How do people use AirRater? And does it help protect health?

A user evaluation

QUESTIONS

We wanted to know more about how people use AirRater and whether it helps users to protect their health.

CONVERSATIONS

We spoke with 42 users of AirRater across Tasmania, Port Macquarie and the ACT to find out how, when and why they use the app.

RESULTS

We found that AirRater is used in different ways for different reasons. While most people find it easy to use, there are ways we can make it even better.

What is AirRater and why do we need to evaluate it?

Environmental hazards such as poor air quality can create health problems for people, particularly those who suffer from lung and heart conditions, and those who are pregnant, very young or very old. In an extreme event such as a bushfire, even people with no medical conditions can experience poor health.

AirRater is a free smartphone app that provides users with near real-time information about air quality, pollen levels and temperature at a selected location. By logging symptoms into the app, users can build a personal profile of their own environmental triggers over time. This can help users make decisions based on their own individual health needs. We know from survey feedback that AirRater is increasingly used by people to get information about protecting their health during extreme air quality or weather events, even when they do not suffer from a health condition.

As of February 2021, there were over 60,000 AirRater users across Australia.

What did we do?

We wanted to find out the different ways people use the app, and whether there were any changes we could make to improve the app. We also wanted to know whether AirRater was helping users to have conversations about their health with their doctors. We spoke with app users and will also speak with health professionals and representatives from government agencies. This report discusses results from our conversations with app users.

Forty-two AirRater users agreed to speak with us. We asked them to complete a pre-interview questionnaire to gather some basic information before the interview. During the interview, we spoke with them about their use of AirRater, the app's features, their understanding of and trust in the information the app provides, and whether AirRater helps them with any medication use or making decisions to protect their health. We also asked whether they have talked about AirRater with their doctor or anyone else. Interviews took place between 1 May 2020 and 26 June 2020.

Who were our participants?

30 participants identified as female

21 participants started using AirRater this year

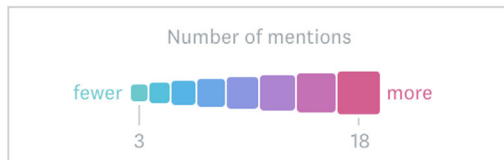**24** participants experience hay fever

17 participants experience asthma

What did we find?

18 users used 'air quality' to describe the purpose of AirRater:

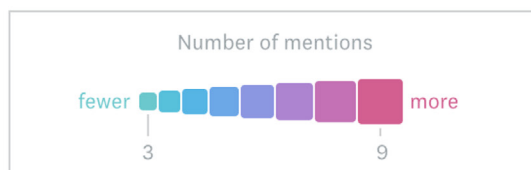'How would you describe the purpose of AirRater to a friend?'

18 users used 'air quality' to describe the purpose of AirRater:

'What was the main reason you decided to download AirRater?'

Use of AirRater

Most AirRater users told us the app was useful, straightforward and/or easy to use. About half the users told us they use the app to confirm that how they feel is a result of their environment. There was variation in how often people use the app.

> *"…using the app has given me the opportunity to know that I was right, my body's right… basically, it confirms what my body's telling me."*

Features of AirRater

Users told us what they liked and disliked about the app's features. The most popular feature reported by users was the location function, allowing users to monitor important locations, such as work and home, as well as the location of family members. Not everyone liked the current symptom reporting function.

> *"What I would like to see is the capacity to be able to print it out…over a period of time…and find out what the changes were."*

Understanding and trust of AirRater

Many users told us that the information the app provides was easy to understand. Some felt that the traffic light and one-word rating systems used in the app made it easy to understand. Most users told us that they did not question the accuracy of the data provided by AirRater.

> *"I think the interface is fairly user-friendly for people…the colour change and the…good, fair, poor, that made it really quick and simple to understand."*

Self-management and behaviour change

Most users told us they use the app to help them make decisions to protect their health. Some people use the app to help with medication use, while most users told us they use the app to make decisions to protect their health.

> *"…it became a ritual for me…while I was really symptomatic…it helped me form a schedule…of using my medication."*

Sharing information from the app

While most users told us they had discussed or recommended the app to family, friends or colleagues, only some users told us they had discussed the app with a doctor. Users suggested a number of changes to make it easier to share their personal symptoms or have a discussion with a doctor.

> *"…I've mentioned AirRater to my doctor and that I use it, and that's part of my asthma plan."*

What's next?

Participants told us what improvements they'd like to see in the app. These included providing additional information, such as wind direction and UV ratings, as well as allowing users to customise the app and create downloadable reports. We are currently looking at these suggestions to see what we can do in the future.

Next, we will speak with healthcare professionals and government agency representatives to gain their thoughts on the role that smartphone health apps like AirRater can play in supporting individuals to protect their health.

Acknowledgements