UKRI Research England

New Uses of Screens
in Post-Lockdown Britain

UNIVERSITY OF LEEDS

Study Report and Findings

R. Clayton, C. Clayton, M. Potter, S. Al-Azri and I. Mogeh.

Introduction

The 'New Uses of Screens in Post-Lockdown Britain' study (NUSPB) set out to discover the current lived experiences of British people and how screen technologies may or may not have become more permanently integrated within their day-to-day lives following the coronavirus lockdowns of 2020-2021.

Funded by Research England through the Policy Support Fund, this study broadly investigated:

1) What are the participant's positive and negative experiences of using screens?
2) Comparing experiences before and after the lockdowns, in what ways specifically, has screen use changed, if at all?
3) How much time do participants currently spend using different screens each day?
4) Do they perceive any impacts of using screens on their health?
5) Do participants want to be using more screens or less screens in the future?

This study builds upon data gathered during the 'British Families in Lockdown' study (BFiL) which identified that British parents considered themselves to be using screens more during the coronavirus lockdowns. It emerged from the BFiL study that many parents did not know how much screen time was considered safe or appropriate and that there was a lack of government guidance on the issue. Many felt they were using screens 'too much' and there were concerns about health impacts among the study participants.

Historically there has been wider societal concern regarding the extent of screen use in society. In 2016 an open letter published by the Guardian newspaper and signed by 40 senior public figures called for national guidelines to be implemented for children. The National Institute for Health Research (NIHR) commissioned a review of available literature that was published in 2019. In response, the UK Chief Medical Officer (CMO) commented "scientific research is currently insufficiently conclusive to support UK CMO evidence-based guidelines on optimal amounts of screen use or online activities"(CMO 2019). As such no guidelines were created, however, by acknowledging societal concerns, the CMO produced advice for parents which included suggestions that parents should lead by example and not use screens excessively. There was however no clear indication of how 'excessive use' should be measured or quantified. Further, the CMO advised that families 'discuss' screen time and ask themselves: Is it under control? Does it interfere with what the families want to do? Does it interfere with sleep? Is snacking controlled. Again, this advice is offered without providing families any quantifiable metrics of how these vague concepts can be measured. In the context of unclear advice and a lack of guidelines, in 2020, the UK experienced the COVID-19 pandemic and the ensuing lockdowns led to a significant increase in screen use. Amidst all the health advice provided during the pandemic to the UK population, including limits upon how much time should be spent outside and how often to exercise, no government advice was provided regarding screen use.

Study Information

We conducted a survey of 500 British adults who were selected to be nationally representative in terms of age, gender, marital status, presence of children in the household, socio-economic group, ethnicity and region. The survey took approximately 15 minutes to complete and was undertaken by Face Facts who are an MRS Fair Data company. Based on a UK population of 67.22 million adults, our selection of 500 respondents ensured a 95% confidence level (which is the most commonly used confidence level) and indicates that the results will be significantly accurate. Furthermore, 500 participants provided only a 4.38% margin of error, indicating that the results will be significantly representative.

The survey was supported by qualitative research through which 22 adults took part in semi-structured interviews. The sample were recruited from participants in the BFiL study and were purposively selected in order to provide insights into the survey findings. The interviews took place online using VOIP protocols and lasted around one hour.

"John Maynard Keynes talked about, you know, in the future people will work three days a week because we'll have all these wonderful machines. And if we do the same amount of work that people did six years ago, we could work three days a week but somehow we're working five because they've gone, 'well you've got more time now you can input more things and you can take it to an extra level of analysis"

(Bruno).

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Summary of Findings

This study has discovered that the use of screens by the British adult population has increased during the pandemic with 54% of British adults now using screens more regularly. 1 in 4 people (27%) are now using screens more at work following the lockdown experiences and 1 in 2 adults (51%) are using screens for leisure more than they did pre-pandemic. As a result, half (50%) of British adults are now 'heavily' exposed to screens for a combined total of 11 hours or more each day.

British adults associate screens with a negative impact on health, with 40% saying that screen use has negatively affected them physically and 28% saying that screen use has negatively affected their mental health. Younger generations, women and those from higher social grades seem to be disproportionately affected by negative health impacts from screens.

Our data has shown convincingly that perceived negative health impacts from screens are common and were expressed by around 60% of the participants; furthermore, the more people look at screens, the more likely they are to complain of negative health impacts. Amongst light users of screens (1-5 hours each day), 42% reported no negative health impacts from looking at screens. Whereas amongst those who use screens for 6 or more hours each day, their likelihood of reporting no negative health impacts reduces to 32%.

Spending less time looking at screens appears to reduce the likelihood of reporting negative health impacts, with only 7% of ailments reported amongst those who use screens for 5 hours a day or less. 93% of negative health impacts occur in those who are exposed to screens for 6 hours or more each day. Most negative health impacts (75%) occur in those who are exposed to screens for 9 hours or more each day.

There are inequalities in terms of screen use changes related to ethnicity, region and socio economic status; with 69% of ethnic minority adults using screens more and 62% of those from higher social grades using screens more.

35% (1 in 3) of ethnic minority adults are considered 'extreme users' of phone screens and look at a phone screen for around 6 hours or more each day compared to 18% of ethnically white European adults. 43% of Northerners but only 23% of Southerners are considered heavy or extreme users of television screens and look at a television screen for around 5 hours or more each day. 33% of those from higher social grades are considered extreme users of computer/tablet screens and look at a computer/tablet screen for around 6 hours or more each day compared to 20% from lower social grades.

Several groups are particularly concerned about the amount of time they spend looking at screens, including women, young people, young parents, higher social grades, minority ethnic groups and people from Southern England. The majority of British adults want to be looking at screens less.

In terms of government guidance on screen use, 78% of people are unaware of what it is, whilst the remaining 22% claim to know, but offer contradictory estimates ranging from 2 hours a day to 10 hours a day.

Average Daily Screen Usage Metrics:

Based on our data collected, mode averages have been utilised to identify the most popular usage bands based on frequency distribution. The mode is not affected by extreme values and can be computed for both numerical and categorical data (Hayes 2021). Study definitions: Negative usage/ negative user = Screen type is not used •Light usage/ Light user = Below modal average •Average/ average user = Modal average. •Heavy usage/ heavy user= Above modal average •Extreme usage/ extreme user = Significantly above modal average

Phone usage

Negative: 0 hours - 4%
Light: around 1 hour/less - 21%
Average: around 2-3 hours - 31%
Heavy: around 4-5 hours - 24%
Extreme: around 6/+ hours - 20%

Television usage

Negative: 0 hours - 3%
Light: around 1-2 hours/less - 30%
Average: around 3-4 hours - 34%
Heavy: around 5-6 hours - 21%
Extreme: around 7/+ hours - 12%

Computer and Tablet usage

Negative: 0 hours - 5%
Light: around 1 hour/less - 14%
Average: around 2-3 hours - 31%
Heavy: around 4-5 hours - 24%
Extreme: around 6/+ hours - 26%

Combined Screen usage

Negative: 0 hours - 0%
Light: around 1-5 hours/less - 9%
Average: around 6-10 hours - 41%
Heavy: around 11-15 hours - 33%
Extreme: around 16/+ hours - 17%

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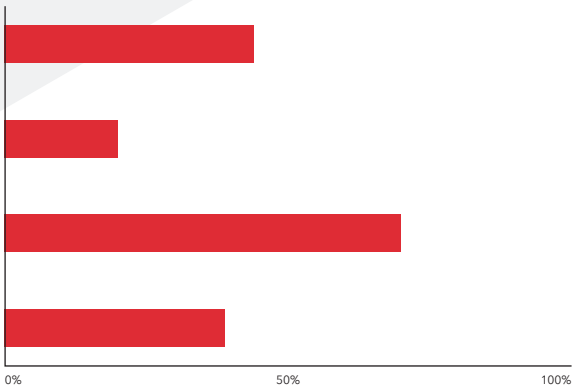
SMARTPHONE SCREENS

People now use smartphones throughout the waking day. Participants have reported that they are used first thing in the morning to check the time, the news and the weather. They are used to browse the internet, access social media, check emails, watch videos, play games, shop and send messages. The portability and convenience of smartphones means that they are often being looked at when other screens are inaccessible. When attending public events, sightseeing or on holiday, people will often look through their phone screen as they take photos or video. Smartphones are used when people sit on the toilet, relax in the bath and before they go to sleep in bed. We have heard several accounts of people using smartphones whilst simultaneously working on computers or looking at televisions screens.

Overall usage



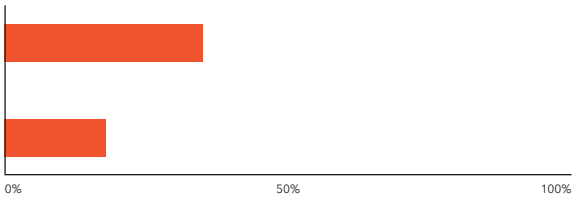
44% of **British adults** are considered heavy or extreme users of phone screens and look at a phone screen around 4 hours or more each day.

20% of **British adults** are considered extreme users of phone screens and look at a phone screen around 6 hours or more each day.

70% of **Ethnic minorities adults** are considered heavy or extreme users of phone screens and look at a phone screen around 4 hours or more each day.

39% of **Over 55 year olds** are considered light users of phone screens and look at a phone screen around 1 hour each day.

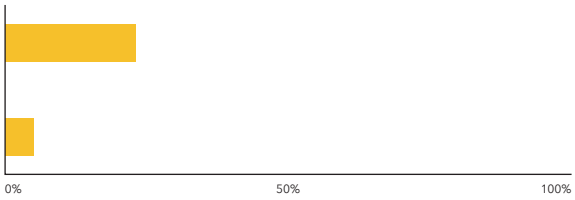
Ethnic Disparities



35% of **Ethnic minorities adults** are considered extreme users of phone screens and look at a phone screen around 6 hours or more each day.

18% of **Ethnically white European adults** are considered extreme users of phone screens and look at a phone screen around 6 hours or more each day.

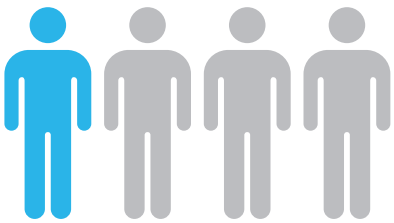
Ethnic Disparities



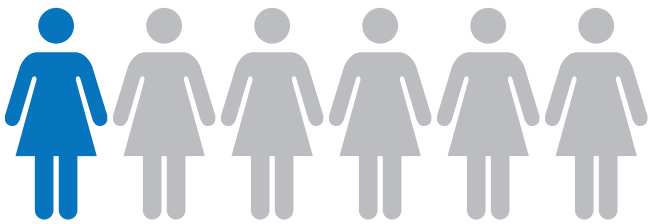
23% of **Ethnically white European adults** are considered light users of phone screens and look at a phone screen around 1 hour each day.

5% of **Ethnic minority adults** are considered light users of phone screens and look at a phone screen around 1 hour each day.

Gender Disparities



1 in 4 26% of **British men** are considered light users of phone screens and look at a phone screen around 1 hour each day.



1 in 6 17% of **British women** are considered light users of phone screens and look at a phone screen around 1 hour each day.

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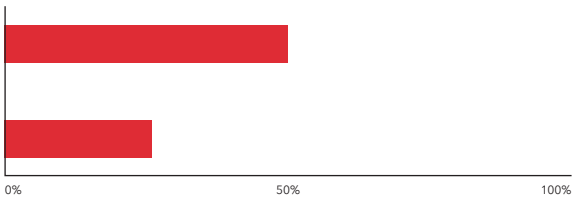
COMPUTER SCREENS AND TABLETS

Computer screens are commonly associated with work and studying. The portability of laptops seems to suit some people, whilst others either choose to use desktops, or are forced to use them as a result of their work demands. Often desktop users have multiple screens, which significantly increases people's overall exposure. People watch films and TV series on laptops and play games. Desktop machines are also popular amongst regular online gamers. Many people now have home offices set up following the lockdowns and increasingly work from home, sometimes in their bedrooms. Tablets are mobile and personal devices which can be carried into any room and used for a broad range of screen based activities. Tablets are often cited as being used by children in the home.

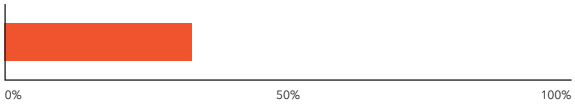
Overall usage



50% of **British adults** are considered heavy or extreme users of computer/tablet screens and look at a computer/tablet screen around 4 hours or more each day.

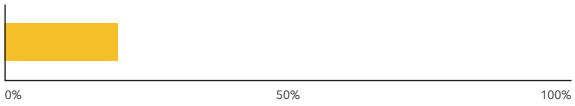
26% of **British adults** are considered extreme users of computer/tablet screens and look at a computer/tablet screen around 6 hours or more each day.

Social Disparities



33% of **Higher social grades** are considered extreme users of computer/tablet screens and look at a computer/tablet screen around 6 hours or more each day.

Subtitle for below information



20% of **Lower social grades** are considered extreme users of computer/tablet screens and look at a computer/tablet screen around 6 hours or more each day.

Relational Statistic

26% of **Single adults** spend more than 7 hours a day looking at a computer/tablet screen.

"Work wise… everything is on computers nowadays… sixteen, seventeen hours a day [screen time]… It's work 99% of the time… Everything is electronic."

(Duncan).

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TELEVISION SCREENS

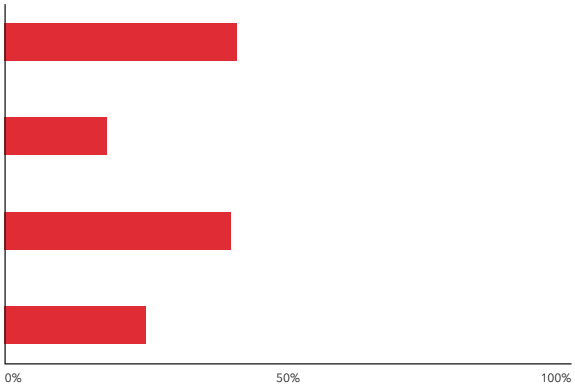
"I've definitely diversified and branched out into needing more things to watch, cause there was so much kind of time to watch things"

(Charlotte).

Most interview participants have a large television screen in the main room of the house, which often provided shared viewing opportunities during the lockdowns as many families experienced new bonding experiences through the communal watching of film and TV. Some houses have multiple television screens placed in different rooms.

Television screens are also used for gaming and many have games consoles connected. Participants reported that television screens are often placed in front of comfortable sofas and are associated with relaxation and entertainment. Watching long films, playing games or binge watching television series can lead to prolonged periods of inactivity, which are considered problematic in terms of health impacts.

Social Disparities



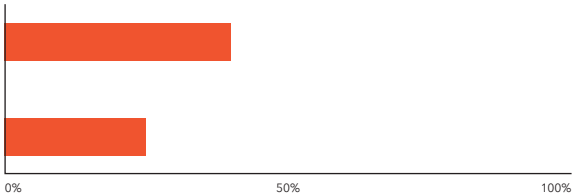
41% of **Higher social grades** are considered light users of television screens and look at a television screen around 2 hours or less each day.

18% of **Lower social grades** are considered light users of television screens and look at a television screen around 2 hours or less each day.

40% of **Lower social grades** are considered heavy or extreme users of television screens and look at a television screen around 5 hours or more each day.

25% of **Higher social grades** are considered heavy or extreme users of television screens and look at a television screen around 5 hours or more each day.

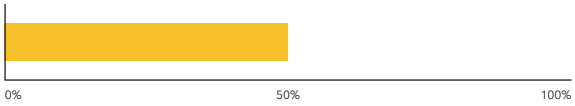
Regional Disparities



43% of **Northerners** are considered heavy or extreme users of television screens and look at a television screen around 5 hours or more each day.

23% of **Southerners** are considered heavy or extreme users of television screens and look at a television screen around 5 hours or more each day.

Relational Statistic



50% of **Widowed, separated or divorced adults** watch more than 5 hours of television each day.

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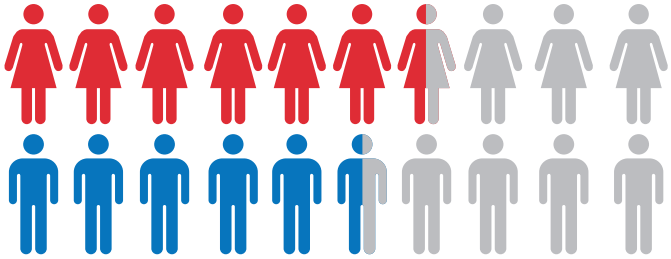
HEALTH IMPACTS

Participants in the study were asked if looking at a screen had ever caused a negative impact on their physical or mental health. They were provided with multiple-choice answers including: Yes a significantly negative impact; Yes, a slight negative impact; No impact; No, it has had a slight positive impact; No, it has had a significant positive impact; Not sure/don't know. From the survey responses, it was clear that most people experienced negative impacts (around 60%) and that more people experienced negative physical health impacts than negative mental health impacts. The most common physical impacts were related to the eyes and vision (46%) and the most common mental health impact was depression (25%). Those who identified as African ethnicity had the lowest proportion of negative health impacts, whereas those who identified at Chinese ethnicity had the highest proportion of negative health impacts. Minority ethnic people rarely cited negative mental health impacts. 64% of women expressed negative health impacts compared to 54% of men. Younger people and higher earners also seem to be negatively affected disproportionately. A small proportion of people declared that they experienced positive health impacts.

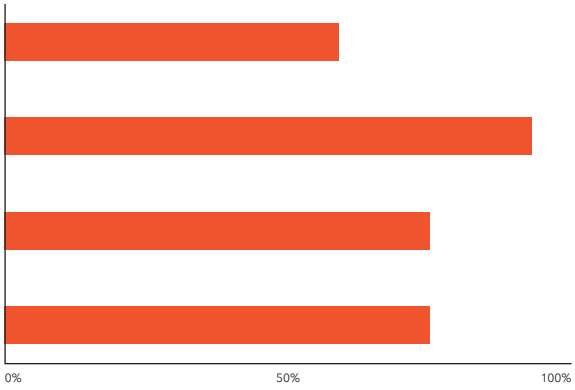
Women appear to be disproportionally affected



64% of **Women** expressed negative health impacts

54% of **Men** expressed negative health impacts

Impact Statistics



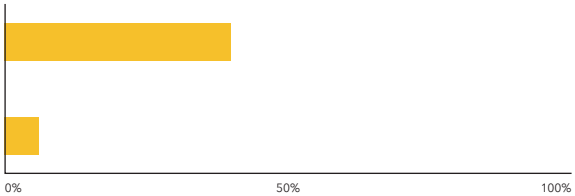
59% of **British adults** have experienced a negative impact on their health from screens.

93% of **Negative health** impacts occur in those who are exposed to screens for 6 hours or more each day.

75% of **Negative physical health** impacts also occur in those who are exposed to screens for 9 hours or more each day.

75% of **Negative mental health** impacts occur in those who are exposed to screens for 9 hours or more each day.

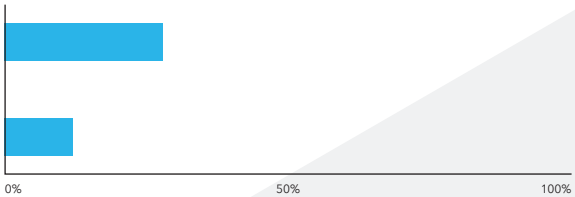
Physical Health



40% of **British adults** think that looking at a screen has had a negative impact on their physical health.

6% of **British adults** think that looking at a screen has had a positive impact on their physical health.

Mental Health



28% of **British adults** think that looking at a screen has had a negative impact on their mental health.

12% of **British adults** think that looking at a screen has had a positive impact on their mental health.

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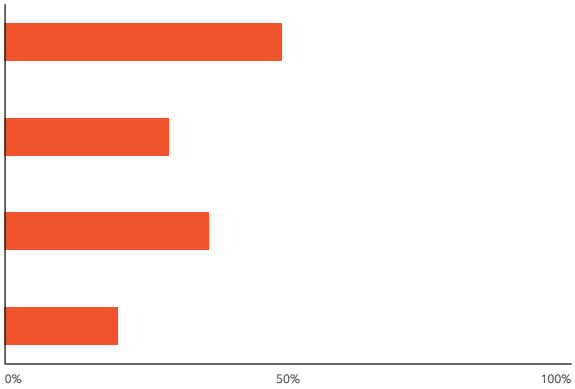
HEALTH IMPACTS
Continued

Social Disparities



49% of **Higher social grades** think that looking at a screen has had a negative impact on their physical health.

29% of **Lower social grades** think that looking at a screen has had a negative impact on their physical health.

36% of **Higher social grades** think that looking at a screen has had a negative impact on their mental health.

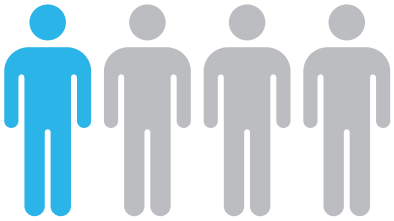
20% of **Lower social grades** think that looking at a screen has had a negative impact on their mental health.

> "I think the screen is in there in terms of damaging eyesight and creating stress, it's like you've created a wall. I think that wall kind of caves you in a bit, you become a bit agoraphobic, I guess."

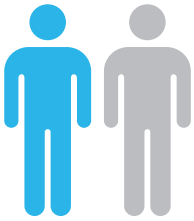
(Solomon).

Age Disparities

1 in 4 28% of **Over 55 year olds** think that looking at a screen has had a negative impact on their overall health.



1 in 2 47% of **18-54 year olds** think that looking at a screen has had a negative impact on their overall health.



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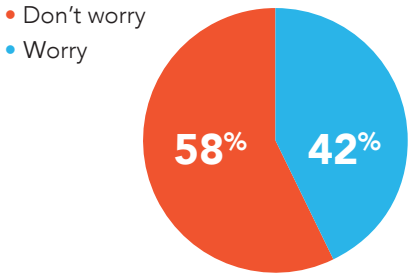
GOVERNMENT GUIDANCE

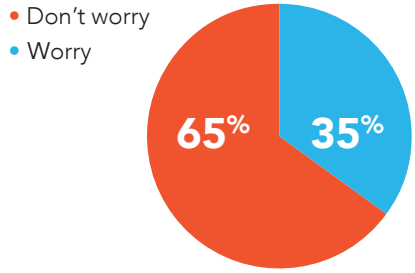
During the BFiL study it became clear that people were using screens significantly more as a result of the lockdowns. Some people were feeling concerned that their screen use was unhealthy and thought that government guidance would help them reflect upon their screen behaviours. Interview participants from both studies (NUSPB and BFiL) seemed not to know of any guidance, despite some of them believing and expecting that guidance did exist. When participants from the studies were told that guidelines did not exist, all felt that government guidelines should exist, and felt it would be useful. When survey participants in the NUSPB study were asked if they knew the government guidance on how much screen-time is advised each day, most correctly replied no (78%), however, some answered yes (22%). When asked what the guidance was, these participants provided answers that ranged from 1 hour to 10 hours a day demonstrating a lack of clarity and understanding within the UK population.

Feelings and Concerns About Screen Use

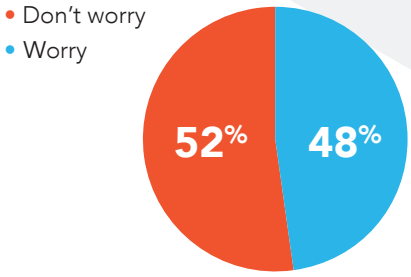
British Adults

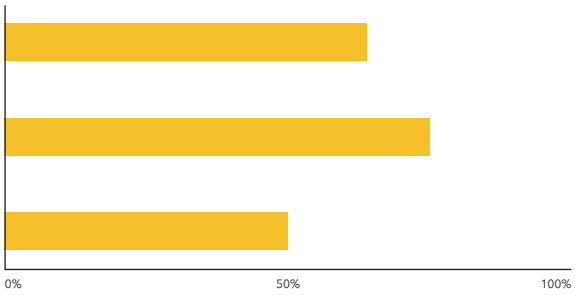


British Men



British Women



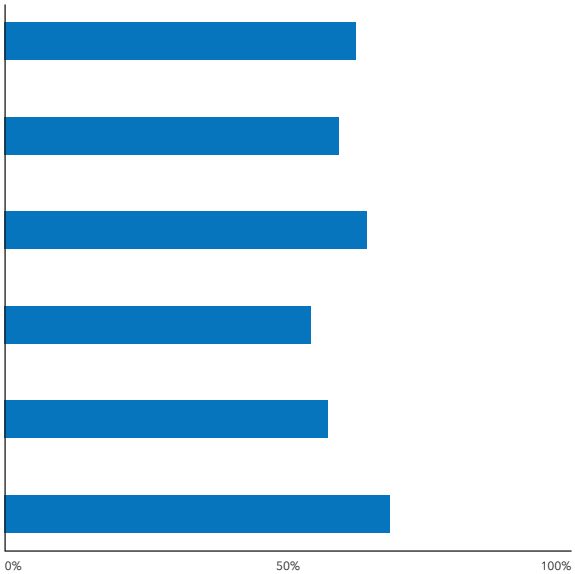


64% of **Ethnic minority adults** worry about the amount of time they spend looking at screens.

75% of **Parents** whose children live at home worry about the amount of time they spend looking at screens.

50% of **Southerners** worry about the amount of time they spend looking at screens.

Worries often increase with more screen exposure, with the exception of extreme users, who worry less.



62% of **18-34 year olds** want to spend less time looking at screens.

59% of **Middle and higher earners** want to spend less time looking at screens.

64% of **Ethnic minority adults** want to spend less time looking at screens.

54% of **Southerners** want to spend less time looking at screens.

57% of **Parents** whose children live at home want to spend less time looking at screens.

68% of **Parents** of pre-school children want to spend less time looking at screens.

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IMPACT OF THE PANDEMIC

The COVID-19 lockdowns have transformed the relationship between the UK population and screens to an unprecedented extent. In particular, the emergence of video conferencing as an essential feature of people's personal and professional everyday life was new. Many people experienced additional work demands throughout the lockdowns which sometimes led to feelings of not being able to 'switch off' from work. For many of the participants, these feelings have continued post-pandemic whilst working from home.

"Screen use definitely increased and had an impact. I think, because before the pandemic you go to work and you work so many hours, then you go home...you come away from your screen. But if you work at home, you lose the sense of time. You just keep working."

(Duncan).

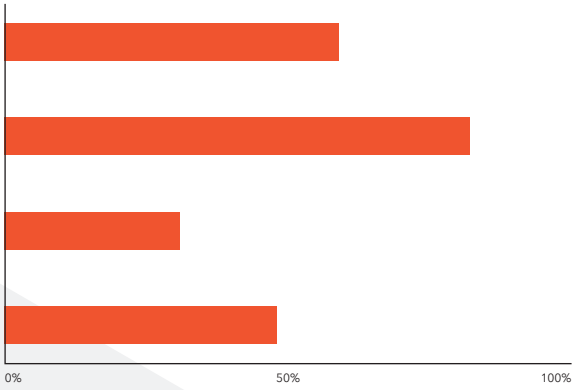
British adults using screens during the lockdowns.

2 in 3 62% of **British adults** used screens more during the three lockdowns of 2020-21 than they did before lockdowns.

"My reliance on screens has gone up... you just can't manage without screens"

(Solomon).

Ethnic Disparities



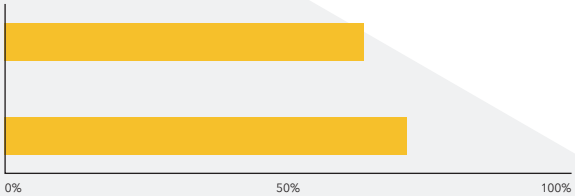
59% of **Ethnically white European adults** used screens during the three lockdowns of 2020-21 more than they did before lockdowns.

82% of **Ethnic minority adults** used screens during the three lockdowns of 2020-21 more than they did before lockdowns.

31% of **All adults** used screens significantly more during the three lockdowns of 2020-21 more than they did before lockdowns.

48% of **Ethnic minority adults** used screens significantly more during the three lockdowns of 2020-21 than they did before lockdowns.

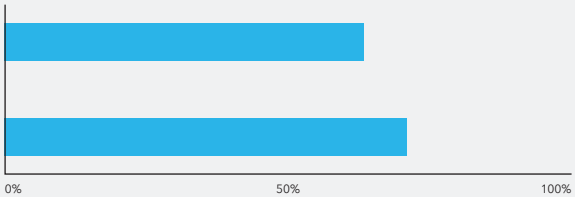
Parental Disparities



63% of **British adults** with children living at home used screens during the three lockdowns of 2020-21 more than they did before lockdowns.

71% of **British adults** without children used screens during the three lockdowns of 2020-21 more than they did before lockdowns.

Social Disparities



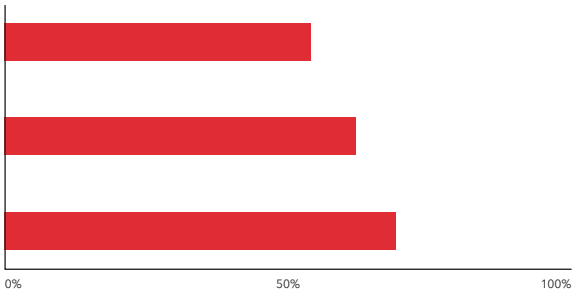
70% of **Higher social grades** used screens during the three lockdowns of 2020-21 more than they did before lockdowns.

52% of **Lower social grades** used screens during the three lockdowns of 2020-21 more than they did before lockdowns.

Clayton, R., Clayton, C., Potter, M., Al-Azri, S. & Mogeh, I. (2022)
'New Uses of Screens in Post-Lockdown Britain - Study Report and Findings' . Report. University of Leeds, Leeds. DOI https://doi.org/10.48785/100/97. Licensed under Creative Commons (CC by 4.0).

Since many people now work from home, there is a tendency to undertake work, such as sending and receiving emails, outside of normal working hours. Some have found that by doing additional work they are becoming more productive and this is seen as beneficial for them. Others have enjoyed new leisure experiences with screens throughout lockdown including engagements with new apps on their phone, watching more films and TV or playing new video games. In particular it seems that it is the use of screens for leisure that has increased because of the pandemic.

Post-Pandemic Impacts

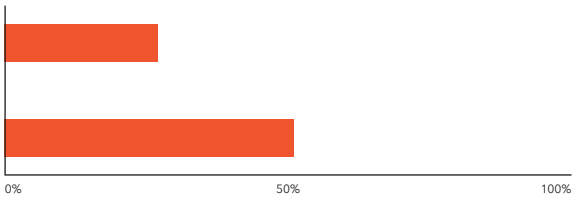


54% of **British adults** now use screens overall more than they did before the pandemic.

62% of **Higher social grades** now use screens more than they did before the pandemic.

69% of **Minority ethnic adults** now use screens more than they did before the pandemic.

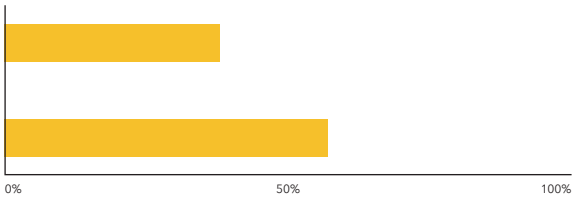
Work and Leisure Disparities



27% of **Adults** now use screens more at work than they did before the pandemic.

51% of **Adults** now use screens for leisure more than they did before the pandemic.

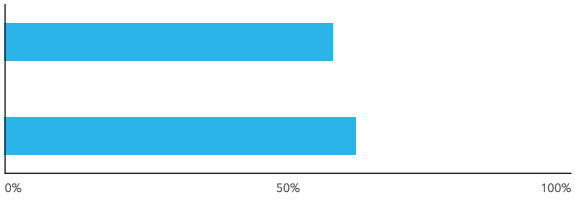
Social Disparities



38% of **Higher social grades** now use screens more at work than they did before the pandemic.

57% of **Higher social grades** now use screens for leisure more than they did before the pandemic.

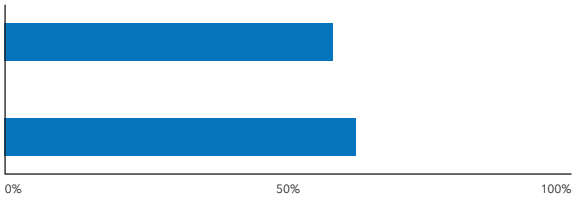
Ethnic Disparities



58% of **Minority ethnic adults** now use screens more at work than they did before the pandemic.

62% of **Minority ethnic adults** now use screens for leisure more than they did before the pandemic.

Significant Increase in Leisure Use



44% of **Adults** who said that overall their screen use has increased following the lockdowns felt that their screen time at work has now increased.

85% of **Adults** who said that overall their screen use has increased following the lockdowns feel their use of screens for leisure has now increased.

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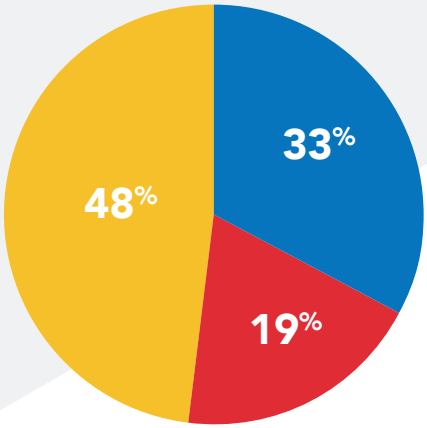
CONCLUSION

British adults using screens during the lockdowns



British adults say **Mostly Positive**

British adults say **Mostly Negative**

British adults say **Mostly Neutral**

This study has shown that screen use has increased as a result of the pandemic. It has accelerated societal trends towards digitalisation and screen use. Screens appear to bring enormous benefits to people's lives and they supported the nation during the coronavirus lockdowns, providing people with entertainment, a means to communicate and the capacity for many to work and study remotely. However, in the absence of national guidance for adult screen use, and with unclear guidance for children's screen use, many British people have found themselves using screens to 'extreme' levels. Negative health impacts from screen use are being reported by the majority of British adults and there are worrying accounts of people feeling that they are reliant, forced, obligated and in some cases addicted to screens, to the detriment of their health.

Whilst some adults are aware of their high exposure to screens and are aware of the physical impacts, there is some evidence to suggest that others are not aware. Some adults when asked if they had negative health impacts answered "no" but went on to describe experiencing headaches, eye strain and other physical symptoms. Other adults, acknowledged the negative health impacts and recognised they were using screens "too much", but felt they had no choice due to their employment demands.

Some parents have discussed strategies that they employ to avoid looking at screens too much including avoiding watching television in the evening, or preferring to listen to podcasts for entertainment. As such it maybe that the excessive use of screens for work purposes may lead to a reduction in screen leisure activities in the future. However, it is important to note that currently the statistical indications are that it is screen use for leisure that has significantly increased.

Generally people are self-regulating screen time by waiting for physical symptoms to start and then making a decision to either take pain relief and stimulants in order to continue, or they consider taking a break. The implications of screen use and symptom response for people's long terms health are still not fully understood.

More research needs to be undertaken to better understand the inequalities related to ethnicity, gender, social grade, age, location and relationship status, and further knowledge can be gained related to what negative health impacts are experienced by who, in relation to which screens.

Although the limitations of this research are recognised, in terms of not providing clinical does-response investigations into screen use and health impacts, the statistical evidence of self-reported ailments should not be ignored.

Recommendations

1. **The Government must provide clear guidance that is easily understood and measurable for adults regarding screen use.**
2. **Government agendas to increase the digitalisation of society should be reconsidered in relation to the negative health impacts reported.**
3. **Further research into the negative societal impacts of extreme screen use should be encouraged.**
4. **Understanding over-reliance, enforced usage, obligated usage and addiction to screens should be prioritised in order to protect adults who are vulnerable to extreme usage.**

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