

The influence of COVID-19 pandemic on students' screen time, learning, lifestyle, and well-being

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Abstract

The COVID-19 pandemic crisis has changed the lifestyle of people and learning process of students in different countries. The aim of the study was to find out the influence of COVID-19 pandemic on Latvia students' screen time, learning peculiarities, lifestyle, and well-being. The electronic survey of the basic school, secondary school and University of Latvia students was carried out in different regions of Latvia. The results of the survey suggest that the screen time of students and the time spent by students doing study home-works during COVID-19 pandemic crisis have increased. However, many students prefer to study on-line over face-to-face studies. The time spent on physical activities for majority of students during COVID-19 pandemic has not significantly changed. The well-being for many Latvia students during COVID-19 pandemic crisis has decreased.

Keywords: *COVID-19 pandemic; students; screen time; on-line studies; physical activity; well-being.*

1. Introduction

The COVID-19 pandemic crisis changed the lifestyles and learning processes of adolescents and young people. In many countries study process during the COVID-19 pandemic was carried out mainly using on-line methods. Even before COVID-19 pandemic the increased of screen time and reduction of daily physical activities among children, adolescents and young people have been proposed as potential risk factors for different health problems. Research suggests that high screen time is associated with negative influence on various health problems of young people, their mood disturbances, and psychosocial impairments (Bianco et al., 2019; Marques et al., 2019). Due to online learning and gathering restrictions during the COVID-19 pandemic crisis, students must spend even more time by working with computers, and these restrictions could lead to social exclusion. Although distance and online education has some advantages, it is not a substitute for traditional face-to-face education (Topkaya et al, 2021). It was found that distance learning and online communication for many students can lead to difficulties of understanding online lectures (Al-Jarf, 2020). Social exclusion can increase the vulnerability of adolescents and young people to mental health problems and risky health behaviours. Psychological outcomes of the COVID-19 pandemic especially influence children and adolescents (Yakşı et al, 2021). Studies show that girls are at increased risk of developing depression during the COVID-19 pandemic crisis (Tamás & Bettina, 2021). Increased risk of depressive symptoms is associated with increased screen time, alcohol, and drug abuse. Introduced anti-pandemic measures are psycho-traumatic factors that increase the experience of loneliness (Shpakou et al, 2021). The female students were also observed to have a greater physical inactivity tendency during the pandemic, in comparison with male students (Tetik & Koc, 2021). Reduced physical activity has negative effects on life quality and it creates physical and mental health risks. The high levels of anxiety and depression were found among students from North of England, and females scoring was significantly higher than males. Furthermore, distress was associated with lower levels of exercising and higher levels of tobacco use (Chen & Lucock, 2022). At the same time studies have shown more sustainable lifestyle of Spain college students during COVID-19 pandemic, which is associated with more hours of sleep during the week and lower sleep deb (Ramírez-Contreras et al, 2022). Improving the physical and psychological health of students during COVID-19 pandemic is important for public health (Öztürk et al, 2021).

Although different aspects of COVID-19 pandemic influence on people of different countries is much studied, its influence on Latvia students' lifestyle and their education is relatively unknown. The aim of the study was to find out the influence of COVID-19 pandemic on Latvia students' screen time, learning peculiarities, lifestyle, and well-being.

2. Methods

The study was performed in basic schools and secondary schools of Latvia, and different branches of the faculty of Education, Psychology and Art of the University of Latvia. During COVID-19 pandemic crisis (from the March of the 2020) the study process in majority of Latvia schools and Universities was done using mainly on-line learning methods. The electronic survey of the basic school, secondary school, and the University of Latvia students of pedagogy specialties about their opinion on the influence of COVID-19 pandemic crisis on students' screen time, learning (on-line learning during COVID-19 pandemic in comparison with face-to-face learning before pandemic), lifestyle (physical activities, sleeping time), and well-being was carried out. Google forms were used for this questionnaire. Altogether 235 students were surveyed. The results of the survey were analysed using SPSS statistical data processing program.

3. Results

The results of the survey showed that the screen time of Latvia students during COVID-19 pandemic crisis increased (see Figure 1). 44,7% of surveyed students admitted that the time spent at the screens significantly increased and 31,1% of surveyed students pointed out that the screen time slightly increased. Only for 22,1% of students the screen time haven't changed. Only for 22,1% of students the screen time haven't changed.

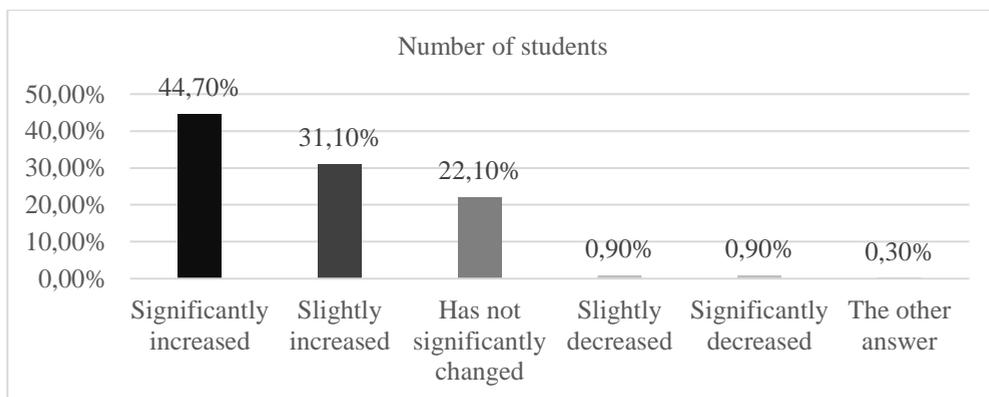


Figure 1. The impact of the COVID-19 pandemic crisis on students' screen time (in % from the number of respondents).

Before COVID-19 pandemic crisis many surveyed students spent at the computer less than 1 hour (23%) or 1-2 hours (37,4%) during day (see Table 1). During COVID-19 pandemic crisis 33,6% of surveyed students spend at the computer 3-4 hours and 23% of students spend at the computer 5-6 hours but 14% of students even 7-8 hours during day.

Table 1. Time spent by students during day at the computer before and during the COVID-19 pandemic crisis (in % from the number of respondents).

Variable	Before COVID-19 pandemic crisis	After COVID-19 pandemic crisis
Less than 1 hour	23	1,3
1-2 hours	37,4	13,2
3-4 hours	26	33,6
5-6 hours	6	23
7-8 hours	3,4	14
9-10 hours	1,7	7,2
More than 10 hours	1,7	5,5
The other answer	0,8	2,2

Time spent by Latvia students doing study home-works during COVID-19 pandemic crisis also have increased (see Table 2). Before crisis 12,4% of surveyed students spent by doing study home-works less than 1 hour and 37,8% of students spent 1-2 hour during day. During COVID-19 pandemic only 3,4% of surveyed students spend less than 1 hour by doing study home-works and 29,9% of students spend 1-2 hours, but 46,2% of students spend 3-4 hours, 10,7% of students spend 5-6 hours and 8,5% of students even more than 7 hours during day.

Table 2. Time spent by students during day doing study home-works before and during the COVID-19 pandemic crisis (in % from the number of respondents).

Variable	Before COVID-19 pandemic crisis	After COVID-19 pandemic crisis
Less than 1 hour	12,4	3,4
1-2 hours	37,8	29,9
3-4 hours	30,9	46,2
5-6 hours	8,2	10,7
More than 7 hours	3,4	8,5
The other answer	7,3	1,3

Despite the long time spent at the computer, many students still prefer to study on-line over face-to-face studies (see Figure 2). 50,6% of the surveyed Latvia students answered that they

prefer on-line studies and only 11,2% of students noted that they prefer face-to-face studies. 17,2% of surveyed students for some subjects prefer face-to-face studies and for some subjects prefer on-line studies. 13,7% of surveyed students like combining face-to-face studies with on-line studies. During COVID-19 pandemic crisis there were periods in Latvia when lectures were managed on-line but laboratory works and seminars - face-to-face. Some students (5,2%) admit that they like face-to-face studies but due to many responsibilities prefer on-line studies. Thus, due to the high workload, online studies for many students are more suitable than face-to-face studies.

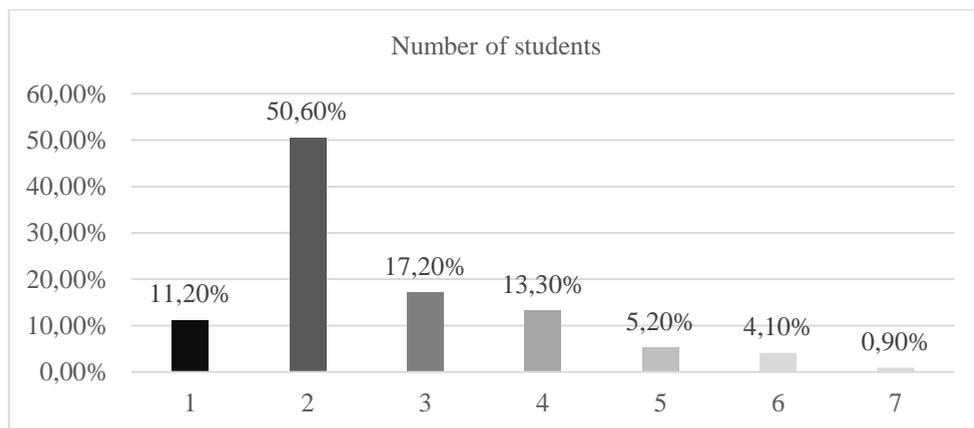


Figure 2. The study process that students prefer: face-to-face or on-line (in % from the number of respondents).
 1 - I prefer face-to-face study process. 2 - I prefer on-line study process. 3 - For some subjects I prefer face-to-face studies, for some subjects I prefer on-line studies. 4 - I prefer combining both ways of studies. 5 - I like face-to-face studies but due to my many responsibilities, I prefer on-line study process. 6 - I don't care. 7 - The other answer.

The time spent on physical activities for most of Latvia students during COVID-19 pandemic has not significantly changed (see Table 3). Nevertheless, the number of students who go into sports very little (less than 1 hour during week) has slightly increased during the COVID-19 pandemic crisis (from 22,6% to 27,9%) and the number of students who go into sports very regularly has decreased. Number of students who spend on physical activities during week 10-20 hours has decreased from 5,1% to 3,4% and the number of students who spend on physical activities during week more than 21 hour has decreased from 1,7% to 1,3%. Thus, it seems that students who have been physically active during the COVID-19 pandemic retain physical activity, but the opportunities to go into sports are reduced.

Table 3. Time spent by students during week on physical activities before and during the COVID-19 pandemic crisis (in % from the number of respondents).

Variable	Before COVID-19 pandemic crisis	After COVID-19 pandemic crisis
Less than 1 hour	22,6	27,9
1-2 hours	28,5	29,2
3-5 hours	26	25,3
5-10 hours	12,3	9,4
10-20 hours	5,1	3,4
More than 21 hour	1,7	1,3
The other answer	3,8	3,5

(in % from the number of respondents).

The well-being for many Latvia students during COVID-19 pandemic crisis has decreased (see Figure 4). 32,6% of surveyed students declared that their well-being is slightly decreased but 13,7% of students noted that their well-being has significantly decreased. 44,2% of students answered that their well-being has not significantly changed. Probably, despite the possibility of partially maintaining a typical lifestyle and adapting to on-line study process, various factors related to the COVID-19 pandemic crisis have affected the lives and well-being of many students.

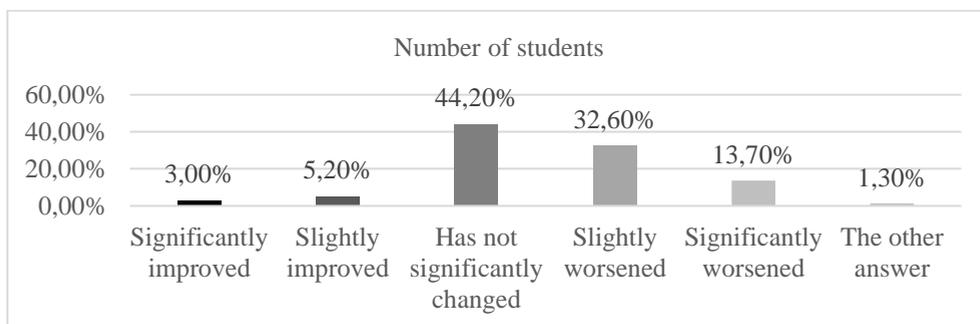


Figure 4. The impact of the COVID-19 pandemic crisis on students' well-being (in % from the number of respondents).

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Conclusions

The screen time of Latvia students and the time spent by Latvia students doing study homeworks during COVID-19 pandemic crisis have increased. Many Latvia students prefer to study on-line over face-to-face studies. The time spent on physical activities for most of Latvia students during COVID-19 pandemic has not significantly changed, the number of students who go into sports very little has slightly increased but the number of students who go into sports very regularly has decreased. The well-being for many Latvia students during COVID-19 pandemic crisis has decreased. It seems that in future on-line studies will become more popular in comparison to face-to-face studies.

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