
Design for Wellbeing – Tools for Research, Practice and Ethics

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ABSTRACT

Any move towards more ethical design and technologies that genuinely improve our lives requires that those technologies respect our psychological needs. Currently, there is no systematic integration of wellbeing science into tech development, and the many technology-induced harms to mental health, reported in the media daily, attest to this deficit. But the status quo is changing. A demand for more “Humane Technologies” [12] is forcing companies to rethink digital business as usual. Fortunately, recent research has uncovered new ways to make psychologically respectful technologies possible. Just as we can design ergonomically to support physical wellness, we can design psycho-ergonomically to support psychological health. By integrating well-evidenced theory and methods from multiple disciplines, we can design and develop new technologies to “do no harm” and even increase psychological wellbeing [1]. In this course we will introduce frameworks for designing technologies that respect human values and wellbeing [6,7,8,9,10] together with an established ethical framework within which to situate this design for flourishing [11]. We also provide practical tools for ideation, design, and the evaluation of the psychological impact of products.

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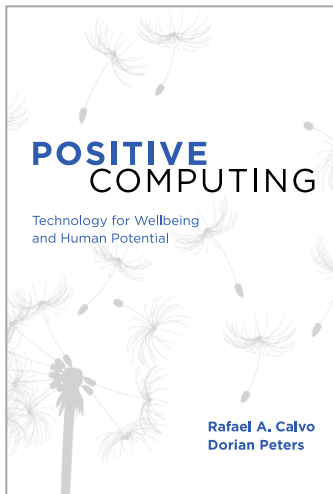


Figure 1 - Resource text to be provided.



Figure 1 – Wellbeing Determinant Cards used to guide ideation around wellbeing impact..

This includes strategies for supporting wellbeing determinants such as autonomy [3,5], relatedness [5], meaning [4], and compassion [2]. By ensuring respect for human psychological needs, we take a critical first step towards a more ethical design process and a future in which all digital experience supports thriving.

CCS CONCEPTS

- **Human-centered computing** → HCI design and evaluation methods

KEYWORDS

design methods; evaluation methods; wellbeing; positive computing; humane technology; positive technologies; design research; behavior change; emotions; user experience; motivation.

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1 DURATION

2x80 min sessions

2 LEARNING OUTCOMES

You will gain:

- **Theoretical foundations** – An understanding of theory and evidence from multiple disciplines that inform the design, evaluation, and philosophical grounding of wellbeing-supportive technology.
- **Practical frameworks and tools** for integrating psychological wellbeing into planning, ideation, analysis, and evaluation of new technologies.
- **Scenarios and case studies** that provide examples of the ways technology use can impact wellbeing.
- **Group-generated design strategies and ideation** for better supporting wellbeing in your current and future projects.
- **A copy of the resource text** *Positive Computing* for reference.
- **A set of ideation cards** featuring core wellbeing determinants along with related references and tech-based examples.

3 JUSTIFICATION

A growing urgency to improve the psychological impact of everyday technologies along with a growing interest among HCI professionals to consider more ethical approaches to design reflects a move towards richer human-centeredness. Only by designing technology that respects our mental health, can we make a happier and healthier (not just more productive) world. In the same way that economists are measuring wellbeing at the national level, and psychologists have been measuring it at an individual level for decades, we are in a position to systematically incorporate wellbeing measures into the design and evaluation of technology.

4 CONTENT

A summary of relevant wellbeing theory that can be used to inform technology design [1,6,7]; introduction to Sen's "capability approach" [11] as an ethical frame for wellbeing design; an updated summary of the latest research and methods for wellbeing design, including the METUX model (Motivation, Engagement and Thriving in User Experience) [10]; a number of tools for bridging theory to practice; validated instruments for evaluation of wellbeing impact; and the opportunity to apply each of these to real projects in a collaborative environment.

5 BACKGROUND OF ATTENDEES

Appropriate for HCI professionals of any background and at any point in their career who are interested in exploring the impact of technology on psychological health.

6 AUDIENCE SIZE

Flexible but no more than 60 is preferred.

7 PRESENTATION FORMAT

The course will be conducted as a combination of lecture and group activity.

8 SCHEDULE

8.1 Part 1 – Ethics, wellbeing and Design

Presentation (20 min)

What is wellbeing really and why design for it? How do we design for wellbeing ethically? Wellbeing science in a nutshell. Speed dating with key wellbeing researchers and their theories. Introducing wellbeing determinants and the 6 spheres of user experience.

8.2 Part 2 – The Psycho-Ergonomics Toolkit

Activity + Presentation (60 min)

How do we design for and then measure psychological impact? How do we strike a balance between engagement and addiction? Frameworks, tools and case studies for wellbeing-supportive design as well as the importance of valid measures, evidence-based theory and multidisciplinary collaboration.

8.3 Part 3 – Using the toolkit - Leveraging wellbeing psychology for better design

Activity + Presentation (80 min)

Groups diagnose and troubleshoot design failures based on psychological needs, invent new wellbeing-supportive designs, and plan an evaluation of wellbeing impact. Wrap-up and future directions.

9 INSTRUCTORS

Rafael Calvo is Australian Research Council Future Fellow, Director of the Wellbeing Technologies Lab at the University of Sydney and Visiting Fellow at the Leverhulme Centre for the Future of Intelligence at the University of Cambridge. He is Associate Editor of *Frontiers in Psychology – Human-Media Interaction* and *JMIR Human Factors* and former Associate Editor of *IEEE Transactions on Affective Computing* and *IEEE Transactions on Learning Technologies*. He is a Senior Member of IEEE with over 200 publications in the fields of affective computing, learning technologies, and computational intelligence including the book *Positive Computing* (MIT Press). He is also a member of the IEEE committee on the Ethics of Intelligent and Autonomous Systems.

Dorian Peters is a designer, author, and Creative Leader at the Wellbeing Technologies Lab at the University of Sydney and Visiting Fellow at the Leverhulme Centre for the Future of Intelligence at the University of Cambridge. She specializes in UX and interaction design for learning and wellbeing and her books include *Interface Design for Learning* (New Riders) and *Positive Computing* (MIT Press). She has degrees in Multimedia Design and Directing from the University of Sydney and Carnegie Mellon.

10 ACKNOWLEDGEMENTS

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