You Don't Get Me: Public Responses to Mood and Behaviour Monitoring Wearable Technology

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A diverse group of researchers opted for a unique, unorthodox approach to gathering opinions on mental health, relationships and wearable technology that can monitor mood, behaviour and relationships

Rebecca Pearson, Hannah Sallis and their teams travelled across the South West in a mobile laboratory van to gather the unknown opinions of 'hard to reach' communities on the use of wearable technology to monitor mental health and relationships.

The objective of the mobile event was to understand mental health and relationships in the real world and the use of wearable technology to study this, but this article focuses on describing the way the research was carried out and how members of the public responded to it. The results were surprising.

### 'We're interested in community feedback'

In academia, there are different outlets for different things. I'm all up for different outlets and different types of events. There were various aspects to this public engagement community event, and we had numerous objectives.

The wearable technology is important of course, but first I want to discuss the mobile public engagement event itself. To the best of my knowledge, these kinds of events don't happen very often. We're interested in community feedback. You might go to a community centre or invite people to an event, but researchers are unlikely to set up on the street like we did and engage with passersby.

We did a few key events on a mobile van. It was quite visual. We started at a central square. What we really wanted to do was to engage with varied populations who would be unlikely to come to university, unlikely to be on the internet to respond, and unlikely to even come into town. This isn't just based on income or disadvantaged postcards, these individuals are less visible, and harder to reach – for whatever reason.

We tried a variety of things. We had the central location because we were well supported there because we had been before. We then visited local communities; we went to car boot sales. Our target was young people and families. We went to car boot sales in Hengrove and Marksbury which are very different socioeconomic areas and we also visited a seaside town called Weston-super-Mare. We went to a variety of locations every day and set up activities for whoever was around to engage in.

'It was a learning curve for what you can do'
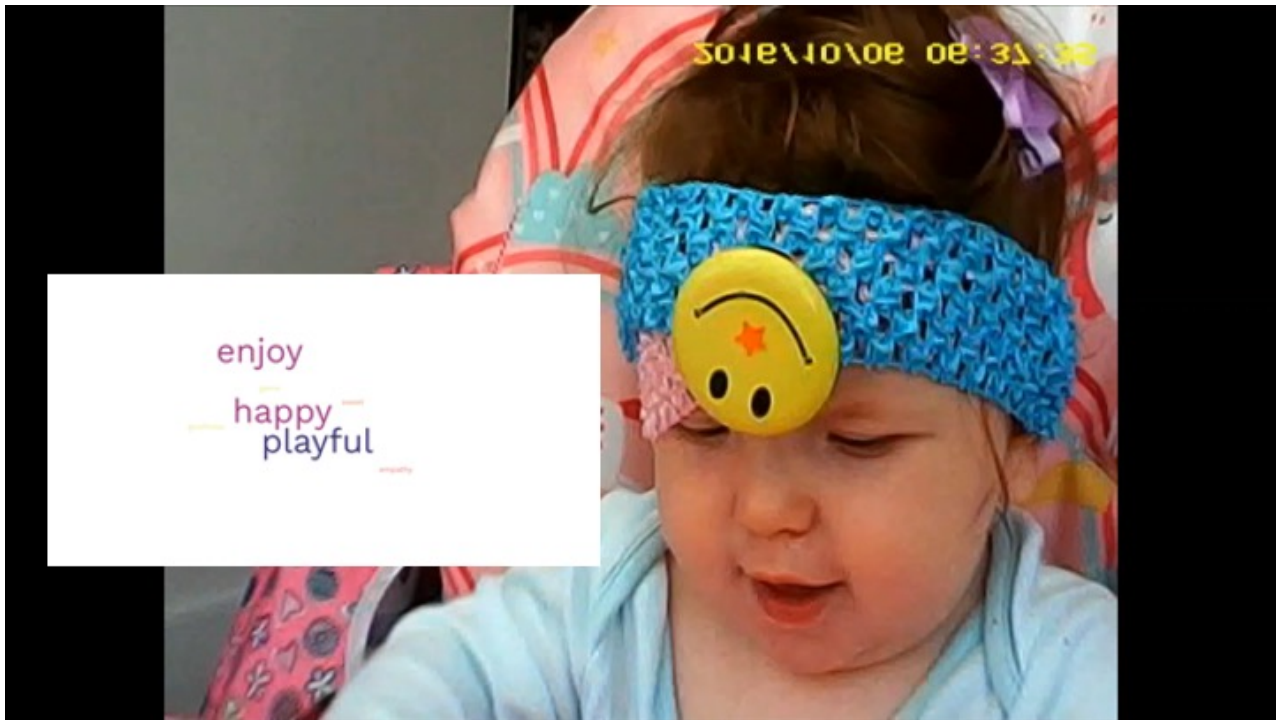
It was a learning curve for what you can do. I would say it was unique in going out to communities. And two, because we didn't invite people – we were just there. We got very different responders than you would typically. Passersby were looking for something to do and would say "Oh, what's that?" We had quite a lot of surprise. People really valued the fact that we'd come out to them because it was a bit of visibility for these communities.

We had fancy technology on show to try out, but more importantly, we were just asking people what they thought. We want to know what is important to people. We don't know what we should be researching. We have our own ideas which we have been reinforcing down generations and generations of psychologists but we just want to know what's important to you.

We asked people to give us two or three words on parenting or relationships. Some people would tell us stories and they would jot down what they considered important in a relationship. The concept of 'Trust' just kept coming up all over the place. This was news to us because Trust does not feature in most of our questionnaires. However, it makes sense. Trust and Understanding were both really interesting concepts that came up. It was a good way of gauging the language and the concepts that the public used and considered important.

Adapting questions for children

I'm very interested in how parenting interventions can prevent some mental disorders. I have been observing how the team has implemented research and how members of the public can give us a more precise view of what could be more effective ways to address the other questions we have.

We used various methods to get answers from the public. For children, we posed verbal questions, but generally, they will not use verbal answers. Most of them will draw or just vote. Within the first few days of the event, we realised that we sometimes were not even able to ask questions because we are so caught up in our academic way. We would see parents rephrase the questions we asked. That was quite powerful.

Parents tend to discuss things more deeply whereas young people will respond more practically. Children would draw their emotions. They also enjoyed looking at the different types of technology we had on offer and would vote on which one they liked the most.

It definitely surprised us how easy it was to get people involved and to gather their opinions. This is so useful for scientists. I do think most of our training is based on theories with not enough direct involvement from people. We need to consider the priorities of people.

Some people who have experienced mental disorders first-hand spoke with us. They told us some very intimate things and in what was quite a random place. We received a lot of information in a very short period of time from a wide sample of people from different places. Some of these individuals can be described as 'hard to reach'. It was a very useful approach to involve people in designing scientific research.

Understanding mental health and relationships

Our goal was to gain insight into mental health.

People often worry when they are being observed that they are being judged, the use of body-worn cams in police and security settings has introduced a sense of being watched, but what we found was that people felt more comfortable when we made it clear that we want to understand their reality through their unique personal lens, via these technologies. Not for us to watch them, but to see from their view.

I think that this rebalance of perspectives was very powerful for young people. Everyone wants to be understood and accepted. We have a long way to go but wearable technology and its objectivity was seen as a potentially powerful (although not always comfortable) concept.

The power of being understood

Lots of individuals worry about being observed and judged. Deep down, everyone wants to be understood and so it is perhaps not that surprising that the concept of Understanding kept being mentioned.

Being understood has a lot to do with acceptance and being accepted.

Often, those with mental disorders do not feel understood because other people cannot comprehend why they act in a certain way.

Headcams and other similar technologies are changing how people are perceiving the world and the way they perceive other people.

That's the power of just being understood. If people can watch a video back and see how it felt for you, they might begin to understand you. That's the point. Rather than judge you, the videos help people understand you.

Some people are against research, but they were not against us

Of course, some individuals were resistant to the research. Some people are against research, but they weren't against us. Some asked us what mental health was because they did not understand what it meant. However, they tended to open up when we told them that we didn't have the answers and that we wanted to find out the answers from them.

People get suspicious about technology research and manipulating human behaviour, which is fair enough. But this is why we talk to people because we need to learn from that.

When it comes to technology that records a person's behaviour to monitor their emotions and relationships, people shudder. They do not like the idea of being watched. But when they realise it's not about us trying to watch them, it's about us watching back from their perspective to understand them better, they warm to the idea.

What does the future hold for wearable technologies?

If you have the experience to watch the world from the perspective of another person then you can actually become more empathetic. I think that there are many different health care and social applications for these technologies.

Wearable technology can help bridge the gap between generations by allowing them to see the world from a different perspective. However, we must be careful in the way we use these technologies for monitoring moods and predicting human behaviour.

There are some really clear things I will take away from this event and this is the importance of 'Trust' and 'Understanding' in relationships.

Also, I think this kind of public engagement event should be the standard practice for science and research. Going outside, talking to people, discovering what is important, what's relevant and checking this against your own data and findings.