

Research * Wearable Technologies: Understanding physiology and behaviour beyond the laboratory (Christine Parsons)

Wearable technologies have become increasingly prevalent in our daily lives. From tracking running times to monitoring stress, pulse and breathing – little in our life is left untracked. But what can all this data tell us? Could we gain new knowledge about human physiology and behaviour by drawing on information gained through wearable technologies in an ethical and responsible way?

Psychologist [Christine Parsons](#) (Director of the [Interacting Minds Centre](#)) has joined us this week to discuss wearable technologies, their impact on people, and their use in her research to understand topics such as sleep, mental health, and mindfulness.

Topics and Resources mentioned in this episode:

[00:02:00] Overview of Christine Parson's Research

For an overview over projects and research publications, please see: [https://pure.au.dk/portal/en/persons/christine-parsons\(8828f773-0764-4eb0-959d-3357956aec4f\)/publications.html](https://pure.au.dk/portal/en/persons/christine-parsons(8828f773-0764-4eb0-959d-3357956aec4f)/publications.html)

[00:04:19] Quantified Self

"The **quantified self** refers both to the cultural phenomenon of self-tracking with technology and to a community of users and makers of self-tracking tools who share an interest in 'self-knowledge through numbers'". [Wikipedia](#) on Quantified Self.

[00:14:26] Mindfulness based stress reduction research

See, for instance:

[Parsons, C. E., Madsen, M. A., Jensen, K. L., Kæseler, S., Fjorback, L. O., Piet, J., ... & Linehan, C. \(2020\). Smartphone monitoring of participants' engagement with home practice during](#)

[mindfulness-based stress reduction: Observational study. *JMIR mental health*, 7\(1\), e14467.](#)

[Parsons, C. E., Jensen, K. L., Roepstorff, A., Fjorback, L. O., & Linehan, C. \(2019\). Designing technology tools to support engagement in mindfulness-based interventions: an analysis of teacher and student experiences. *Digital Health*, 5, 2055207619868550.](#)

[00:15:40] **GDPR**

General Data Protection Regulation (GDPR) is the European data protection law put into effect in 2018. You can read more about the regulation here: <https://gdpr.eu/what-is-gdpr/>

[00:27:00] **Sleep and Emotions Research**

See, for instance:

[Parsons, C. E., Schofield, B., Batziou, S. E., Ward, C., & Young, K. S. \(2021\). Sleep quality is associated with emotion experience and adaptive regulation of positive emotion: An experience sampling study. *Journal of Sleep Research*, \[13533\].
<https://doi.org/10.1111/jsr.13533>](#)

Parsons, C. E., & Young, K. S. (2022). Beneficial effects of sleep extension on daily emotion in short-sleeping young adults: An experience sampling study. *Sleep Health*.
<https://doi.org/https://doi.org/10.1016/j.sleh.2022.05.008>

Terminology

REM Sleep REM sleep refers to sleep stages that are associated with rapid eye movement (REM).

Learn more about Christine Parsons and her research

- [Google Scholar Profile Page](#)
- [University Research Page](#)
- Vice Chairwoman of the [Danish Society for Women in Science \(DANWISE\)](#)
- [Christine Parsons on Twitter](#)