaped not only the practices of the students, but also their expectations around higher education. It shows that contemporary students are becoming passive consumers rather than just the producers of information. The study found that the students are not making use of the potential of technology in education.*" Both Selwyn (2016) and Ashour (2019) suggest that universities and colleges ought to put more effort into developing institutional policies and practices that promote improving the use of existing technologies rather than into continuous introduction of new ones. An important part here includes the development of didactic skills since mere technical ability of professors to use technologies does not affect the quality of technology-supported learning. The COVID-19 pandemic cut into such (un)prepared university setting.

1.4 Purpose of the study

In the introductory, we briefly describe the problems of higher education during the pandemic and point out the difficulties that faculties have faced in making the transition. In the second part of the paper, we present the results of the survey conducted at the Faculty of Arts, University of Ljubljana (Slovenia). We wanted to investigate students' experiences of studying during the pandemic, their evaluation of study activities and their attitudes towards distance learning. We also wanted to find out what factors influence the feeling of academic overload that many students have reported in other studies.

With this in mind, we asked three main research questions:

1. Are there differences in the experience of distance learning between study conditions, level of study, year of study and gender?
2. How students' attitudes about distance education are correlated with variables such as the living conditions, study conditions, level of study and gender?
3. Which factors influence the students' feeling of being overburdened during a period of distance learning?

2. Method

2.1 Participants

In the survey, 1827 students participated, which represents more than 40% of all students at the faculty (N = 4487 in the academic year 2020/2021). The surveyed students comprised of 83% female students and 16% of male students, whilst 1% of respondents did not specify their gender. This percentage is representative of gender shares of the students enrolled in the faculty. We divided students according to the (Bologna) level of study (undergraduate/postgraduate), year of study (1 through 5) and place of residence (rural/urban). The data show that most of the responses are from undergraduate students (72%). On the undergraduate level, almost half of the answers were from first-year students (45%), followed by second- and third-year students. The data is representative in all dimensions according to the actual characteristics of students' population currently enrolled in the faculty, with the sample size that covers almost half of all enrolled students.

Table 1: Demographic characteristics of the respondents (N=1827)

Demographic variables	***Percentage***
Gender	
Female	83.3
Male	16.7
Study level	
Undergraduate (UG)	72.2
Postgraduate (PG)	27.8
Year of study	
1 (UG)	32.7
2 (UG)	21.0
3 (UG)	18.8
4 (1st year PG)	12.6
5 (2nd year PG)	14.8
Place of residence	
Rural	53.4
Urban	46.6

Note: UG = Undergraduate level; PG = Post graduate level

2.2 Instrument

For the purposes of this study, we prepared a questionnaire, which consisted of various scales and questions. We were interested in the basic demographic characteristics of students (gender, place of residence) and data on their studies (e.g., study year and study level). In addition to their enrolment data, we were interested in their experience of studying during the pandemic. We designed three scales; the first one was "Attitudes Toward Teaching Approaches", where 5-point Likert scale was used: the score of 1 meant "Not appropriate at all" and the score of 5 meant "Very appropriate.", the second was the scale with the same items, but the students indicated the frequency of use of teaching methods. Students rated how often, on average, teachers used a particular approach. The scale ranged from 1 - "In (almost) no course" to 5 - "In (almost) all courses".

We were also interested in the attitudes of students about online learning in general, so we created "Attitudes Towards Distance Learning Scale", which consisted of six items. The students expressed their attitudes on the 5-point Likert scale, where the score of 1 meant "I do not agree at all" and the score of 5 meant "I fully agree."

In the analysis, we created a new variable called "**Learning Conditions Index**" (LCI), which was calculated from student responses on whether they had (1) an appropriate study setting, (2) a quiet space to study, (3) appropriate office furniture, (4) own hardware, (5) own software, and (6) reliable Internet connection. Students answered dichotomously (Yes/No). From the answers, we calculated the index of learning conditions, which was used in the analyses (min = 1, max = 6, M = 4.92, SD = 1.27).

We were interested whether students perceived distance learning at the faculty as more or less stressful than the face-to-face learning experience before the pandemic. The question was not answered by the first-year students because they had not yet had this experience. The students answered on a scale from 1 - "My study load during the epidemic was much lower" to 5 - "My study load during the epidemic was much higher". The answers to this question have been labelled as the degree of academic overload.

Overall, variables included in the statistical analysis are:

- **Attitudes Toward Teaching Approaches**: assessing the appropriateness of each teaching approach. A higher score means that students rated an approach as more appropriate.
- **Frequency of Teaching Approaches Use**: assessing the appropriateness of each teaching approach. A higher score means that students rated an approach as more appropriate.
- **Attitudes Towards Distance Learning**: attitudes to some aspects of studying at a distance learning. A higher score means that students have a more positive attitude towards a particular aspect of distance learning.
- **Study level**: the level of study in which the student is enrolled (1 - undergraduate; 2 – postgraduate)
- **Year of study**: the year of study the student is attending (1 thru 5)
- **Learning Conditions Index**: conditions of student's learning environment at home. High scores indicate better learning conditions.
- **Rural/urban**: place of residence (0 = rural, 1 = urban environment)
- **Academic overload**: feeling of being overwhelmed by distance learning requirements. High scores indicate higher perceived burden of studying online.

2.3 Procedure and data analysis

The survey, which took place in February 2021, included all enrolled students of the Faculty of Arts. We created an online survey, which was sent to students' email addresses by the faculty management. On average, they took 10 minutes to complete the survey and their answers were anonymous. Statistical analysis was carried out using the SPSS software package.

3. Results

3.1 Differences in the experience of distance learning per gender (study conditions, level of study and year of study)

Our first research question is related to experiences of distance learning during the pandemic. Students were assessing the appropriateness of the most used teaching methods during this time. We made some comparisons if these attitudes are in any way correlated to their learning conditions, study level, and study year.

Table 2: Pearson's correlation coefficients for attitudes toward teaching approaches, and learning conditions (LCI), study level and year of study

Teaching Approaches Scale	LCI	Study Level	Year of study
Live lectures via Zoom	0.30***	0.04	0.04
Recorded lectures (long)	0.11***	-0.09***	-0.10***
Recorded lectures (short)	0.12	-0.09	-0.10***
Study material without activities	0.07**	-0.02	-0.06*
Study material with activities	0.09***	-0.05	-0.09***
Communication via e-mail	0.06*	0.02	-0.04

***$p < 0.001$; **$p < 0.01$; *$p < 0.05$

Note: LCI = Learning Conditions Index

Although the correlation coefficients are low, some correlations indicate high statistical significance. In terms of conditions in which learning took place (LCI) the correlation analysis, not surprisingly, showed that students who had appropriate study conditions during the period of distance learning assessed live lectures via Zoom very highly as the suitable way of distance teaching ($r = 0.30$; $p < 0.001$), followed by longer pre-recorded lectures ($r = 0.11$; $p < 0.001$) and study material with activities organised in course's LMS ($r = 0.09$; $p < 0.001$). Students from the same group assessed study material without activities ($r = 0.07$; $p < 0.01$) and communication via e-mail ($r = 0.06$; $p < 0.05$) as more appropriate, but with a lower statistical probability and weaker correlation coefficients.

Undergraduate students assessed longer pre-recorded lectures as more appropriate than post-graduate students ($r = -0.09$; $p < 0.001$). Lower-year students assessed the pre-recorded longer lectures ($r = -0.10$; $p < 0.001$), shorter pre-recorded lectures ($r = -0.10$; $p < 0.001$) and study material with activities as appropriate ($r = -0.09$; $p < 0.001$).

We also wanted to know whether gender influences the assessment of the appropriateness of teaching approaches.

Table 3: Analyses of variance for effects of gender the assessment of adequacy of teaching approaches

	Gender				
	Female		Male		ANOVA
Attitudes Toward Teaching Approaches	M	SD	M	SD	*F(*1.1474)
Live lectures via Zoom	4.25	1.04	3.89	1.17	23.661***
Recorded lectures (long)	3.39	1.30	3.16	1.27	6.418*
Recorded lectures (short)	3.54	1.22	3.24	1.23	12.593***
Study material without activities	2.82	1.33	3.04	1.37	5.567*
Study material with activities	3.35	1.22	3.38	1.28	0.079
Communication via e-mail	4.09	1.19	3.98	1.31	1.638

***$p < 0.001$; **$p < 0.01$; *$p < 0.05$

When assessing the adequacy of individual learning approaches by gender, there were several statistically significant differences: female students rated live lectures via Zoom as more appropriate ($p < 0.001$, $F = 23.661$) than male students, followed by pre-recorded shorter lectures ($p < 0.001$, $F = 12,593$) and pre-recorded longer lectures ($p < 0.05$, $F = 6.148$). The only teaching method that the male students rated better than their female counterparts is the study materials without activities, which are published in the LMS or sent by e-mail ($p < 0.05$, $F = 5.567$).

3.2 Attitudes toward distance learning and their correlation with frequency of teaching, study conditions, level of study, and gender.

In the next research question, we wanted to investigate how the attitudes toward distance learning are related to frequency of teaching approaches, learning conditions, study level, and gender.

Table 4: Pearson's correlation coefficients for the frequency of teaching approaches and attitudes towards distance learning

	Attitudes Towards Distance Learning Scale						
Frequency of Teaching Approaches	1	2	3	4	5	6	7
Live lectures via Zoom	0.00	0.05	0.05	0.05	0.06	-0.04	0.02
Recorded lectures (long)	0.11**	-0.12**	0.04	0.09	-0.01	-0.01	0.03
Recorded lectures (short)	0.13**	-0.14***	0.06	0.11*	0.09*	-0.05	0.12
Study material without activities	0.04	-0.03	-0.01	-0.04	0.01	0.03	0.07
Study material with activities	0.07	0.01	0.02	0.02	-0.04	-0.03	0.13**
Communication via e-mail	0.05	-0.03	0.04	0.12*	0.09*	-0.04	0.05

***$p < 0.001$; **$p < 0.01$; *$p < 0.05$

Note: 1 - Distance learning is generally more suitable for me than face-to-face lectures; 2 - Distance learning makes it more difficult to maintain motivation to study; 3 - I have adapted well to distance learning; 4 - I have acquired the same amount of knowledge by studying at a distance as with face-to-face lectures; 5 - I have the appropriate ICT skills to follow and participate in the distance learning process; 6 - I am worried about passing online exams because I do not know how they take place; 7 – By studying at a distance, I have gained more knowledge than with attending face-to-face lectures.

As the correlation analysis in Table 4 shows, the Pearson correlation coefficients are low, although some characteristics are statistically important. The highest correlation between the frequency of teaching methods and students' attitudes towards distance learning was found in the difficulty of maintaining motivation to learn (item 2 in the table) while watching recorded lectures (long or short). The more often these teaching methods were used by the teacher, the less difficulty students had in maintaining motivation to learn (r = - 0.14; p < 0.001). We found slightly lower correlation between the use of certain teaching methods and the claim that students have acquired more knowledge during the period of distance learning (item 4). Those students who received more frequently study material with activities were more likely to assess that they had acquired more knowledge during the period of distance learning (r = 0.13; p < 0.01). The same correlation can be observed between the students' view that distance learning is generally more appropriate for them than face-to-face lectures and pre-recorded short lectures. Students who received more frequently pre-recorded shorter lectures during the period of distance learning were more likely to assess that distance learning was generally more suitable for them than face-to-face lectures (r = 0.13; p < 0.01).

The following table shows the results of the correlation between attitudes towards distance learning and the level and year of study.

Table 5: Pearson correlation coefficients between attitudes towards distance learning, study conditions, and study level

Attitudes towards distance learning	LCI	Study level
Adequacy of distance learning	0.26***	-0.41***
Difficulty in maintaining motivation	-0.29***	0.44***
Adaptation to distance learning	0.37***	-0.38***
Gained the same amount of knowledge by studying at a distance	0.35***	–0.44***
Having appropriate ICT skills for distance learning	0.38***	–0.25***
Concerned about online exams	–0.29***	0.29***
Gained more knowledge by studying at a distance	0.28***	-0.39***

***p < 0.001; **p < 0.01; *p < 0.05

Note: LCI = Learning Conditions Index

Correlation analysis shows that there are quite a few statistically significant correlations and that most of the correlations are moderately high. The highest correlations are related to study level. The results show that postgraduates had more difficulty in maintaining their motivation to study during distance learning than first-level students (r = 0.44; p < 0.001). On the other hand, undergraduate students expressed to a greater extent than their master's degree colleagues that they had acquired the same amount of knowledge during the period of distance learning as with face-to-face lectures (r = –0.44; p < 0.001). In addition, undergraduate students also more in agreed that distance learning is generally more suitable for them than face-to-face lectures (r = –0.41; p < 0.001), that they had acquired more knowledge during the period of distance learning (r = –0.39; p < 0.001), that they had adapted well to distance learning (r = –0.38; p < 0.001), as well as that they have adequate ICT skills for distance learning ICT (r = –0.25; p < 0.001). In contrast, master's degree students expressed greater concern about distance exams (r = 0.29; p < 0.001).

The comparison of attitudes with learning conditions also showed statistical significance among all items. Students who indicated they had appropriate learning conditions during the period of distance learning were more likely to express that they had appropriate ICT competencies for distance learning (r = 0.38; p < 0.001), that they had adjusted well to distance learning (r = 0.37; p < 0.001), that during the period of distance learning they acquired the same amount of knowledge as with face-to-face lectures (r = 0.35; p < 0.001), that they acquired more knowledge during the period of distance learning (r = 0.28; p < 0.001) or that distance learning was generally more suitable for them than face-to-face lectures (r = 0.26; p < 0.001). However, students who did not have adequate study conditions during the period of distance learning were more likely to indicate difficulties with maintaining motivation to study (r = - 0.29; p < 0.001) and expressed concerns about distance exams (r = –0.29; p < 0.001).

The analysis by gender did not reveal any major differences, and even those that are statistically significant are quite small.

Table 6: Analysis of variance for differences in attitudes towards distance learning by gender

	Gender				ANOVA
	Female		Male		*F*(1.1474)
Attitudes towards distance learning	M	SD	M	SD	
Adequacy of distance learning	2.78	1.40	2.53	1.42	6.399*
Difficulty in maintaining motivation	3.93	1.28	4.00	1.24	0.606
Adaptation to distance learning	3.77	1.06	3.64	1.11	3.277
Gained the same amount of knowledge during distance learning	3.12	1.30	2.92	1.33	3.075
Having appropriate ICT skills for distance learning	4.24	0.86	4.39	0.86	6.169*
Concerned about online exams	2.90	1.34	2.68	1.26	5.480*
Gained more knowledge during distance learning	2.26	1.09	2.18	1.16	0.621

* $p < 0.05$

The analysis of variance revealed differences in the assessment of the relevance of distance learning ($p < 0.05$, $F = 6.399$) and concerns about taking exams online ($p < 0.05$, $F = 5.480$). Both statements were rated higher by females, while the assessment of having adequate ICT skills for distance learning was rated higher by males ($p < 0.05$, $F = 6.169$).

3.3 Which factors influence the students' feeling of being overwhelmed during a period of distance learning?

In the last part of the data analysis, we conducted a standard multiple regression analysis to determine which variables influence the students' academic overload (feeling of being overwhelmed by distance learning) to the greatest extent. As a measure of academic overload, we used a scale where students expressed their feeling of being overwhelmed with studying of a distance.

Variables included in the analysis:

- Independent variables:
  - Attitudes toward teaching approaches
  - Attitudes towards distance learning
  - Study level
  - Year of study
  - Learning Conditions Index
  - Rural/urban
- Dependent variable:
  - Academic overload

Table 7 shows the significance of factors that may influence the feeling of academic overload during distance learning. The results of the analysis showed that all variables used together explain 29% of the reasons for higher or lower overburdening ($R^2 = 0.294$; $F = 8.592$; $p < 0.001$).

Table 7: Regression Analysis Summary for Factors Influencing Feeling of Being Overwhelmed

Independent Variables	***B***	***SEB***	***β***
Attitudes toward teaching approaches			
Live lectures via Zoom	0.131	0.085	0.070
Recorded lectures (long)	0.090	0.123	0.041
Recorded lectures (short)	0.049	0.150	0.018
Study material without activities	0.003	0.051	0.003
Study material with activities in LMS	-0.060	0.056	-0.054
Communication via e-mail	0.039	0.048	0.039
Attitudes Towards Distance learning			
Adequacy of distance learning	-0.046	0.056	-0.062
Difficulty in maintaining motivation	0.180	0.055	0.217***
Adaptation to distance learning	-0.003	0.069	-0.003
Gained the same amount of knowledge	-0.142	0.061	-0.175**
ICT skills for distance learning	-0.082	0.066	-0.067
Concerned about distance exams	0.086	0.040	0.108*

Independent Variables	*B*	*SEB*	*β*
Gained knowledge during distance learning	-0.024	0.067	-0.024
Study level	-0.251	0.205	-0.106
Year of study	0.152	0.066	0.205**
Learning conditions index	-0.066	0.043	-0.079
Rural/urban	-0.011	0.097	-0.005

Note: R^2 = =0.294. (N = 367, F = 8.592; $p < 0.001$); Dependent variable: Academic overload
***$p < 0.001$; **$p < 0.01$; *$p < 0.05$

The results show that four independent variables statistically significantly predict academic overload. The feeling of academic overload is most strongly influenced by difficulty in maintaining motivation, the year of study and the assessment of the quality of distance learning. The more difficult it was for students to maintain motivation while studying, the more they felt overwhelmed during distance learning ($p < 0.001$). Academic overload is also influenced by the year of study - the higher the year of study ($p < 0.01$), the higher the overload. Another important predictor of academic overload was the attitude that one can acquire the same amount of knowledge in distance learning as in face-to-face courses ($p < 0.01$). In this case, the correlation was negative, i.e., students who felt that distance learning did not provide the same amount of knowledge felt more academically overloaded than students who rated the quality of distance learning the same as face-to-face learning. Academic overload was also influenced by the level of concern about distance exams. The more they worried about how they would pass the exam in the course, the more they felt academically overloaded ($p < 0.05$). It is interesting to note that the use of different teaching approaches or methods (e.g., recorded lectures, live zoom sessions, etc.) had no influence on the feeling of academic overload, but the personal experience of distance learning had a greater influence.

4. Discussion

In the survey we investigated how students at the Faculty of Arts, University of Ljubljana, experienced distance learning under the conditions we defined as 'emergency remote teaching'. We were interested in how students' attitudes towards distance learning were related to factors such as gender, study conditions and level of study, and whether there were differences between groups. In the following chapter, we summarise and discuss the main findings, which we divided into three sections.

4.1 Experiences with distance learning during the pandemic

In the first part, we determined the correlation between the assessment of adequacy of individual teaching approaches according to factors such as study conditions, level of study and gender of students. We established that students who assessed that they had appropriate conditions for study during the period of distance learning also assessed as appropriate and suitable for achieving their learning objectives most of the activities which they had received during the period of distance learning (face-to-face lectures, pre-recorded longer lectures, study material with activities, study material without activities and communication via e-mail). Furthermore, statistically significant correlations were determined in categories covering study level. It is an interesting finding that first-year students assessed asynchronous forms of study as more appropriate way of studying (shorter and longer lectures were recorded in advance and they were provided study material with activities) then postgraduate students. The fact that live video meetings (e.g., via Zoom or a similar tool) were rated as more relevant by students who had good conditions for learning from home is not very surprising. Interestingly, students with poorer conditions did not rate other forms of study as more appropriate (e.g., recorded lectures). This could be due to the quality of the videos themselves and their fit with the course content, or to students' expectations of their studies: as a form of learning that takes place face-to-face, as a communication between the teacher and the students, etc. As Choe et al. (2019) point out, the students' satisfaction with pre-recorded lectures and their efficiency largely depends on the way the video is prepared, its length, etc. The same applies to the negative correlation between study level, and lecture videos. The correlations are very low, but we can still see a negative trend and suspect that such results are due to the nature of study at the master level. This is mainly carried out in small groups, is often project-based, active teaching methods are used, etc. In short, approaches that are simple and obvious in face-to-face environment, are more difficult to implement in an online environment, especially if the lecturer has no experience of using technology in such situations.

Gender differences were apparent in assessing the adequacy of individual teaching approaches (Table 3). We found that female students rated face-to-face lectures as more appropriate, followed by shorter and recorded lectures (long), whilst male students assessed independent study with material without activities as more

appropriate. These results are surprising, since they are not connected with gender differences in attitudes towards distance learning (Table 6), and their ICT skills. Male students rated higher the statement that they have the appropriate ICT skills for distance learning than female students, whilst female students rated slightly higher the adequacy of distance learning and expressed greater concern about distance exams. Our theoretical expectations would be that positive attitudes would be positively correlated with ICT skills. These results would be congruent with previous studies on the correlation between attitudes and use of technology and ICT skills (e.g., Romero Martínez et al., 2020). Our findings are more in line with those of Casillas et al. (2017), who studied the digital literacy of 580 education students at the University of Salamanca (Spain) and found that female students had more positive attitudes towards technology than male students, although male students had higher levels of technology literacy. Similar, Colomo-Magaña et al. (2020), found that female students assessed the usefulness of certain forms of study (such as the flipped classroom) during a period of distance learning as more useful for promoting independent learning than the male students.

In the second segment, we explored whether there were any correlations between the frequency of teaching methods used in their courses and their attitudes towards distance learning (Table 4). The results show that students who indicated that videos of course lectures were more frequent in their course suggested that it was easier for them to maintain their motivation during distance learning. There can be many reasons for this. The asynchronous format allows students to watch the lecture video when they are motivated to do so and have the most time available. Another feature of recorded video is that it can be watched repeatedly or in shorter clips. All of this can have a positive effect on maintaining motivation, compared to live lectures that are broadcast via Zoom and that students must follow according to the course schedule. In effect, they found this form of studying was generally more suitable for them than attending face-to-face lectures. This data is somewhat surprising, since surveys usually show that the use of recorded lectures, whilst allowing for greater flexibility of study, are often more problem-oriented and have a positive effect on motivation to study (Noetel et al., 2021; Vlachopoulos and Jan, 2020). However, this is not necessarily true for all generations of students. As established by Velde et al. (2021), although the lower-year students positively assess the flexibility provided by asynchronous lectures, they also emphasise as more important their need for guidance in learning new content, direct communication and motivation generated by their professor (Velde et al., 2021). Similarly, Harrison (2020) found in his exploratory qualitative study that while most distance learners liked and watched the videos, a significant proportion did not because of the poor quality of the production. These and similar findings show that the quality of the teacher (in this case as the creator of the video) has the greatest impact on student learning.

Another important finding is that students who had more learning material with subsequent activities in course's online classrooms estimate that they even acquired more knowledge this way than in face-to-face classes. This is quite an important result, showing that guided or self-directed activities in Moodle are quite useful for studying, provided they are properly planned. This insight is not only important for ensuring the quality of distance learning in general, but also for the introduction of blended or flipped learning in the future.

4.2 Attitudes toward distance learning and academic overload

The analysis of the correlations between attitudes towards distance learning, learning conditions and the level of study (Table 5) revealed some interesting results. When analysing learning conditions in connection with the attitudes of students, we found that study conditions affected their attitudes towards distance learning, their assessment of competence for distance learning, as well as their motivation to study and the feeling of being overburdened. Namely, we identified some negative attitudes and difficulties with motivation in students who did not have adequate study conditions available. These results reaffirm the fact that although distance education shows great potential, it can only be realised if everyone involved in the process has the right conditions available. As many studies have shown, school closures have affected all students, but especially the most vulnerable ones who are more likely to face additional barriers, such as poor Internet connection, inadequate hardware or software, inadequate study space and often underdeveloped ICT competencies (Aristovnik et al., 2020; Czerniewicz et al., 2020; Katz et al., 2021; OECD, 2020) The results also suggest that postgraduate students had more difficulty than undergraduate students in maintaining their commitment to distance learning. On the other hand, undergraduate students were more likely to estimate that the knowledge they acquired in distance learning was equivalent to the knowledge they acquired in face-to-face learning. In addition, undergraduate students felt that distance learning was more suitable for them than face-to-face courses and that they had acquired more knowledge during distance learning. In general, students adapted better to distance learning and rated their ICT skills as competent.

Finally, we examined which factors influence students' academic overload during distance learning (Table 7). As for the feeling of academic overload, it is interesting, even surprising, that the teaching methods themselves did not influence this thinking. We had expected that the large number of recorded lectures and the various activities organised by teachers in the online classrooms would have an impact on workload and stress during distance learning, but these expectations proved to be wrong. The perception of academic overload was mainly influenced by psychological factors and the learning conditions while studying at a distance. In this respect, the analysis highlights in particular the difficulties in maintaining motivation, but also concerns about the (new) methods of assessing knowledge. Another important factor influencing the feeling of academic overload was the level of study, or rather the year of study. The higher the year of study the students were in, the more they felt overloaded, which is certainly an indicator of the teaching approaches and teachers' expectations. It would be interesting to see if these results are specific only to social studies or also to science and engineering programmes. To some extent, our findings are consistent with the research of Chen et al. (2011), who analysed the factors that influence information overload in online learning. They included learning preferences and time constraints among the important factors. Similar factors were also identified in the present study. However, our findings are also similar to studies conducted during the Covid-19 pandemic (Alheneidi et al., 2021; Al-Kumaim et al., 2021; Lazarevic and Bentz, 2021). These include time pressure during the study period, access to learning materials (Lazarevic and Bentz, 2021), changing learning modes and distracting learning environments at home (Alheneidi et al., 2021), teacher workload due to online learning platforms, technical problems, and psychological difficulties due to social isolation (Al-Kumaim et al., 2021).

4.3 Strengths and limitations

This survey identifies potential barriers to effective distance learning, as well as its opportunities for improving the students' experience of it. Survey was conducted on a large sample of students (almost 50% of the total enrolment) and yielded some interesting findings about distance learning during the pandemic, but it also has some limitations. Among them, we list the sampling method and the research method itself. The sample was selected on an ad-hoc basis and the survey was conducted online. This automatically means that the questions were most likely answered by those students who had better study conditions at home and who did not have major problems with distance learning. Moreover, online surveys are often responded to by those who have a more positive attitude towards the topic the survey is dedicated to. For this reason, we conclude that this affected the magnitude of the differences we established in the study. In other words, they are in fact larger than revealed by the survey. In the future, it would certainly make sense to validate these results with other qualitative methods in addition to expanding the student survey sample with students from other programmes (i.e., not just from social sciences).

5. Conclusion

In this paper, we described some of the factors which influenced the quality and experiences of study for students during the pandemic at the selected faculty in Slovenia. survey was conducted on a large sample of students (almost 50% of the total enrolment) and yielded some interesting findings about distance learning during the pandemic. We found that we cannot make a clear judgement on whether learning at a distance even if label it as "emergency remote teaching" is harmful or beneficial to students. As the results showed the evaluation of this form of study was highly dependent on the teaching approaches used, course requirements and the prevailing teaching approaches experienced in the pre-pandemic period. It also showed that in some cases the teaching approaches were not as important a factor as the learning conditions under which the student participated in the distance learning activities. Unfavourable conditions at home can lead to despair, stress, and apathy on the part of students during their studies. Nevertheless, we believe that some solutions and didactic strategies should be maintained and further developed in the post-pandemic period, but under certain conditions: (1) In order to actively participate in distance learning, all students must have the same learning and technical conditions (hardware and software, good internet connection, quiet learning environment, etc.). (2) Teaching methods must be adapted to the environment in which learning takes place, therefore (3) teachers must be didactically trained for distance learning. (4) Collaboration between teacher and students and between the students themselves, must be facilitated as one of the ways of academic and psychological support during distance learning.

The pandemic has made it clear that the school systems and the universities are far from being prepared for this kind of teaching and learning. For this reason, and because of the lack of contact between the participants in education, such a form of education simply cannot become "the new normal".

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