

THE SHMAPPED APP AS A CASE STUDY FOR HEALTH

Background

The Shmapped app was developed as part of the NERC funded IWUN (Improving Wellbeing through Urban Nature) project, which aims to understand the value of urban nature for health and wellbeing. The app was developed to prompt and record an individual's thoughts and feelings on entering local parks and other areas of greenspace within the city of Sheffield.

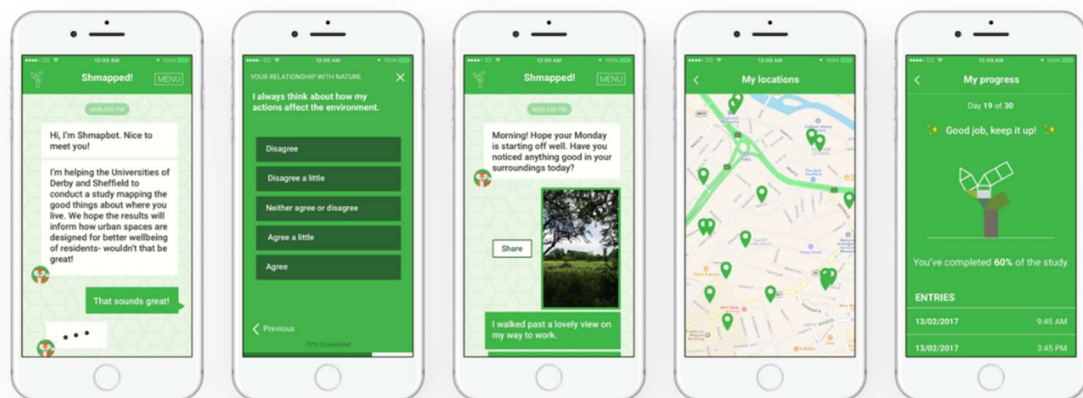
How they did it

Within the research project the app was designed as a novel way of engaging individuals with their local environment and allowed a less formal approach to taking part in robust research. A key advantage was that the app allowed the individual to respond instantly to their surroundings.

The app was created by Furthermore who designed software that allowed residents in Sheffield to find natural and built spaces and track their health and wellbeing. It was developed by researchers from the Universities of Derby (who led the research) and Sheffield and implemented with the help of Sheffield and Rotherham Wildlife Trust. It has revealed new insights into types of spaces and how they affect resident's wellbeing.

The app began by collecting baseline wellbeing data through brief questionnaires and then prompted the users to record the 'good things in nature', rate their current location, and Nature whilst noting perceived levels of biodiversity.

It also recorded users' journeys, locations and the duration of stay in natural environments, thereby allowing exposure to types of natural environments to be calculated. Shmapped app was free to download by participants and used for a week.



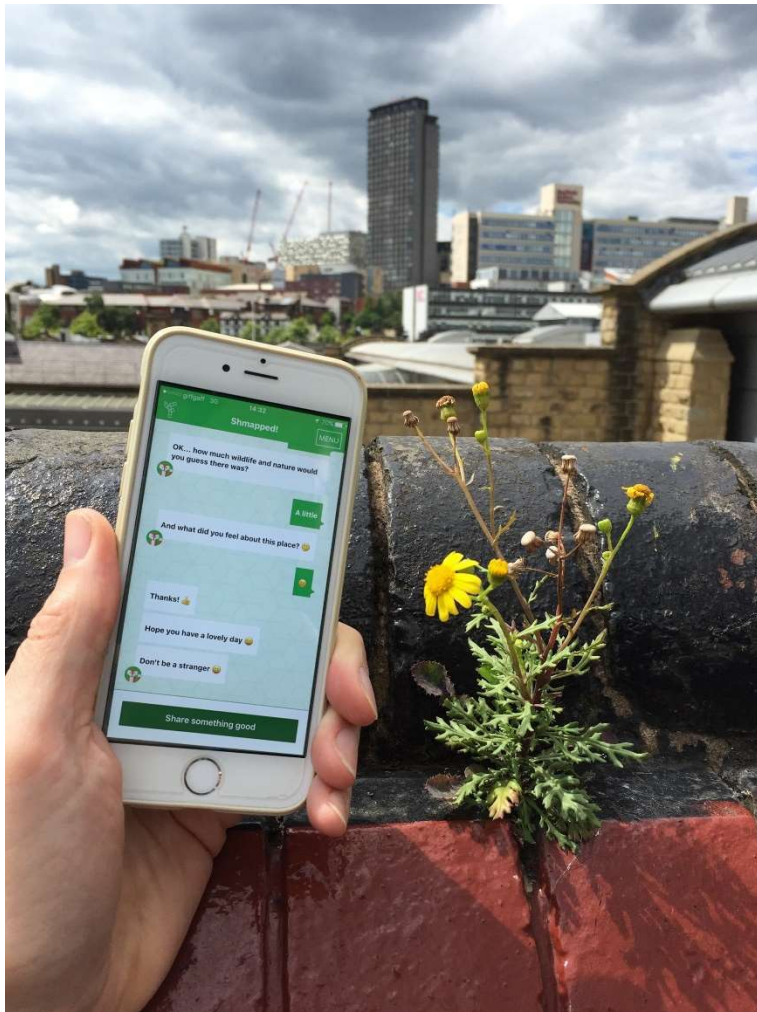


Figure 1: Some of the images presented to the user of the *shmapped* app.

Of the 582 adults who used the app in the IWUN study including 148 who were classed as clinical cases (according to the ReQoL). Analysis found that there were sustained improvements to mental wellbeing a month after using the app - measured by both the Recovering Quality of life scale (ReQoL¹). These statistically significant improvements were explained by improvements in nature connectedness and Positive Affect. The control group recorded their reactions to the surrounding environment in built spaces. The results from analysis of the app data demonstrate that noticing the good things in urban nature matters as it brings improvements to mental health, and that biodiversity is also important to users' sense of wellbeing. These results point towards the beneficial impact of urban greenspaces and indicate that the app is a useful way of measuring this.

As significant mental health benefits have been demonstrated through using the app, there is a plan to reconfigure the app into a format that can be used throughout the UK. Other changes will also make it less research orientated, focusing more on a user friendly format.

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[Brazier J](#), [Connell J](#), [Papaioannou D](#), [Mukuria C](#), [Mulhern B](#), [Peasgood T](#), [Lloyd Jones M](#), [Paisley S](#), [O'Cathain A](#), [Barkham M](#), [Knapp M](#), [Byford S](#), [Gilbody S](#) & [Parry G](#).

Health Technology Assessment Volume: 18, Issue: 34, Published in May 2014

The Challenge

Uptake, engagement and promotion of the app via GPs was initially challenging. This was largely because of hesitancy to promote something that was new that lacked quantified evidence of benefits, something which is very important to the health community. As part of the research project, the app was set to run for a limited period of time. Further work is needed to develop the app so that it can be used on a longer-term basis and contain mechanisms to enable and measure positive behaviour changes benefiting mental health. NHS approval would be needed to ensure its widespread use by the health community.

Outcomes

Through prompting the user to notice nature whilst in greenspace, the research indicates that the app itself could help to improve the mental wellbeing of the users, with biodiversity of that greenspace being a key factor. There is the possibility to develop the app for use anywhere within the UK and, subject to approval, it could be included on NHS Digital's app list.

Conclusion

The proven mental health benefits of using the app in Sheffield suggest that it could be a useful resource for GPs encouraging patients to get outdoors and enjoy nature to improve wellbeing. Use of the app could be included within the suite of recommendations given to patients as part of social prescribing as it can be used individually or as part of a group activity. The app could also be potentially used in mental health trusts for both inpatients and outpatients. There is also potential for its use in rehab for patients in acute hospitals and for keeping people mental and physically fit in other care settings too. The use of the app on patient led health walks as recommended by GPs, psychiatrists and OTs, could bring a new dynamic focus to groups and perhaps engage audiences that might otherwise be more difficult to involve.

Find out more

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Contact us

@sushealthcare, @nhsforest @iwun

Miles.davidson@derby.ac.uk

Sarah.dandy@sustainablehealthcare.org.uk