

**Parents, teens and screens during COVID-19 containment:  
an exploratory study**

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## Parents, teens and screens during COVID-19 containment: an exploratory study

### Abstract

**Objective.** One of the main concerns of parents is the amount of screen-time of their teenagers and most of them try to set rules about it. The objective of this exploratory study was to compare whether parents' rules changed during confinement and whether these changes were successful.

**Methods.** We studied a group of parents (N=47) of 13 year-olds in Switzerland surveyed before and during the COVID-19 pandemic.

**Results.** Most parents (83%) indicated that screen-time rules for their teens had changed during containment, mainly to be less strict. Although only a minority of parents were successful in defining screen-time spaces or schedules for their teenagers, almost three out of four were successful when they encouraged non screen-based activities.

**Conclusions.** This exploratory study reveals that, during containment, parents decided to be less strict with their teens' screen-time use even though it remained their main worry. However, it also suggests that when activities non-involving screens are proposed, teens are likely to participate. These results seem to indicate that reducing screen-time is not a matter of imposing restrictions but, rather, of proposing alternatives. Finally, further research is warranted to assess whether these changes in screen-time use are exceptional or here to stay.

**Key words:** Teenagers; Parents; Screen-time; COVID-19

**KEY MESSAGES**

- The amount of teenagers' screen-time has increased during the lockdown
- Parents admit that the rules they impose on screen-time were less constrictive during the pandemic.
- Nevertheless, parents have tried to put some kind of limits to it with mixed results
- When family activities not related to screen were proposed, teen were likely to participate.

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## Introduction

Excessive amount of screen-time is reported by parents as the main conflict between them and their children regarding digital technology (1) and the main negative aspect of their child's Internet use (2). In an American study (3), 94% of parents indicated that they take at least one action to manage their child's technology usage during the school year, but that regulating their child's screen-time was a constant battle.

Due to the COVID-19 pandemic, since mid-March 2020, Switzerland, like most European countries, declared an emergency situation followed by a lockdown. Since then, schools were closed and children and adolescents had to stay at home. Most working adults were encouraged to do home office as much as possible. This extraordinary situation has certainly implied a wider and larger use of screens in general, and the Internet in particular, as a way to access friends and family but also teachers or co-workers.

The objective of this exploratory research was to assess what measures had been established by parents regarding their teenagers screen use during the containment and whether they were successful. We also compared the parent's change of perception in terms of their identified worrying aspects of their teenagers Internet use between before and during the containment.

## Methods

During the school year 2019-20 (from October 28<sup>th</sup> 2019 to February 14 2020) a representative sample of students in grade 10 in the canton of Vaud, Switzerland (~4'000, aged ~13-14 years), were invited to participate in a school-based survey on Internet use. The Ethics Committee of the Canton of Vaud (CER-VD) approved the study protocol (#2019-01232). In the information letter addressed to parents, we asked them if they would agree to participate in a short questionnaire for parents. Out of 240 who accessed the website, 102 completed the survey (T0). Among them, 81 accepted to be contacted again for follow-up and gave their email address or cellular phone number. On April 21 2020, these parents were contacted to answer a short questionnaire online about how they were managing their adolescent's screen-time during the containment due to the COVIDd-19 pandemic

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3 (T1). Fifty-seven of them answered (70.4%) and 47 completed the questionnaire (58.0%). There were  
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5 no differences in age (46.5 vs. 45.9 years), being Swiss-born (71.7% vs. 67.2%) or gender of the child  
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7 (55.3% vs. 49.0% males) between respondents and non-respondents. However, there were  
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9 significantly more mothers in the respondents' group (86.8% vs. 62.7%;  $p < 0.01$ ).

10 Sociodemographic data (see Table 1) were collected at baseline (T0) and we used the contact  
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12 information they had given us (email address or cell phone number) to match them at T1. At T1 we  
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14 asked them what measures they had put in place regarding screen-time, and screen and non-screen  
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16 activities during containment (see Table 2 for the list of questions). We also were interested in  
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18 knowing if their level of worry about the amount of time spent online by their teenager had changed  
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20 between T0 and T1. At both time-points, we asked parents to report their three main worries about  
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22 their child's Internet use (*What are your three main parental worries regarding your child's Internet*  
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24 *use?*) that they had to choose from a list of options as described in the literature (1) (see Table 3).  
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26 Results are given as means or proportions with 95% confidence intervals.  
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## 32 **Results**

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34 The majority of respondents were mothers, Swiss-born, and living in an intact family. Most of them  
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36 worked full (19.2%) or part-time (70.2%) at T0 and over 40% worked from home at T1. The majority  
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38 (57.5%) had a university degree and 12.8% considered that their socioeconomic status was below  
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40 average compared to other families in Switzerland. The mean age of their children was slightly over  
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42 13 years, with 44.7% of them being girls (Table 1).  
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45 Almost all parents indicated that home screen rules had changed during containment, mainly to  
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47 become less strict. Close to half of the sample indicated that their children used the Internet for both  
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49 homework and leisure. About two-thirds of parents tried to create spaces and schedules for screen  
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51 use but only one third of them were successful in implementing them. They stated that the screen-  
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53 time of their child had increased a lot (70.2%) or a bit (27.7%) during containment. Parents reported  
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55 that the main screen activities (apart from homework) of their children during containment were  
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57 watching series, films or videos, contacting friends, and playing online.  
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3 Almost all of them encouraged non-screen-based activities and the majority declared being  
4 successful in implementing them. Slightly over half of the parents also stated that family time  
5 without screens had increased during containment. The majority of parents (57.4%) declared that  
6 the relationship with their teen had not changed, while the rest of them were equally distributed  
7 between those reporting it to be more or less conflictual (Table 2).  
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14 The proportion of parents indicating that they were quite or very worried about their teen amount of  
15 screen-time remained high and did not vary significantly between T0 and T1. At T0, the three main  
16 worrisome aspects of their teen Internet use were the time spent on it, cyberbullying and being  
17 confronted to violent content. At T1, the first and third main worries remained the same, while  
18 misinformation/fake news was reported as the second most worrisome. It is worth noting that  
19 cyberbullying decreased from 53.2% to 14.9% between the two time-points (Table 3).  
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## 28 Discussion

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30 During this exceptional situation, the majority of this group of parents chose to be less strict with  
31 their teen screen-time. This might be explained by the fact that they needed to do at least part of  
32 their homework online and because it was probably the only way they could connect with their  
33 friends and family or to occupy themselves. The main activities reported by parents (other than  
34 homework) seem to corroborate this hypothesis. In fact, the situation described is quite similar to  
35 teens' increased screen-time observed during vacations (4). However, it is worth noting that  
36 although these parents were not excessively successful in implementing screen-time schedules and  
37 spaces, they were successful when non-screen family activities were proposed and family time  
38 increased. Even though this finding may be due to the fact that no other activities were allowed or as  
39 a way to escape boredom, it can also be interpreted in the sense that when parents propose  
40 activities, their teens are eager to follow. Moreover, our results seem to indicate that proposing  
41 alternatives is much more effective than imposing restrictions. This finding is in line with previous  
42 literature indicating the relationship between parents supporting alternatives such as physical  
43 activity (5) or family-based interventions (6) and a decrease in their children screen-time.  
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3 Independently of the situation, at both time points, time spent in front of a screen remained, by far,  
4 the main worry of parents. The prevalence found in our study is similar to a Canadian study (76%) (1),  
5 but higher than the one found in an American survey among parents of teens (65%) (7) and very far  
6 from those found in in the UK (37%) (8) or in Serbia (4.1%) (9).  
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11 Just over half of the parents in our sample reported cyberbullying as their second most frequent  
12 concern at T0, a much lower prevalence than in the Canadian study where it reached 78% (1), but  
13 higher than in the UK among parents of 5-15 year-olds (40%) (8). The fact that we only allowed  
14 parents to choose a maximum of three worries can explain these differences. Nevertheless, it is  
15 interesting to remark that this concern decreases importantly to 15% during containment (T1). Some  
16 authors consider that there is an overlap between traditional bullying and cyberbullying (10, 11),  
17 although the latter goes beyond the school grounds and does not stop when there is no school.  
18 Moreover, a UK study reported that half of traditional bullying victims were also victims of  
19 cyberbullying (11). One way to explain this finding would be that parents, with their teen out of  
20 school, might consider (wrongly) that the problem is over. Yet, Swiss data (12) indicate that 11-22%  
21 of youths aged 12-15 years are cyberbullied.  
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36 The phenomenon of sexting seems to follow the same pattern. Sexting is a concern expressed by  
37 relatively few parents (17%) at T0 because parents may think (again wrongly) that it does not happen  
38 at this age. Yet, the 2018 JAMES study reports that 2-5% of 12-15 year-olds in Switzerland have sent  
39 erotic photos or videos of themselves and 22-27% have received such content (12). In addition, these  
40 rates are based on a situation without containment, but sexting is also known as a way to keep an  
41 intimate bond when a face to face meeting is not possible (13). Interestingly, its proportion among  
42 parental worries is almost reduced in half during containment. Again, the fact that they could only  
43 choose three options can explain it, at least partially.  
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54 Misinformation increased as a concern during containment. This finding is most probably due to the  
55 huge amount of information received those days regarding the virus, how it was spread or the way to  
56 avoid it that were rarely based on accurate or scientific data (14). Nonetheless, in the Canadian  
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3 study, this concern was the top one among parents of 14-15 year-olds (1). Similarly, the concern  
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5 about corporations collecting their child personal information doubled between T0 and T1. This  
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7 concern is also much more reported (76%) among Canadian parents (1). This increase could also be  
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9 explained because the proposal to use COVID tracking apps to control the pandemic has raised voices  
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11 against it because of how these data could be used. However, the fact that these two concerns have  
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13 increased over time could also explain, to some extent, the drop of cyberbullying and sexting.

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16 The strength of this exploratory study is that it compares the worries of parents regarding their teens  
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18 screen use in a normal situation and during an exceptional one and describes strategies used by  
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20 parents to face an unexpected situation. However, some limitations need to be noted. First, the  
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22 sample size is small and has no sufficient statistical power. Second, the sample is rather a  
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24 convenience sample not necessarily representative of parents in the canton of Vaud. Furthermore,  
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26 the majority were mothers with a university degree who worked. An American study (15) indicated  
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28 that parental concerns are not uniform and depend on the parents background in terms of their  
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30 gender, education, income, race, residence or their child's age. Finally, we asked parents to refer  
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32 their answers to their child in 10<sup>th</sup> grade, but we do not know if they have more children (nor their  
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34 age) and having siblings could facilitate organizing family activities.

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37 Our exploratory study reveals that parents opted mainly to be less strict with their teen screen use  
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39 time even though it remained their main worry. However, it also suggests that when activities non-  
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41 involving screens are proposed, teens are likely to participate. This means that reducing screen-time  
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43 is not a matter of imposing restrictions but, rather, of proposing alternatives. Finally, further research  
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45 is warranted to assess whether these changes in screen-time use are exceptional or here to stay.  
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**REFERENCES**

1. Brisson-Boivin K. The digital well-being of Canadian families. Ottawa: MediaSmarts; 2018.
2. Kabakci I, Odabassi HF, Coklar AN. Parents' views about internet use fo their children. International Journal of Education and Information Technologies. 2008;4(2):248-55.
3. American Psychological Association. Stress in America: coping with change (Part 2). American Psychological Association; 2017.
4. Olds T, Maher C, Dumuid D. Life on holidays: differences in activity composition between school and holiday periods in Australian children. BMC Public Health. 2019;19(Suppl 2):450.
5. Cabanas-Sanchez V, Garcia-Cervantes L, Esteban-Gonzalo L, Girela-Rejon MJ, Castro-Pinero J, Veiga OL. Social correlates of sedentary behavior in young people: The UP&DOWN study. J Sport Health Sci. 2020;9(2):189-96.
6. Bounova A, Michalopoulou M, Agelousis N, Kourtessis T, Gourgoulis V. The parental role in adolescent screen related sedentary behavior. Int J Adolesc Med Health. 2016;30(2).
7. Pew Research Center. How teens and parents navigate screen time and device distractions. August 2018.
8. Ofcom. Children and parents: media use and attitudes report 2018. Ofcom; January 2019.
9. UNICEF. Survey on parental awareness of online child abuse risks. Serbia: UNICEF; March 2016.
10. Casas JA, Del Rey R, Ortega-Ruiz R. Bullying and cyberbullying: Convergent and divergent predictor variables. Comput Hum Behav. 2013;29(3):580-7.
11. Mateu A, Pascual-Sanchez A, Martinez-Herves M, Hickey N, Nicholls D, Kramer T. Cyberbullying and post-traumatic stress symptoms in UK adolescents. Arch Dis Child. 2020.

- 1
- 2
- 3 12. Suter L, Waller G, Bernath J, Külling C, Willemse I, Süss D. JAMES - Jeunes, activités, médias -
- 4 enquête Suisse. Zurich: Zürcher Hochschule für Angewandte Wissenschaften; 2018.
- 5
- 6
- 7
- 8 13. Barrense-Dias Y, Berchtold A, Suris JC, Akre C. Sexting and the Definition Issue. J Adolesc
- 9 Health. 2017.
- 10
- 11
- 12
- 13 14. Ball P, Maxmen A. The epic battle against coronavirus misinformation and conspiracy
- 14 theories. Nature. 2020;581(7809):371-4.
- 15
- 16
- 17
- 18 15. Boyd D, Hargittai E. Connected and concerned: variation in parents' online safety concerns.
- 19 Policy & Internet. 2013;5(3):245-69.
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Table 1. Description of the sample at T0 (N=47)

<b>PARENT:</b>	<b>Mean or Proportion*</b>
Mean age ( $\pm$ SE)	45.23 $\pm$ 1.24 [42.7:47.7]
Relation of respondent to child (mother)	87.2% [74.3:95.2]
Swiss-born (yes)	74.5% [59.7:86.1]
Family structure (parents together)	70.2% [55.1:82.7]
Working situation (T0):	
Full time	19.2% [9.1:33.3]
Part time	70.2% [55.1:82.7]
Housewife/husband	8.5% [2.4:20.4]
Unemployed	2.1% [0.1:11.3]
Working situation (T1):	
I do home office and it's fine with me	23.4% [12.3:38.0]
I do home office but I have trouble concentrating	19.1% [9.1:33.3]
I have to go to my work place	29.8% [17.3:44.9]
I am technically unemployed	14.9% [6.2:28.3]
I do not work	12.8% [4.8:25.7]
Education level (university)	57.5% [42.2:71.7]
Socioeconomic status of the family:	
Above average	40.4% [26.4:55.7]
Average	46.8% [32.1:61.9]
Below average	12.8% [4.8:25.7]
<b>CHILD:</b>	
Mean age ( $\pm$ SE)	13.38 $\pm$ 0.08 [13.2:13.5]
Gender (girl)	44.7% [30.2:59.9]

\*95% confidence intervals are presented between brackets

Table 2. Parental changes at T1 compared to T0 (N=47)

Parent changed Internet rules during containment:	Proportion*
Not at all	17.1% [7.6:30.8]
A little	44.7% [30.2:59.9]
A lot	19.1% [9.1:33.3]
Completely	19.1% [9.1:33.3]
If changed Internet rules, in what sense (N=39):	
Less strict	92.3% [79.1:98.4]
More strict	2.6% [0.1:13.5]
I don't know	5.1% [0.6:17.3]
Main Internet activity of your child during containment:	
Homework	12.8% [4.8:25.7]
Leisure	40.4% [26.4:55.7]
Both homework & leisure	46.8% [32.1:61.9]
During containment, did you define spaces for media/screen use?	
Yes, and I was successful	36.2% [22.7:51.5]
Yes, but I was not successful	27.7% [15.6:42.6]
No	34.0% [20.9:49.3]
I don't know	2.1% [0.1:11.3]
During containment, did you define a schedule for media/screen use?	
Yes, and I was successful	31.9% [19.1:47.1]
Yes, but I was not successful	36.2% [22.7:51.5]
No	31.9% [19.1:47.1]
During containment, the amount of screen-time of your child has:	
Increased a lot	70.2% [57.4:84.4]
Increased a bit	27.7% [12.3:38.0]
Not changed	2.1% [0.1:14.5]
During containment, the main activity on screen of your child is:	
Watch, films, series, videos	36.2% [22.7:51.5]
Contact friends	29.8% [17.3:44.9]
Play online	25.5% [13.9:40.3]
Listen to music	2.1% [0.1:11.3]
I don't know	2.1% [0.1:11.3]
Other	4.3% [0.1:14.5]
During containment, did you encourage other activities (not screen-based)?	
Yes, and I was successful	72.3% [57.4:84.4]
Yes, but I was not successful	23.4% [12.3:38.0]
No	4.3% [0.1:14.5]
During containment, family time (without screens) has:	
Increased	53.2% [38.1:67.9]
Stayed the same	29.8% [17.3:44.9]
Decreased	12.8% [4.8:25.7]
I don't know	4.2% [0.1:14.5]
During containment, the relationship with your child was:	
More conflictual	21.3% [10.7:35.7]
About the same	57.4% [42.2:71.7]
Less conflictual	21.3% [10.7:35.7]

\*95% confidence intervals are presented between brackets

Table 3. Comparisons in parental concerns between T0 and T1 (N=47)

	<b>Before containment*</b>	<b>During containment*</b>
Worried about amount of screen-time (Very/quite worried):	83.0% [69.2:92.4]	76.6% [62.0:87.7]
Parental concerns about their child Internet use:		
The amount of time they spend online or using a digital device	72.3% [57.4:83.5]	80.4% [65.9:89.8]
Cyberbullying and online harassment	53.2% [38.5:67.3]	15.2% [7.2:29.3]
The amount of violent content they could see	34.0% [21.6:49.1]	28.3% [16.8:43.4]
Posting personal information or photos online	29.8% [18.1:44.8]	21.7% [11.8:36.5]
The amount of sexual content they could see	25.5% [14.8:40.4]	23.9% [13.5:38.9]
Talk to people they don't know	21.3% [11.6:35.8]	17.4% [8.7:31.7]
Sexting	17.0% [8.5:31.1]	8.7% [3.2:21.7]
Misinformation and the need to prove online information is true	12.8% [5.7:26.3]	28.3% [16.8:43.4]
Corporations or others collecting my child's personal information	10.6% [4.3:23.8]	21.7% [11.8:36.5]
Gender stereotyping of girls and boys	6.4% [2.0:18.7]	2.1% [0.2:14.5]
The amount of advertisement they see	4.3% [1.0:16.2]	10.9% [4.4:24.2]
Racial and ethnic stereotyping/racism	2.1% [0.3:14.3]	2.1% [0.2:14.8]

\*95% confidence intervals are presented between brackets