

Usage of eMental Health & eHealth supports by young adults during COVID-19 lockdown

Results of a survey conducted late May 2020



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# **Executive Summary**

This report presents results of a survey on usage of digital tools (apps and remote consultation) to support physical and mental health & wellbeing. The survey took place at the end of May 2020, during the period since the first COVID-19 restrictions began. Respondents were from a large market research panel comprising mainly young adults (and mainly students) in the core third level student age range (18-24). The survey took place about 10 weeks after colleges closed because of COVID-19 and 8 weeks after the first major national lockdown commenced.

# **Main findings**

The survey results show substantial usage of each form of eHealth and eMental health support during the lockdown, with significant increase in usage since the lockdown commenced.

# **Apps**

- Physical health & wellbeing: 35.5% used during lockdown; for 14.4%, usage began during the period.
- Mental health & wellbeing: 22.9% used during lockdown; for 8.7%, usage began during the period.

A majority of users reported the apps were useful, although mean usefulness ratings for physical health apps were significantly higher than for mental health apps. For physical health apps, mean usefulness ratings were significantly higher for those who had used the app already compared to those who started using after the lockdown commenced. A similar picture emerged for mental health apps, although the difference was almost but not quite statistically significant.

#### Remote consultation

- Physical health: 15.6% used during lockdown; for 12.4%, this was their first time.
- Mental health: 6.9% used during lockdown; for 5.5%, this was their first time.

Most remote medical consultations were by phone. Just over one-half of remote mental health consultations were by phone and just under one-half were by video connection. Overall, about four-infive were satisfied or neutral about remote consultations of either type, and about one-in-five



expressed dissatisfaction. For mental health consultations, overall satisfaction levels were fairly similar for video and phone consultations although the numbers concerned are too small for drawing robust conclusions on this.

#### Conclusions

Overall, the results suggest that digital health and wellbeing tools have been useful for many people during the COVID-19 lockdown period. However, the pros and cons of usage of apps for mental health and wellbeing purposes may be an area warranting further exploration. Many people appear to find them useful, but this is not always the case. The wider research literature raises concerns that some people who use mental health apps might benefit more from seeking professional support for their difficulties, but may delay or avoid this as they persevere with an app that is ineffective for them. Also, negative experiences because of a feeling of 'failure' to get benefit from such apps could potentially exacerbate mental health difficulties for some users. Further research and evidence-based guidance for potential users would therefore be useful.

#### 1 Introduction

This report presents results of a survey conducted at the end of May 2020 on usage of digital tools (apps and remote consultation) to support physical and mental health & wellbeing during the period since the first COVID-19 restrictions began. The survey took place about 10 weeks after colleges closed because of COVID-19 and 8 weeks after the first major national lockdown commenced. Questions covered usage of apps and remote consultation during the period and, for those who reported usage, whether they were already using them before the lockdown commenced or had only begun to use them since then. They also asked about the specific apps and remote consultation platforms used, and whether users found the apps useful and how satisfied they were with their consultations in remote mode.

The population surveyed came from a large market research panel comprising mainly young adults (and mainly students) in the core third level student age range (18-24). The survey was pushed by Smartphone app to the entire panel, with a target cut-off after the first 400 or so valid responses and an approximately equal mix of males and females. Table 1.1 presents a profile of respondents. A total of 403 valid responses were returned by the market research company, comprising roughly equal numbers of males (45.9%) and females (51.6%). A large majority were students, with most being full-time (87.3%). The predominant age groups were 18-21 (41.9%) and 21-24 (39.7%), with smaller numbers aged 25-29 (11.2%) or 30+ (3.5%)



**Table 1.1 Respondent profile** 

| Gender | N   | %     | Status              | N   | %     | Age<br>group | N   | %     |
|--------|-----|-------|---------------------|-----|-------|--------------|-----|-------|
| Male   | 185 | 45.9  | Student – Full-time | 352 | 87.3  | <21          | 169 | 41.9  |
| Female | 208 | 51.6  | Student – Part-time | 13  | 3.2   | 21-24        | 160 | 39.7  |
| Other  | 10  | 2.5   | Non-Student         | 38  | 9.4   | 25-29        | 45  | 11.2  |
| Total  | 403 | 100.0 | Total               | 403 | 100.0 | 30+          | 14  | 3.5   |
|        |     |       |                     |     |       | Missing      | 15  | 3.7   |
|        |     |       |                     |     |       | Total        | 403 | 100.0 |

# 2 Overview of usage of eHealth and eMental health

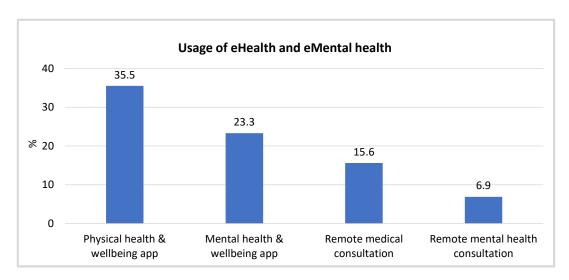
Table 3.1 and Figure 3.1 present an overview of usage of eHealth and eMental health by respondents during the period since the COVID-19 lockdowns and social distancing regimes were first introduced. A little over one-third (35.5%) of respondents reported they used apps for physical health & wellbeing, and a little under one-in-four (23.3%) used apps for mental health & wellbeing. Numbers reporting remote consultations were smaller but still relatively substantial, both for medical consultations (15.6%) and mental health consultations (6.9%). Females were more likely to report usage of all forms of support except apps for physical health & wellbeing, with the female/male ratio 1.77 for mental health and wellbeing apps, 1.78 for mental health consultation, and 2.08 for medical consultation.



Table 3.1 Usage of eHealth and eMental health

|                   | N   | Physical health & wellbeing app |      | Mental health & wellbeing App |      | Remote medical consultation |      | Remote mental<br>health<br>consultation |      |
|-------------------|-----|---------------------------------|------|-------------------------------|------|-----------------------------|------|---|------|
|                   |     | N                               | %    | N                             | %    | N                           | %    | N                                       | %    |
| Male              | 185 | 64                              | 34.6 | 31                            | 16.8 | 18                          | 9.7  | 9                                       | 4.9  |
| Female            | 208 | 74                              | 35.6 | 62                            | 29.8 | 42                          | 20.2 | 18                                      | 8.7  |
| Other             | 10  | 5                               | 50.0 | 1                             | 10.0 | 3                           | 30.0 | 1                                       | 10.0 |
| All               | 403 | 143                             | 35.5 | 94                            | 23.3 | 63                          | 15.6 | 28                                      | 6.9  |
| Female/Male ratio |     | atio 1                          |      | 1.77                          |      | 2.08                        |      | 1.78                                    |      |

Figure 3.1 Usage of different eHealth and eMental health supports since COVID-19 lockdowns commenced



In the case of apps, although many can be readily classified on whether they target and/or are used for physical health & wellbeing or mental health & wellbeing, the distinction can sometimes be more blurred. Reflecting this, respondents using the same app (e.g. apps with sleep management/support functions, yoga apps, and menstrual cycle monitoring apps for women) sometimes varied in whether they reported using them for physical or mental health purposes. Nevertheless, the responses overall allowed a fairly tidy classification and analysis of utilization of apps for the different purposes.



### 3 eHealth

# 3.1 Physical health and wellbeing apps

Overall, just over one-in-three (35.5%) reported using one or more physical health and wellbeing app during the period, with similar usage rates for males and females. Figure 3.1 shows that about forty percent of app users (14.4% of all respondents) had first begun using their app (the one they used most often if they reported using more than one) after the lockdown commenced, and the remainder (21.1%) had already been using their app before this. Both males and females showed very similar patterns in this regard.

Figure 3.1 Usage of apps for physical health & wellbeing since COVID-19 lockdown commenced

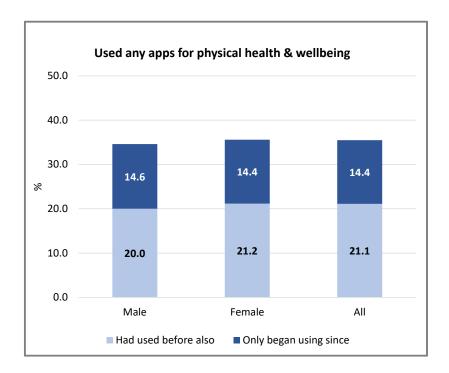


Table 3.1 and Figure 3.2 present ratings of usefulness of the apps used (those who reported using more than one app were asked to rate the one they used most often).



Table 3.1 Physical health & wellbeing apps – ratings of usefulness

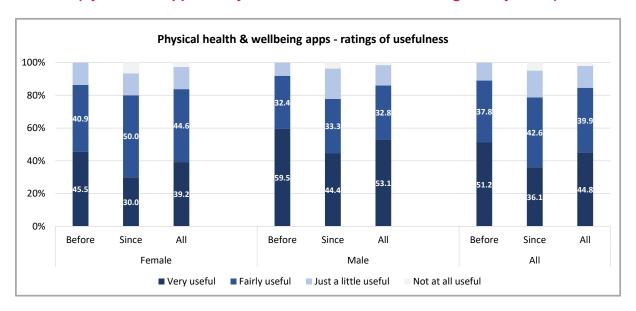
|                   |                                      | Very<br>useful | Fairly<br>useful | Just a<br>little<br>useful | Not at all useful | All   |  |  |
|-------------------|--------------------------------------|----------------|------------------|----------------------------|-------------------|-------|--|--|
|                   | N                                    | 64             | 57               | 19                         | 3                 | 143   |  |  |
| AII               | %                                    | 44.8           | 39.9             | 13.3                       | 2.1               | 100.0 |  |  |
|                   | Mean usefulness score (max=3): 2.27  |                |                  |                            |                   |       |  |  |
| Had used          | N                                    | 42             | 31               | 9                          | 0                 | 82    |  |  |
| before            | %                                    | 51.2           | 37.8             | 11.0                       | 0.0               | 100.0 |  |  |
| lockdown          |                                      | :3): 2.40*     |                  |                            |                   |       |  |  |
| Only              | N                                    | 22             | 26               | 10                         | 3                 | 61    |  |  |
| began<br>using    | %                                    | 36.1           | 42.6             | 16.4                       | 4.9               | 100.0 |  |  |
| since<br>lockdown | Mean usefulness score (max=3): 2.10* |                |                  |                            |                   |       |  |  |

\*P<0.02 (two-tailed T-Test)

Overall, a large majority reported the apps used were either very useful (44.8%) or fairly useful (39.9%). Patterns across males and females were quite similar, although males were more likely to report the apps very useful (53.1%) than females were (39.2%). People who had used the apps before the lockdown were more likely to rate them very useful and had a significantly higher mean usefulness score, with this pattern apparent for both males and females.



Figure 3.2 Physical health & wellbeing apps – ratings of usefulness (by whether app already used before lockdowns or began only since)



#### 3.2 Remote medical consultations

Overall, a little under one-in-six (15.6%) reported having a remote medical consultation during the period, with females (20.1%) considerably more likely than males (9.7%). Figure 3.3 shows a large majority of these had not had a consultation in this mode before the lockdown commenced. Females were a little more likely than males to have used this mode already before the lockdown and a lot more likely to have done this for the first time since the lockdown commenced.



Figure 3.3 Had a remote medical consultation since COVID-19 lockdown commenced

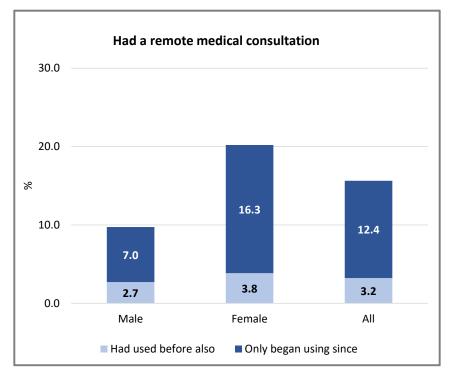


Figure 3.4 shows that the majority of remote medical consultations were by phone (71.4%), with one-in-nine (11.1%) by video link and the remainder by text or other means.

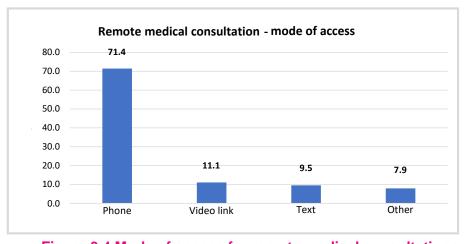


Figure 3.4 Mode of access for remote medical consultations

Figure 3.5 shows levels of satisfaction with remote medical consultation. Almost three-quarters (72.6%) were satisfied, with more than one-quarter (27.4%) very satisfied and the remainder (45.2%) somewhat satisfied. Patterns were fairly similar for males and females, with males just slightly more likely to be satisfied.



Remote medical consultation - satisfaction with this way of having consultation 100% 4.8 6.5 11.8 16.7 12.9 5.9 80% 60% 47.1 45.2 40.5 40% 20% 28.6 29.4 27.4 0% Female Male ΑII ■ Very satisfied ■ Somewhat satisfied ■ Neither satisfied nor dissatisfied ■ Domewhat dissatisfied

Figure 3.5 Satisfaction with remote medical consultation

### 4 eMental health

# 4.1 Mental health and wellbeing apps

Overall, a little under one-in-four (23.3%) reported using one or more mental health and wellbeing app during the period, with females (29.8%) considerably more likely than males (16.8%). Figure 4.1 shows that a little under forty percent of app users (8.7% of all respondents) had first begun using their app (the one they used most often if they reported using more than one) after the lockdown commenced, and the remainder (14.4%) had already been using their app before this. Females were more likely than males to have been using these apps already before the lockdown as well as to have started using since the lockdown commenced, although both males and females had proportionately fairly similar increases in usage since the lockdown commenced.



Figure 4.1 Usage of apps for mental health & wellbeing since COVID-19 lockdown commenced

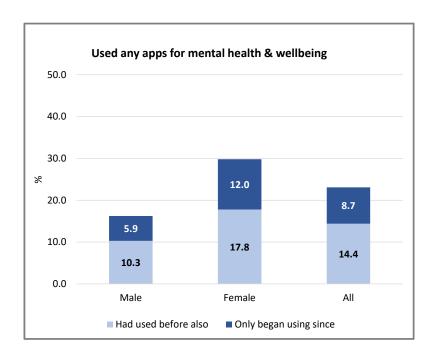




Table 4.1 and Figure 4.2 present ratings of usefulness of the apps used (those who reported using more than one app rated the one they used most often). Overall, just over three-quarters reported the apps used were very useful (31.2%) or fairly useful (45.2%), a bit less positive than the ratings for physical health apps and having a significantly lower mean usefulness score (2.05 vs 2.27; p<0.04, two-tailed T-Test).

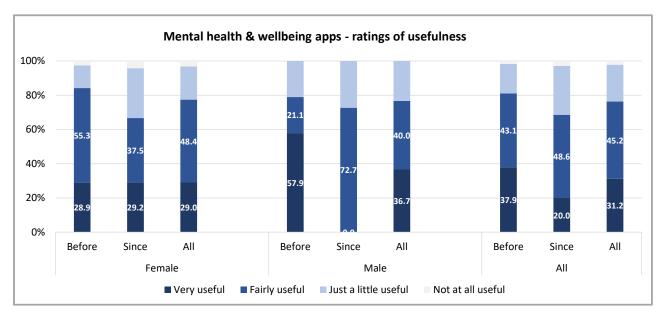
Table 4.1 Mental health & wellbeing apps – ratings of usefulness

|                        |                                      | Very useful | Fairly useful | Just a little<br>useful | Not at all useful | All   |  |  |
|------------------------|--------------------------------------|-------------|---------------|-------------------------|-------------------|-------|--|--|
|                        | N                                    | 29          | 42            | 20                      | 2                 | 93    |  |  |
| All                    | %                                    | 31.2        | 45.2          | 21.5                    | 2.2               | 100.0 |  |  |
|                        | Mean usefulness score (max=3): 2.05  |             |               |                         |                   |       |  |  |
| 11-1                   | N                                    | 22          | 25            | 10                      | 1                 | 58    |  |  |
| Had used before also   | %                                    | 37.9        | 43.1          | 17.2                    | 1.7               | 100.0 |  |  |
|                        | Mean usefulness score (max=3): 2.17* |             |               |                         |                   |       |  |  |
| Onlybanan              | N                                    | 7           | 17            | 10                      | 1                 | 35    |  |  |
| Only began using since | %                                    | 20.0        | 48.6          | 28.6                    | 2.9               | 100.0 |  |  |
|                        |                                      |             | Mean usefuln  | ess score (max=         | :3): 1.86*        |       |  |  |

\*P<0.06 (two-tailed T-Test)



Figure 4.2 Mental health & wellbeing apps – ratings of usefulness (by whether app already used before lockdowns or began only since)



Patterns across males and females were quite similar, although males were somewhat more likely to report the apps very useful (36.7%) than females (29.0%). People who had used the apps before the lockdowns were considerably more likely to rate them very useful and had a higher mean usefulness score, with this pattern especially apparent for males (rated very useful by 57.9% of those who used them before, but none of the males who had not used them before).

The two most commonly used apps were Headspace for meditation and mindfulness (22.3%) and Calm for meditation and sleep (17.0%), with Fitbit also used quite often for sleep tracking and insights (10.6%). Table 4.2 compares usefulness ratings for Headspace and Calm; this shows an especially positive rating for Headspace, with one-in-three (33.3%) rating it very useful compared to just over one-in-nine (11.8%) for Calm.



**Table 4.2 Usefulness of Headspace and Calm** 

|                         | Heads | pace   | Calm |       |
|-------------------------|-------|--------|------|-------|
|                         | N     | %      | N    | %     |
| Very useful             | 7     | 33.3   | 2    | 11.8  |
| Fairly useful           | 10    | 47.6   | 8    | 47.1  |
| Just a little<br>useful | 4     | 19.0   | 5    | 29.4  |
| Not useful at all       |       |        | 1    | 5.9   |
| Missing                 |       |        | 1    | 5.9   |
|                         | 21    | 100.00 | 17   | 100.0 |

Tables 4.3 and 4.4 present comments on usefulness ratings for Headspace and Calm. Commonly reported positive benefits included calming/relaxing (helping manage stress) and help with sleep, with smaller numbers focusing on support for mindfulness and meditation as benefits in their own right. Reasons for less positive ratings included limited or no efficacy for the intended purpose, lack of adherence, or unwillingness to pay for premium versions with more functionality.



Table 4.3 Comments on usefulness ratings for Headspace

| Usefulness    | Comment  |  |  |  |  |  |  |  |
|---------------|--|--|--|--|--|--|--|--|
|               | Helped me relax and not get anxious  |  |  |  |  |  |  |  |
|               | Helped me sleep  |  |  |  |  |  |  |  |
|               | It was useful for meditation during stressful times / Great for calming the mind                               |  |  |  |  |  |  |  |
|               | Offers guided meditation and a wide variety of courses   |  |  |  |  |  |  |  |
| Very          | Used Headspace a lot for mindfulness trainingfor a number of years (close to 4,000 minutes                     |  |  |  |  |  |  |  |
|               | meditation time); incredibly helpful for managing stress and improving performance, particularly at exam time. |  |  |  |  |  |  |  |
|               | Very high-quality meditation app   |  |  |  |  |  |  |  |
|               | Wide functionality, can cover many situational requirements, easy to use                                       |  |  |  |  |  |  |  |
|               | Helped me stay calm  |  |  |  |  |  |  |  |
|               | Calms the mind   |  |  |  |  |  |  |  |
|               | Good sleep Casts   |  |  |  |  |  |  |  |
|               | Helps me meditate and concentrate / focus on good things   |  |  |  |  |  |  |  |
| Fairly        | Really good, but found it hard to be consistent  |  |  |  |  |  |  |  |
| 1 amy         | It is nice to use with good UI and navigation and found everything I wanted                                    |  |  |  |  |  |  |  |
|               | Routine and relaxing   |  |  |  |  |  |  |  |
|               | I sleep better   |  |  |  |  |  |  |  |
|               | it helped with occasional anxiety  |  |  |  |  |  |  |  |
|               | Helped relax   |  |  |  |  |  |  |  |
|               | I preferred to do my own meditation, but the meditation itself was   |  |  |  |  |  |  |  |
| Just a little | Don't feel much different after  |  |  |  |  |  |  |  |
|               | Didn't use it much as didn't want to pay for it  |  |  |  |  |  |  |  |



**Table 4.4 Comments on usefulness ratings for Calm** 

| Usefulness    | Comment  |
|---------------|--|
| Very          | Helped me be more present  |
|               | Helped my anxiety  |
|               | Very good guided meditation, but required a subscription.  |
|               | Helped me centre.  |
| Fairly        | Good for relaxation.   |
| i alliy       | Immersive.   |
|               | Great guided meditation.   |
|               | It made it easier to sleep.  |
|               | A lot of options premium; difficult to test if worth paying for because so little available in free version. |
| Just a little | It was calming but didn't give me better sleep.  |
|               | Didn't really help me sleep better.  |
|               | Only used it once or twice.  |
| Not at all    | Just wasn't for me. The sounds would have me just about asleep and then it wakes me back up.                 |



Table 4.5 presents a listing of all mental health & wellbeing apps used, and Table 4.6 lists apps other than Headspace and Calm that were rated very useful by one or more users.

Table 4.5 Mental health & wellbeing apps used

| Арр               | N  | %    | Issues addressed                   |
|-------------------|----|------|------------------------------------|
| Headspace         | 21 | 22.3 | Meditation and mindfulness         |
| Calm              | 16 | 17.0 | Meditation and sleep               |
| Fitbit Sleep      | 10 | 10.6 | Sleep tracking and insights        |
| Down Dog          | 4  | 4.3  | Yoga                               |
| Кеер Арру         | 3  | 3.2  | Mood boosting, self-reflection etc |
| Meditation app    | 3  | 3.2  | Meditation                         |
| Sleep Cycle       | 3  | 3.2  | Sleep                              |
| Mindshift         | 2  | 2.1  | CBT                                |
| Mindfulness       | 2  | 2.1  | Mindfulness                        |
| Silvercloud       | 2  | 2.1  | CBT                                |
| Insight timer     | 2  | 2.1  | Meditation, sleep                  |
| Reflectly         | 1  | 1.1  | Selfcare and happiness             |
| Apollo Health     | 1  | 1.1  | Meditation, yoga                   |
| Garmin connect    | 1  | 1.1  | Sleep                              |
| Sleep for android | 1  | 1.1  | Sleep                              |
| YouTube           | 1  | 1.1  | Various                            |
| Daylio            | 1  | 1.1  | Mood tracker                       |
| Whoop             | 1  | 1.1  | Sleep                              |
| Pacifica          | 1  | 1.1  | Stress, anxiety                    |
| Abide             | 1  | 1.1  | Meditation                         |
| Rise              | 1  | 1.1  | Sleep                              |
| Brainaurul        | 1  | 1.1  | Relaxation, sleep                  |
| Simple habit      | 1  | 1.1  | Meditation                         |
| Sleep tracker     | 1  | 1.1  | Sleep                              |



| Day one journal  | 1 | 1.1 | Journal, wellbeing       |
|------------------|---|-----|--------------------------|
| Google sleep     | 1 | 1.1 | Sleep                    |
| Mood path        | 1 | 1.1 | Anxiety, depression      |
| Smiling mind     | 1 | 1.1 | Mindfulness              |
| Habit tracker    | 1 | 1.1 | Sleep or other habits    |
| Zen              | 1 | 1.1 | Meditation and sleep     |
| Auto sleep       | 1 | 1.1 | Sleep                    |
| Track your sleep | 1 | 1.1 | Sleep                    |
| Sleep            | 1 | 1.1 | Sleep                    |
| Alarm            | 1 | 1.1 | Sleep                    |
| Jigsaw           | 1 | 1.1 | (online support service) |
| Heartfulness     | 1 | 1.1 | Meditation               |

Table 4.6 Other apps rated very useful by one or more users

| Арр            | Comment  |
|----------------|--|
|                | I enjoy mindfulness  |
| Insight timer  | It has many meditations and courses targeted to specific topics and is very helpful for mindfulness                  |
| Fitbit         | It tracked my sleep and my periods - I can now see a proper pattern with my moods versus sleep and time of the month |
|                | Sleep tracking   |
| Down dog       | Calming and relaxing with physical and mental activity   |
| КеерАрру       | Allowed me to track essential vitals   |
| Moodpath       | Very helpful, I have mental health conditions and I can look back and see my mood swings                             |
| Habit tracker  | Makes me keep simply healthy habits up, and the little things I want to achieve                                      |
| Brainaural     | This app has meditation music which helps in sound sleep and mediation   |
| YouTube        | Can be very calming if you find the right video  |
| Garmin connect | Tracking daily   |



# 4.2 Remote mental health consultations

Just over one-in-fourteen (6.9%) reported having a remote mental health consultation during the period, with females (8.7%) considerably more likely than males (4.9%). Figure 4.3 shows a large majority of those who did, especially amongst females, had not had a consultation in this mode before the lockdown commenced.

Figure 4.3 Had a remote mental health consultation since COVID-19 lockdown commenced

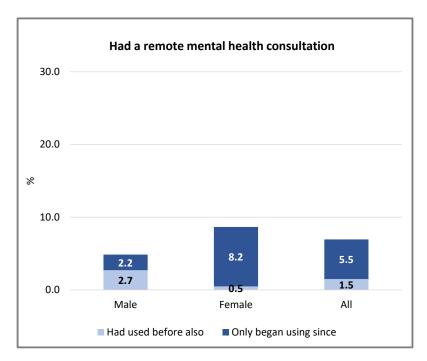


Figure 4.4 shows that one-half of remote mental health consultations were by phone (50.0%), just under one-half were by video link (46.4%), and the remainder by other means.



Remote mental health consultation - mode of access

60.0
50.0
46.4
40.0
30.0
20.0
10.0
Phone Video link Other

Figure 4.4 Mode of access for remote mental health consultations

Figure 4.5 shows levels of satisfaction with having a mental health consultation remotely. Just over two-in-three (67.9%) were satisfied, with almost two-in-five (39.3%) very satisfied and the remainder (28.6%) somewhat satisfied. Although similar numbers of males and females were satisfied to at least some degree, females (50.0%) were a lot more likely to be very satisfied than males (22.2%), but comparisons are based on very small numbers.

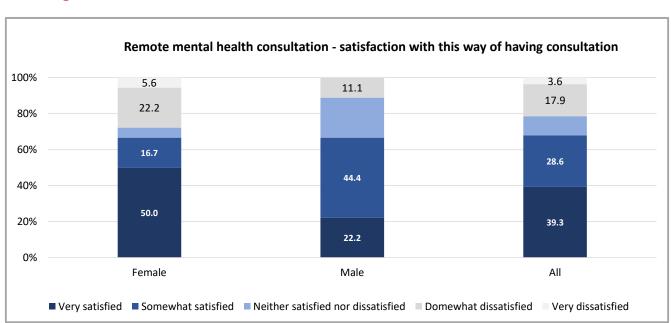


Figure 4.5 Satisfaction with remote mental health consultation - males and females



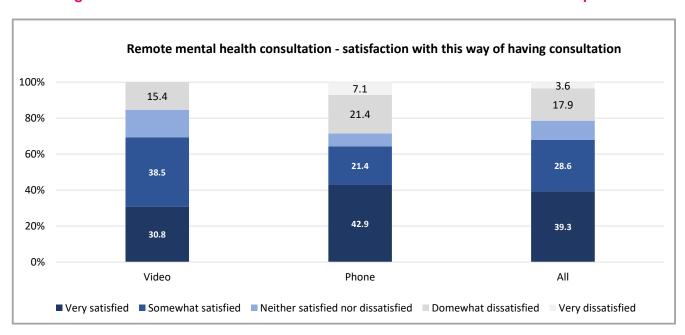
Table 4.7 shows the different platforms used for video consultations, with Zoom being most common (46.2%) and a range of other platforms reported by one or two users each – Skype, Google Hangouts, Microsoft Teams and Face Time.

Table 5.7 Video platforms used for remote mental health consultations

| Video platform  | N  | %    |
|-----------------|----|------|
| Zoom            | 6  | 46.2 |
| Skype           | 2  | 15.4 |
| Google Hangouts | 2  | 15.4 |
| Microsoft Teams | 2  | 15.4 |
| Face Time       | 1  | 7.7  |
|                 | 13 | 46.2 |

Finally, Figure 4.6 shows separately the levels of satisfaction with consultations by video and phone. Quite similar numbers of video users (69.3%) and phone users (64.3%) were satisfied to some degree; more phone users (42.9%) than video users (30.8%) were very satisfied, although these comparisons are again based on very small numbers.

Figure 4.6 Satisfaction with remote mental health consultation – video and phone





### 5 Discussion and conclusions

Data presented in previous Chapters shows substantial increases in usage of each form of eHealth and eMental health support since the lockdown commenced. This chapter discusses the results and draws some overall conclusions.

# 5.1 Apps

Just over one-in-three (35.5%) reported they used apps for physical health & wellbeing during the lockdown period, and almost one-in-four (23.3%) used apps for mental health & wellbeing. For both types of app, about forty percent had begun using them since the lockdown commenced and sixty percent had already been using them before this.

A majority of users reported the apps were useful, although mean usefulness ratings for physical health apps were significantly higher than for mental health apps. For physical health apps, mean usefulness ratings were significantly higher for those who had used the app already compared to those who started using after the lockdown commenced; a similar picture emerged for mental health apps, although the difference was almost but not quite statistically significant.

One factor underlying these patterns may be that the group who had already used the apps before the lockdown and continued to do so during the lockdown period had, through self-selection processes, a higher proportion of people for whom the apps had proven useful through experience. Those who started using the apps for the first time after the lockdown commenced are likely to include more people trying them out, with some finding they are not (yet) providing the benefits they had hoped they would. Unrealistic expectations of 'quick-fix' benefits may another factor linked with this.

The following sections look a bit more closely at some other evidence concerning the quality and efficacy of the two apps respondents most commonly used for mental health and wellbeing – Headspace and Calm.

# **Headspace and Calm**

Based on the numbers of people rating different apps on the Android and iPhone mobile app stores (as reported in a recent systematic review by Lau et al, 2020), Headspace and Calm also appear to be the most widely utilized apps for psychosocial wellness and stress management across the population. An earlier systematic review examined the quality of a range of mindfulness-based iPhone apps (that included Headspace but not Calm) according to the Mobile Application Rating Scale



(MARS) and gave the highest quality rating to Headspace (Mani et al, 2015). Headspace was strong on all the MARS dimensions (engagement, functionality, aesthetics, information and satisfaction) and had four of the five mindfulness-based app features examined (timer, reminders, tracking and program-based practice) but not the mood assessment feature found in a small number of other apps.

Regarding evidence on effectiveness, the Lau et al review found 8 efficacy studies (including 7 RCTs) for Headspace and 2 (including 1 RCT) for Calm, with some evidence for beneficial effects for both in areas such as stress and affect as well as improved mindfulness (Lau et al, 2020). However, an indepth mixed methods study of Calm with college students found some negative consequences of using the app for mindfulness practice, with some users experiencing raised anxiety or a lowering of self-efficacy (Clarke and Draper, 2019). Such negative impacts may arise from an experience of 'failure' in using the app to achieve the expected results and/or difficulties some people may have with mindfulness more generally, for example because of inability to manage negative thoughts arising during meditation. The authors suggest promoters give more attention to this aspect and try to ensure users begin mindfulness practice with reasonable expectations and that lack of success does not cause feelings of stigma and guilt. They also draw attention to the modern tendency to see mindfulness practice as a 'quick-fix' for managing stress and achieving relaxation in the short-term as opposed to its origins in a more spiritually-focused lifetime activity.

Finally, results of a systematic review and meta-analysis of evaluations of standalone smartphone apps for adults with heightened mental health symptom severity found only limited evidence of efficacy and, where found, effect sizes were considerably lower than for digital mental health interventions delivered via the internet (Weisel et al, 2019). The authors raised a concern that some people who would benefit from more structured treatment support (face-to-face or online) may delay or avoid seeking such help by relying on less efficacious standalone apps.

#### 5.2 Remote medical and mental health consultations

In comparison to app usage, smaller but still relatively substantial numbers reported having one or more remote medical consultation (15.6%) or remote mental health consultation (6.9%) during the period since lockdown commenced, with females almost twice as likely to have done so than males. The majority of people who had a remote consultation had not used this mode of consultation before the lockdown.

Whereas most remote medical consultations were by phone, just over one-half of remote mental health consultations were by phone and just under one-half were by video connection. The reliance



on the phone for remote medical consultations may reflect a current preference for this mode by GPs and/or a lack of installation of video consultation platforms by them. Remote mental health consultation providers (e.g. student counselling services) appear to be more likely to have embraced the video consultation mode during the lockdown period.

Overall, about four-in-five were satisfied or neutral about remote consultations of either type, and about one-in-five expressed dissatisfaction. For mental health consultations, overall satisfaction levels were fairly similar for video and phone consultations but the numbers concerned are too small for drawing any robust conclusions on this.

# 5.3 Summary and conclusions

The results of the survey show that many people in the sample (comprising mainly students in the core student age-range of 18-24) have been using apps for physical and mental health & wellbeing during the period since the first COVID-19 lockdown commenced, and about forty-percent of these had not been using them before this. Males and females were equally likely to report using apps for physical health and wellbeing, but females were considerably more likely than males to use apps for mental health and wellbeing. Most people who used apps for health and wellbeing found them useful to at least some degree, with usefulness ratings for physical health apps somewhat higher than for mental health apps. People who had already used the apps before the lockdown commenced tended to give higher usefulness ratings than those who only began during the lockdown, but both groups were quite positive in their ratings overall.

Numbers having medical or mental health consultations remotely increased considerably since the lockdown commenced, with the phone predominating for medical consultations and a fairly even split between the phone and video connections for mental health consultations. Satisfaction levels were quite high for both types of consultation.

Overall, the results suggest that the digital health and wellbeing tools have been useful for many people during the COVID-19 lockdown period. However, the pros and cons of usage of apps for mental health and wellbeing purposes may be an area warranting further exploration. Many people appear to find them useful, but this is not always the case. The wider research literature raises concerns that some people who use mental health apps might benefit more from seeking professional support for their difficulties, but may delay or avoid this as they persevere with an app that is ineffective for them. Also, negative experiences because of a feeling of 'failure' to get benefit from



such apps could potentially exacerbate mental health difficulties for some users. Further research and evidence-based guidance for potential users would therefore be useful.

# References

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