# Public perceptions of a COVID-19 tracking app

*13th July 2020*

## Summary

1. Just under two-thirds of the population who own a smartphone (62%) say they would probably download and use the app. This is about 55% of the sample.
2. This sample is likely to be more inclined to use an app than the general population, given that, by definition, they are comfortable in disclosing some degree of personal data via an on-line system.
3. About a quarter of the sample either do not own a smartphone (12%) or do but do not usually take it out with them (10%).
4. Previous analyses indicated that broadly speaking, people’s views on a smartphone tracking app were unidimensional: they think it is a good thing or they do not think it is a good thing. Specific reasons for not liking the app did not stand out.
5. Likelihood to download and use a smartphone tracking app (in those who own a smartphone) was strongly associated with people’s belief in the effectiveness of the app and their belief in their ability to use the app.
6. Higher likelihood of using a smartphone tracking app was also associated with greater perceived credibility of the Government, and being more worried about coronavirus.
7. Beliefs in the effectiveness of a smartphone tracking app and one’s ability to use the app were associated with feeling more connected to other people. This may be due to increased use of smartphones to stay connected to others.

## Recommendations

1. Increasing perceived effectiveness of a smartphone tracking app to prevent the spread of coronavirus is likely to increase app use.
2. Increasing one’s belief that if you wanted to, you could use a smartphone tracking app to prevent the spread of coronavirus is also likely to increase app use.
3. Increasing perceived credibility of the Government may increase use of a smartphone tracking app.

## Smartphone ownership

* 77% of respondents reported having a smartphone which they usually take out with them
* 10% of respondents reported having a smartphone, but they do not usually take it out with them
* 12% of respondents reported not having a smartphone (1% answered “don’t know”).

## Perceived effectiveness of a smartphone app to prevent the spread of coronavirus

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **An effective way to prevent the spread of coronavirus is to…** | **Strongly agree** | **Agree** | **Neither** | **Disagree** | **Strongly disagree** | **Don’t know** |
| Use a smartphone app to see whether you have come into contact with someone who has reported symptoms of coronavirus, or tested positive for coronavirus | 22% | 33% | 27% | 8% | 5% | 5% |
| Use a smartphone app to record if you have symptoms of coronavirus, so those you may have passed the virus on to can be anonymously notified | 23% | 33% | 26% | 7% | 5% | 5% |

* Rates of perceived effectiveness have remained stable since previous analyses conducted on data collected 8 May to 1 June 2020.

## Factors associated with perceived effectiveness of a smartphone app

* The two questions about perceived effectiveness were highly correlated (*r* = 0.76, *p* < 0.001).
* We combined the two effectiveness questions into one variable, scored 2-10, with high scores indicating stronger beliefs in the efficacy of apps (participants who responded “don’t know” to either of the two questions were excluded).
* Sociodemographic variables (multivariable analysis of: region, gender, age, presence of dependent children in household, having a chronic illness oneself that makes you more susceptible to severe complications from coronavirus, having a family member who has a chronic illness, working, index of multiple deprivation, ethnicity, living alone) predicted little of the variance in perceived effectiveness of a smartphone app (1%).
  + Poorer perceived effectiveness was associated with: being male, living alone, and living in a more deprived area.
  + Higher perceived effectiveness was associated with: working (vs not working), and having a chronic illness oneself that makes you more susceptible to severe complications from coronavirus.
* Combined with sociodemographic variables, other factors explained up to 6% of the variance. Other variables associated with perceived effectiveness of a smartphone app were (percentages of the variance explained by that factor and sociodemographic variables):
  + Higher credibility of information from the Government (6%); feeling more connected to other people (6%); higher worry about coronavirus (5%); greater perceived risk of coronavirus to people in the UK (4%); greater perceived risk of coronavirus to oneself (3%); and owning and taking with you a smartphone (3%).
  + Other factors were associated, but did not account for much more of the variance than demographics alone: speaking English as your first language (1%); knowing that cough, high temperature and loss of sense of smell or taste are symptoms of coronavirus (1%); going out fewer times in the last week (1%); and not having a possible mental health morbidity (1%).
  + No association with: self-reported financial difficulties.

## Beliefs in one’s own ability to use a smartphone app

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **How confident are you that, if you wanted to, you could…** | **Strongly agree** | **Agree** | **Neither** | **Disagree** | **Strongly disagree** | **Don’t know** |
| Use a smartphone app to see whether you have come into contact with someone who has reported symptoms of coronavirus, or tested positive for coronavirus | 25% | 32% | 23% | 10% | 7% | 4% |
| Use a smartphone app to record if you have symptoms of coronavirus, so those you may have passed the virus on to can be anonymously notified | 25% | 32% | 22% | 9% | 7% | 4% |

* Rates of perceived effectiveness have remained stable over time since previous analyses conducted on data collected 8 May to 1 June 2020.

## Factors associated with belief in one’s own ability to use a smartphone app

* The two questions about beliefs in one’s own ability to use a smartphone tracking app were highly correlated (*r* = 0.83, *p* < 0.001).
* We combined the two belief questions into one variable, scored 2-10, with high scores indicating stronger beliefs in one’s own ability to use a smartphone app (participants who responded “don’t know” to either of the two questions were excluded).
* Belief in one’s own ability to use a smartphone app (computed variable) is strongly correlated with perceived effectiveness of using a smartphone app (computed variable: *r* = 0.62, *p* < 0.001).
* Sociodemographic variables (multivariable analysis of: region, gender, age, presence of dependent children in household, having a chronic illness oneself that makes you more susceptible to severe complications from coronavirus, having a family member who has a chronic illness, working, index of multiple deprivation, ethnicity, living alone) predicted little of the variance in belief in one’s ability to use a smartphone app (3%).
  + Higher belief in one’s own ability was associated with: being female, younger age, working (vs not working), and having a dependent child.
  + Lower belief in one’s own ability was associated with: living alone, and living in a more deprived area.
* Combined with sociodemographic variables, other factors explained up to 12% of the variance. Other variables associated with belief in one’s ability to use a smartphone app were (percentages of the variance explained by that factor and sociodemographic variables):
  + Owning and taking with you a smartphone (12%); feeling more connected to other people (8%); higher credibility of information from the Government (7%); higher worry about coronavirus (5%); greater perceived risk of coronavirus to people in the UK (5%); and greater perceived risk of coronavirus to oneself (4%).
  + Other factors were associated, but did not account for much more of the variance than demographics alone: speaking English as your first language (3%); knowing that cough, high temperature and loss of sense of smell or taste are symptoms of coronavirus (3%); going out fewer times in the last week (3%); and not having a possible mental health morbidity (3%).
  + No association with: self-reported financial difficulties.

## Intention to use a smartphone app

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Definitely would** | **Probably would** | **Not sure** | **Probably would not** | **Definitely would not** |
| If it was part of government's approach to easing the lockdown, how likely would you be to download an NHS app tracing the spread of the virus? | 35% | 27% | 21% | 9% | 8% |

* The percentage of people who “definitely would” use an app has decreased since analyses conducted on 8th June (down from 41%, *p*<.001).
* Sociodemographic variables (multivariable analysis of: region, gender, age, presence of dependent children in household, having a chronic illness oneself that makes you more susceptible to severe complications from coronavirus, having a family member who has a chronic illness, working, index of multiple deprivation, ethnicity, living alone) predicted very little of the variance in intention to use a smartphone app (<1%).
  + Higher intention was associated with: older age, having a dependent child, having a chronic illness oneself that makes you more susceptible to severe complications from coronavirus, black or minority ethnicity.
  + Lower intention was associated with: living alone, and living in a more deprived area.
* Combined with sociodemographic variables, other factors explained up to 29% of the variance. Other variables associated with belief in one’s ability to use a smartphone app were (percentages of the variance explained by that factor and sociodemographic variables):
  + Higher perceived effectiveness of using an app (29%); greater belief in one’s own ability to use a smartphone app (26%); higher credibility of information from the Government (9%); feeling more connected to other people (4%); higher worry about coronavirus (4%); owning and taking with you a smartphone (3%); greater perceived risk of coronavirus to people in the UK (3%); and greater perceived risk of coronavirus to oneself (2%).
  + Other factors were associated, but did not account for much more of the variance than demographics alone: knowing that cough, high temperature and loss of sense of smell or taste are symptoms of coronavirus (1%).
  + No association with: having a possible mental health morbidity; total number of outings in the last week; self-reported financial difficulties; speaking English as your first language.

Datasets used:

* Department of Health and Social Care weekly tracker, wave 20-24 (n=10,016, data collected 8th June to 8th July)
  + Tracking DHSC marketing, coronavirus attitudes, beliefs, knowledge, reported behaviour, satisfaction with Government response, credibility of Government.
  + The financial difficulties item combines: “I am struggling to make ends meet”, “I am skipping meals I would usually have”, and “I am finding my current living situation difficult”.
  + The connectedness item combines: “I keep in touch with family and friends who I don't live with”, “There is enough space in my home for everyone currently living in my household”, “I feel connected to family/friends”, and “I have someone to talk to about my worries”.
  + Data collected weekly (Monday to Wednesday) since late January 2020.
  + Market research company commissioned: BMG Research.

*Please note that this work has been conducted rapidly, and has not been peer reviewed or subject to normal quality control measures.*

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