

# What is Digital Wellbeing?

A Leverage Points Framework to Guide Research and Action

*Alberto Monge Roffarello, Monica Molino, Luigi De Russis*



Politecnico  
di Torino

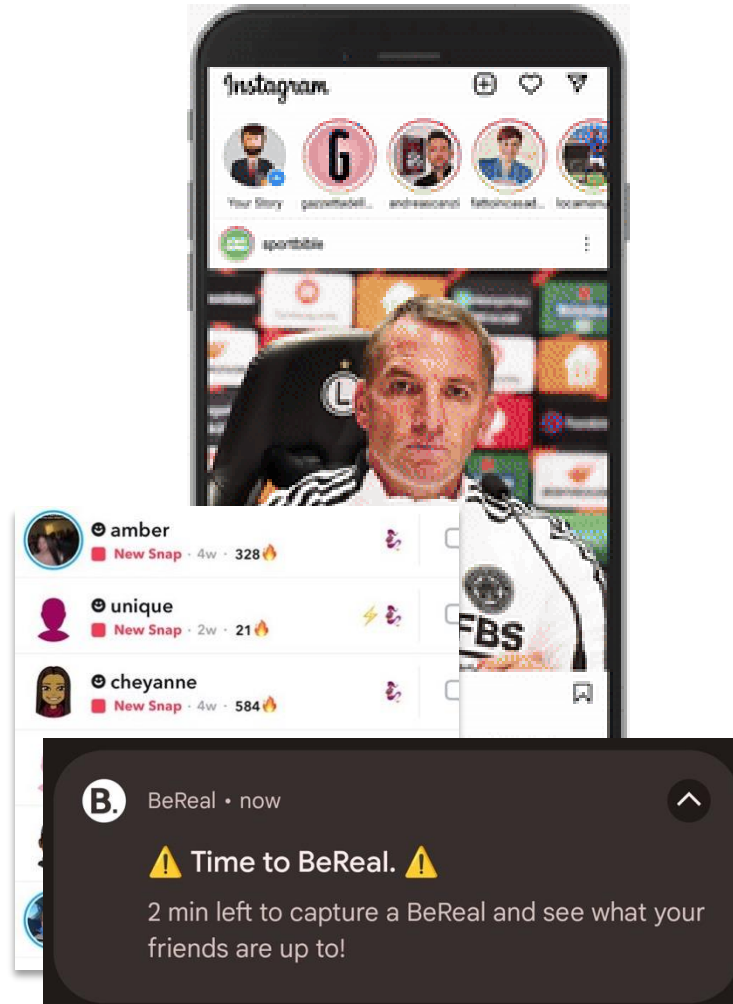


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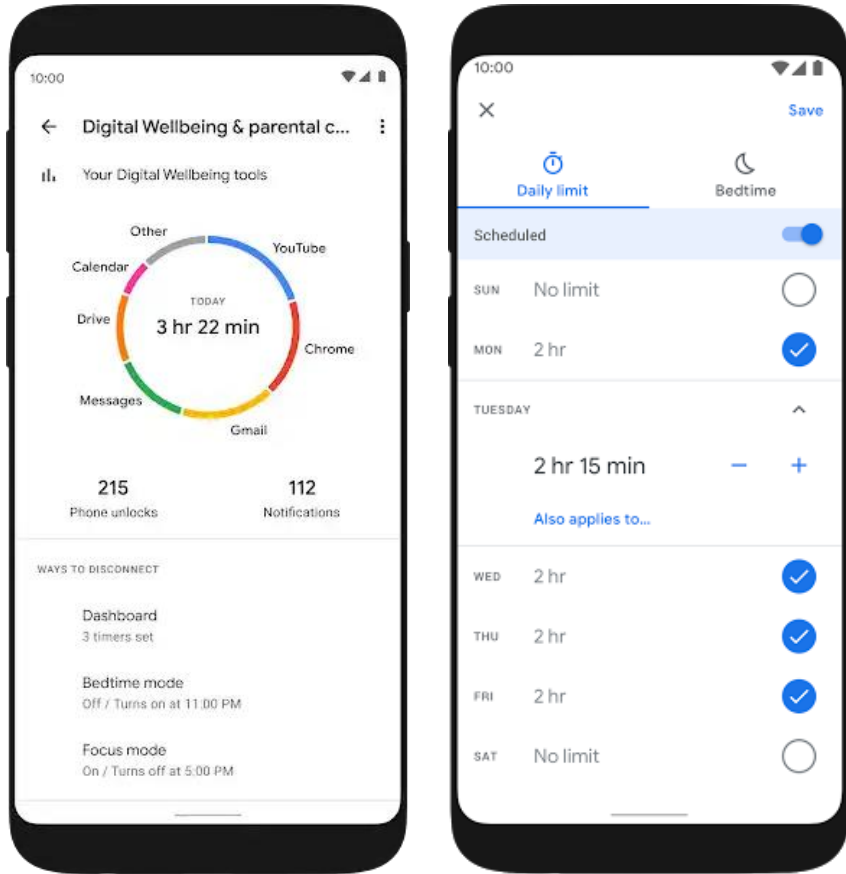
Attention-Capture Damaging Patterns  
*Monge Roffarello et al., CHI 2023*



# DIGITAL WELL-BEING CHI 2019

ABSTRACT May 2019	<a href="#">Designing for Digital Wellbeing: A Research &amp; Practice Agenda</a> Marta E. Cecchinato, John Rooksby, Alexis Hiniker, Sean Munson, Kai Lukoff, +3
RESEARCH-ARTICLE May 2019	<a href="#">The Race Towards Digital Wellbeing: Issues and Opportunities</a> Alberto Monge Roffarello, Luigi De Russis
ABSTRACT May 2019	<a href="#">Push Away the Smartphone: Investigating Methods to Counter Problematic Smartphone Use</a> Charlie Pinder, Jose Ignacio Rocca, Benjamin R. Cowan, Russell Beale
RESEARCH-ARTICLE May 2019	<a href="#">Modeling the Engagement-Disengagement Cycle of Compulsive Phone Use</a> Jonathan A. Tran, Katie S. Yang, Katie Davis, Alexis Hiniker

# A Fragmented Research Field...Oscillating Between the Extremes



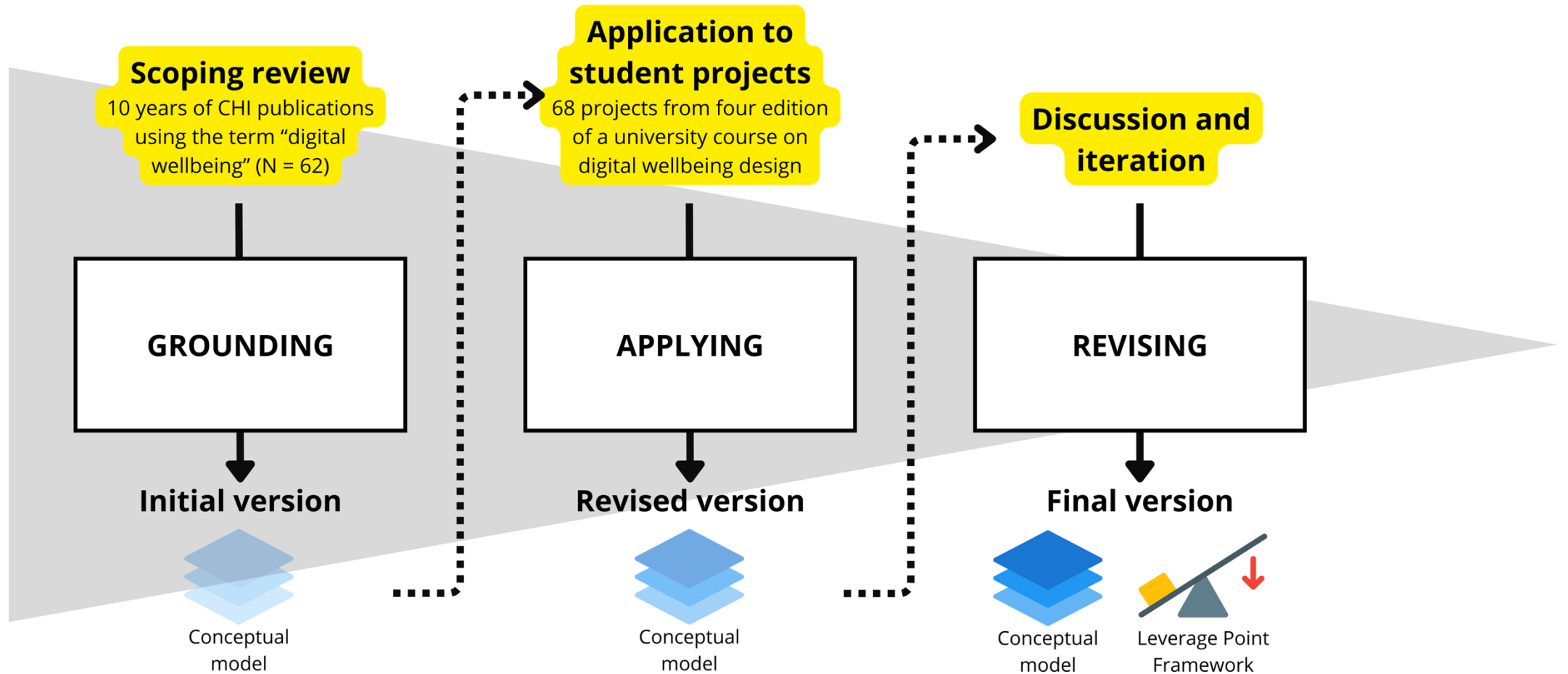
Google Digital Wellbeing <https://wellbeing.google/>

**Burr et al., 2020**

*"The impact of digital technologies on what it means to live a life that is good for a human being."*

How is **digital wellbeing** understood in the **CHI community**, and how can it be **operationalized** in design and research?

# Our Approach



# What Do We Mean by Digital Wellbeing?

Out of 62 CHI papers surveyed, only 8 explicitly define the term.

12.9%

of papers  
explicitly define  
digital wellbeing

**Burr et al., 2020**

*"The impact of digital technologies on what it means to live a life that is good for a human being."*

**Vanden Abeele, 2021**

*"A subjective individual experience of optimal balance between the benefits and drawbacks obtained from mobile connectivity."*

## Screen time

dominates as  
the default proxy

## Psychology

theories (SDT, Ryff)  
rarely translated

## TECHNOLOGY AND USER SCOPE



*What technology is being targeted and for whom?*

### TECHNOLOGY SCOPE

**44** **Smartphones**  
Central vector of distraction and intervention

**38** **Social Media**  
Feeds, notifications, compulsive engagement

**10** **Web**  
Gateway to distracting environments

**7** **GenAI**  
Emerging: overreliance, persuasive deception

**6** **Video & Streaming**  
Short-form videos, autoplay, binge watching

### USER POPULATIONS

**65** **Young Adults**  
Most studied; heavy tech users

**44** **Adults**  
Productivity, work-life balance

**35** **Teens**  
6 papers vs 29 student projects

**11** **Children**  
Underexplored in the literature

**5** **Elderly**  
Exclusion, digital literacy gaps

Strong bias toward smartphones, social media, and young adults — but students projects pushed into GenAI and different populations including teens and elderly.



*What technology is being targeted and for whom?*

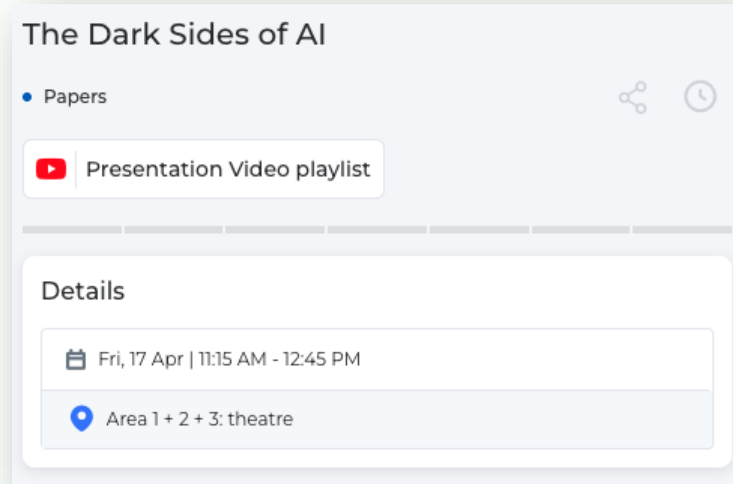
7

## GenAI

Emerging: overreliance, persuasive deception

Three research studies identify **LLMs** as a source of **new digital well-being risks**, such as **overreliance** and **persuasive deception**

Consistent with research on **dark patterns in Gen AI**





What technology is being targeted and for whom?

7

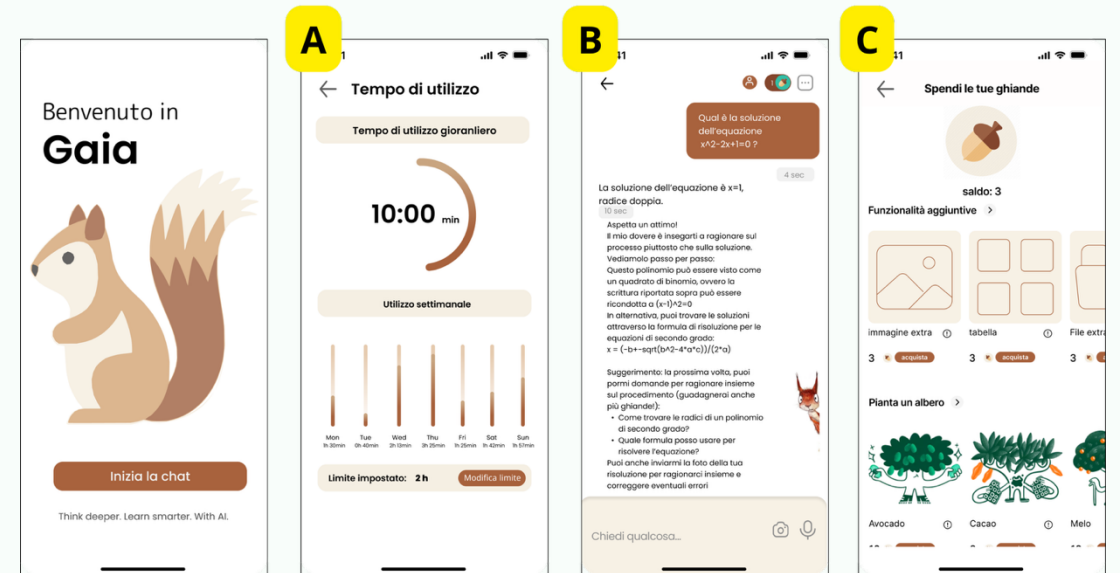
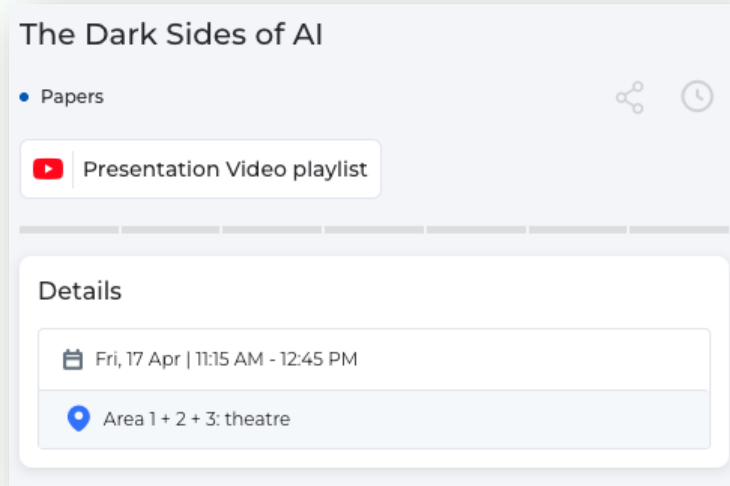
## GenAI

Emerging: overreliance, persuasive deception

Three research studies identify **LLMs** as a source of **new digital well-being risks**, such as **overreliance** and **persuasive deception**

Four student groups targeted **GenAI** as the technology scope for their **digital wellbeing projects**

Consistent with research on **dark patterns in Gen AI**



# MEDIATORS OF DIGITAL WELLBEING



*What influences wellbeing in the digital context?*

## MEDIATORS OF THE SELF — 85%

49

### Screen Time

Dominant proxy — overuse, addiction narratives

21

### Sense of Agency

Feeling in control of one's digital practices

18

### Attentional Focus

Cognitive costs of attention-capture patterns

7

### Media Literacy

Skills to identify manipulative design

6

### Emotional Regulation

Stress, attachment to tech, affect management

## SOCIAL MEDIATORS — 15%

11

### Quality of Relational Life

How tech shapes friendships, family, phubbing

2

### Real-world Engagement

Presence and connection to offline contexts

2

### Inclusion & Accessibility

Autistic adults, cognitive disabilities, WCAG

1

### Structural Inequality

Who tech serves, excludes, or disadvantages

Most work stays at the individual level. Social mediators exist, but remain underexplored.

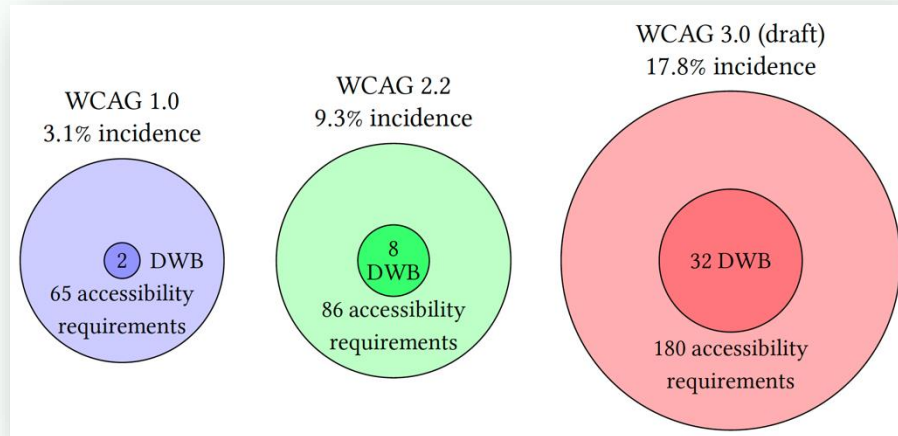


*What influences wellbeing in the digital context?*

2

## Inclusion & Accessibility

Autistic adults, cognitive disabilities, WCAG



Schwartz et al., CHI EA 2025: Intersection between WCAG and Digital Wellbeing

# MEDIATORS OF DIGITAL WELLBEING



What influences wellbeing in the digital context?

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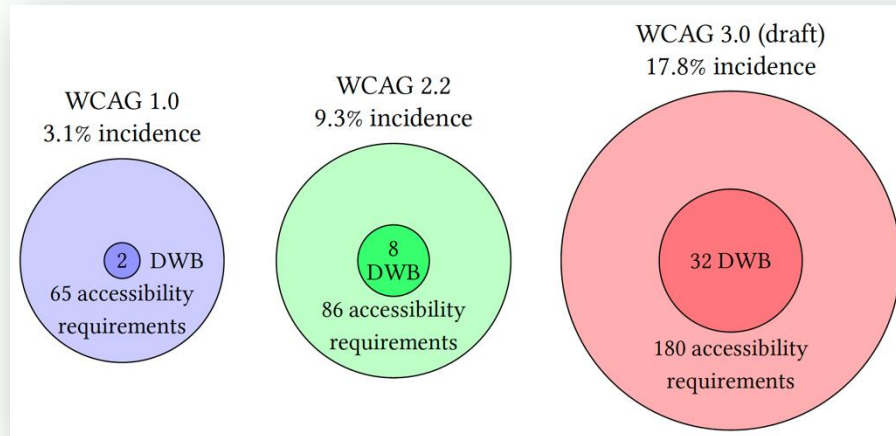
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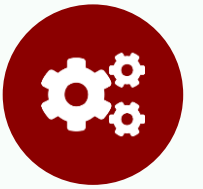


Schwartz et al., CHI EA 2025: Intersection between WCAG and Digital Wellbeing

*"This paper argues that practitioners ought to make the normative stakes and ethical implications of digital well-being explicit at every stage of the design process."*

Docherty and Biega, *(Re)Politicizing Digital Well-Being: Beyond User Engagements*, CHI 2022

# INTERVENTIONS AND STRATEGIES



*How is change enacted in practice?*

## HARM MITIGATION — 77%

64

### Self-regulation

DSCTs, dashboards, timers

17

### Redesign

Rethinking engagement mechanisms

12

### Understanding harms

Dark patterns, addiction research

8

### Co-regulation

Parental mediation, peer support

## CULTIVATION — 23%

19

### Positive Design

Fostering growth & meaning

10

### Education

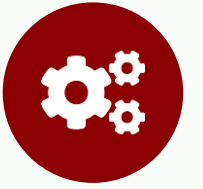
Media literacy, critical thinking

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### Governance

Policy, regulation, standards

77% of work focuses on harm mitigation via self-regulation. Yet, there are works that see digital wellbeing as something to be cultivated, without necessarily starting from a problem of technology use.

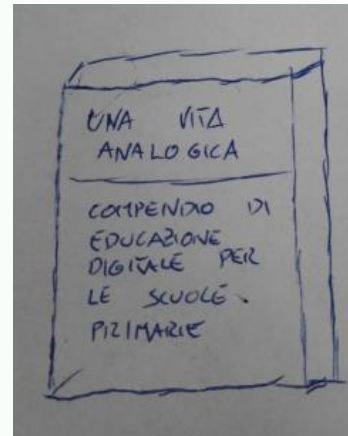
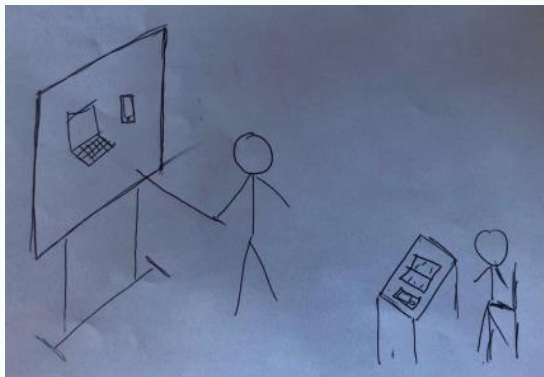


*How is change enacted in practice?*

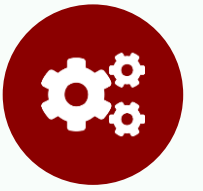
## 10 Education

Media literacy, critical thinking

Digital Wellbeing is **a path of personal growth**



Monge Roffarello and De Russis, *Coping with Digital Wellbeing in a Multi-Device World*, CHI 2021



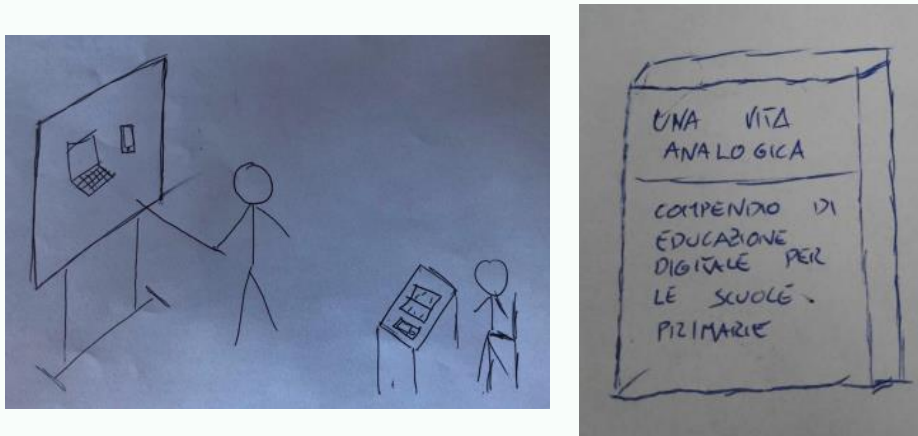
*How is change enacted in practice?*

**10** **Education**  
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Digital Wellbeing is **a path of personal growth**

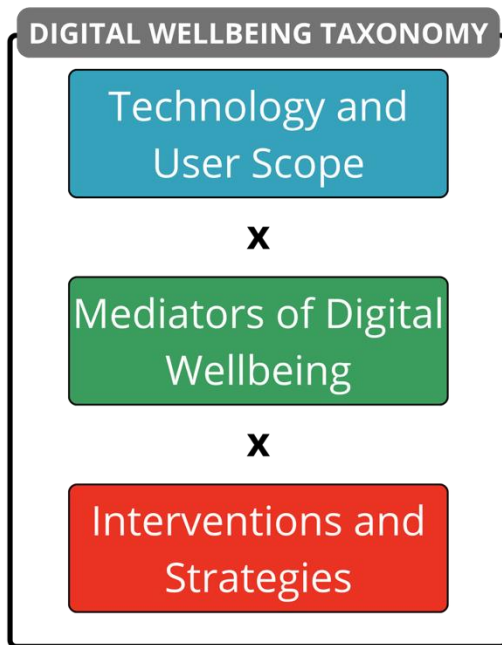
Digital Wellbeing is entering **regulatory initiatives**, mainly through the “dark patterns” lens.



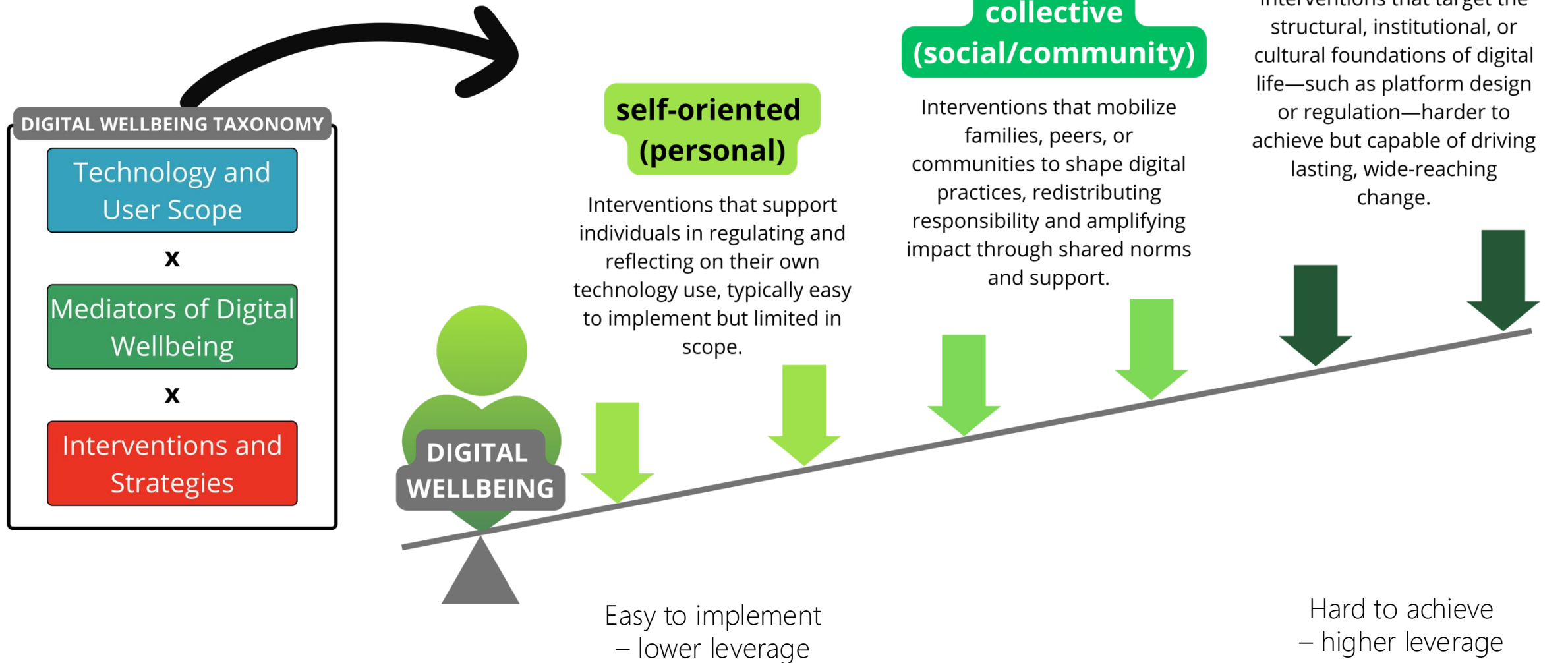
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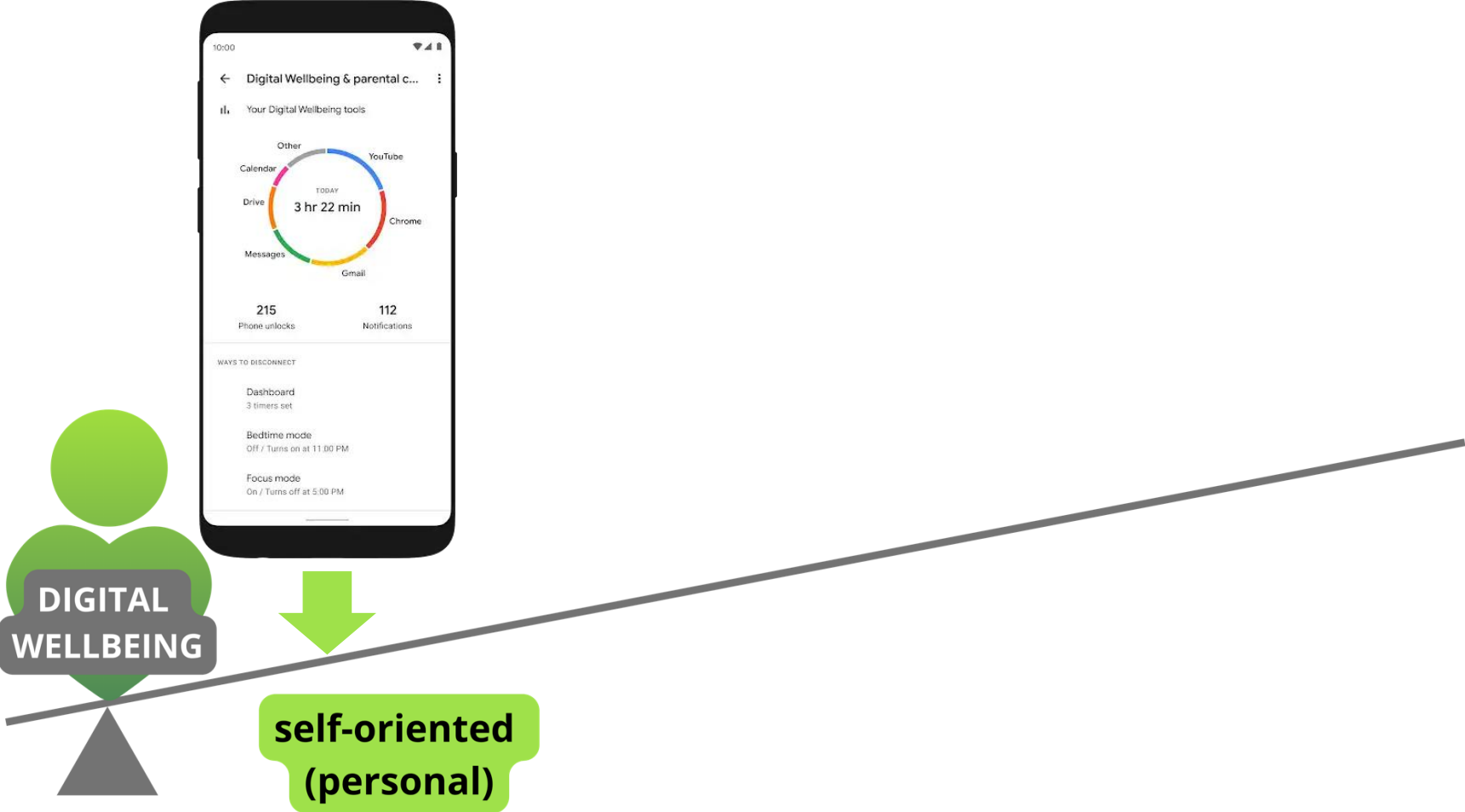
# The Leverage Points Framework



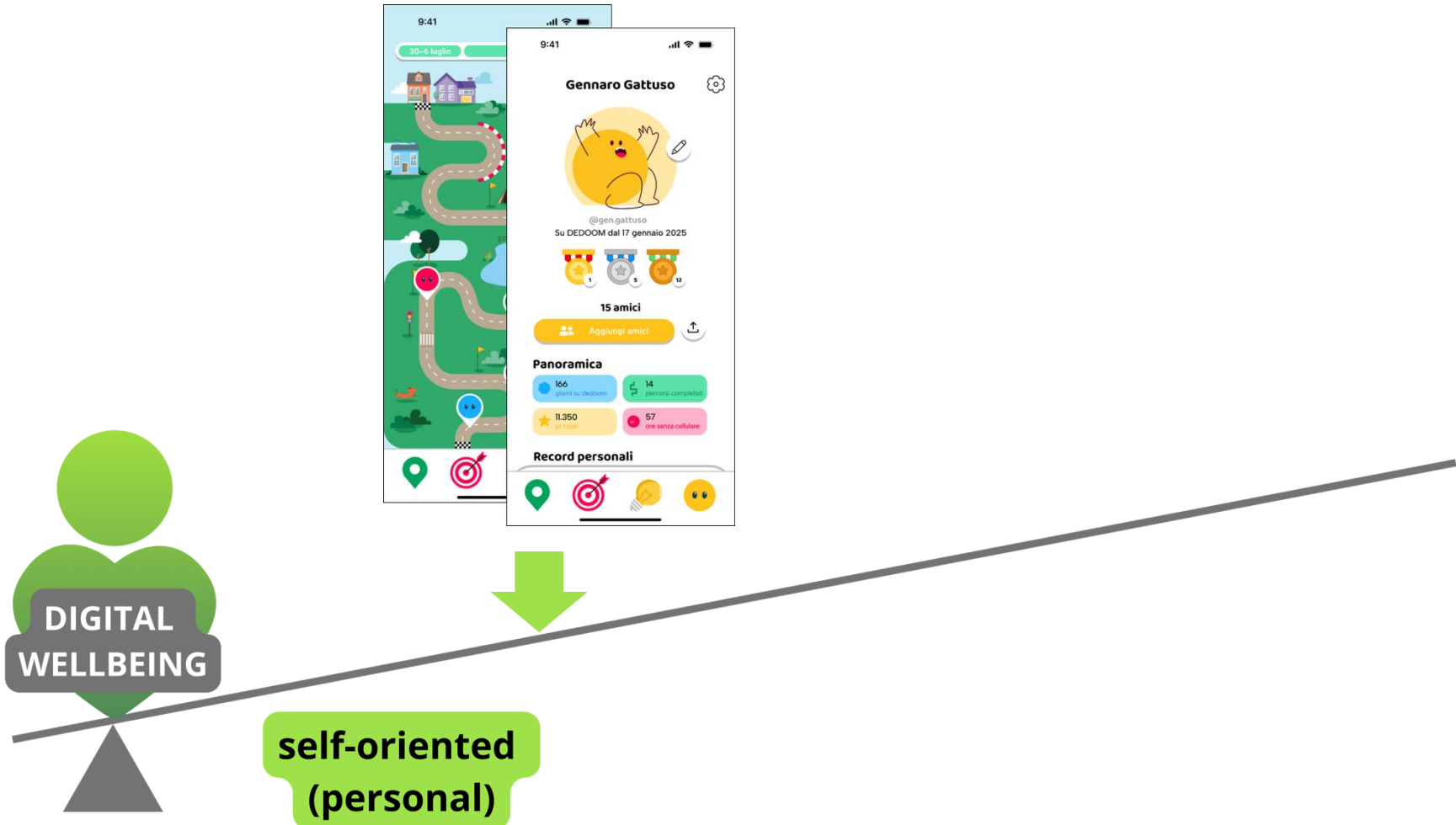
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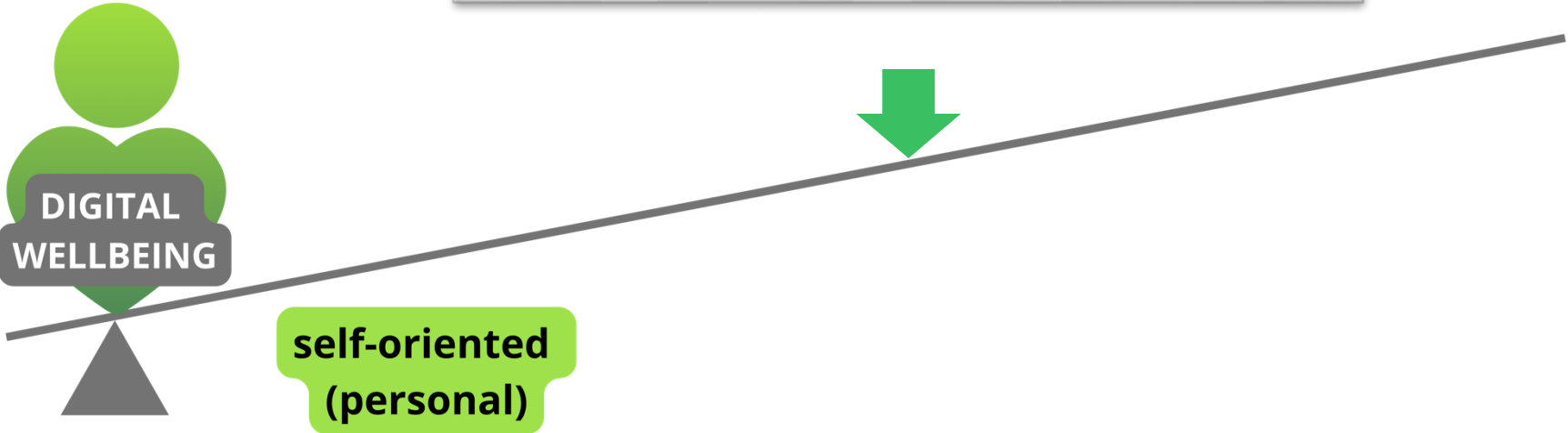


# The Leverage Points Framework

**Improving Digital Wellbeing with and for Teens**

DIGI-Teens is a PRIN 2022 research project that aims at developing a novel gamification platform for education on digital wellbeing at high schools.

[Discover more](#) [See the updates](#)



# The Leverage Points Framework

Commission preliminarily finds TikTok's addictive design in breach of the Digital Services Act

## Dark Patterns and the EU Digital Services Act: Mapping Autonomy Violations and Design Factors

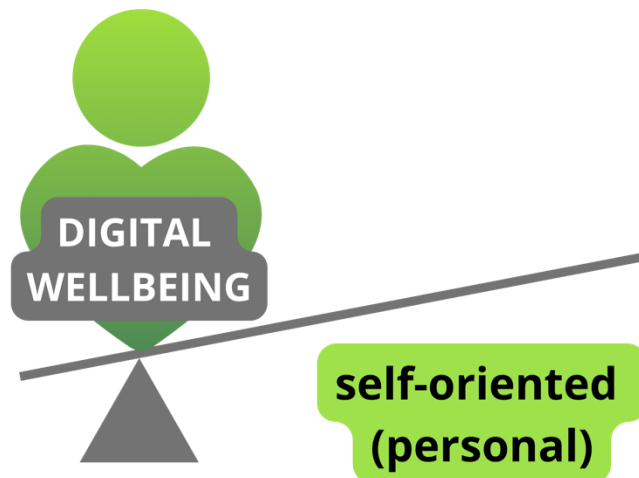
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which users open the app, and other potential indicators.



# Pathways for Impact

## Researchers

A boundary objects across fragmented traditions to building bridges and setting agendas.

## Designers

From exploration to reflexivity: a tool to inspire design reframing through “what if” reflective practices.

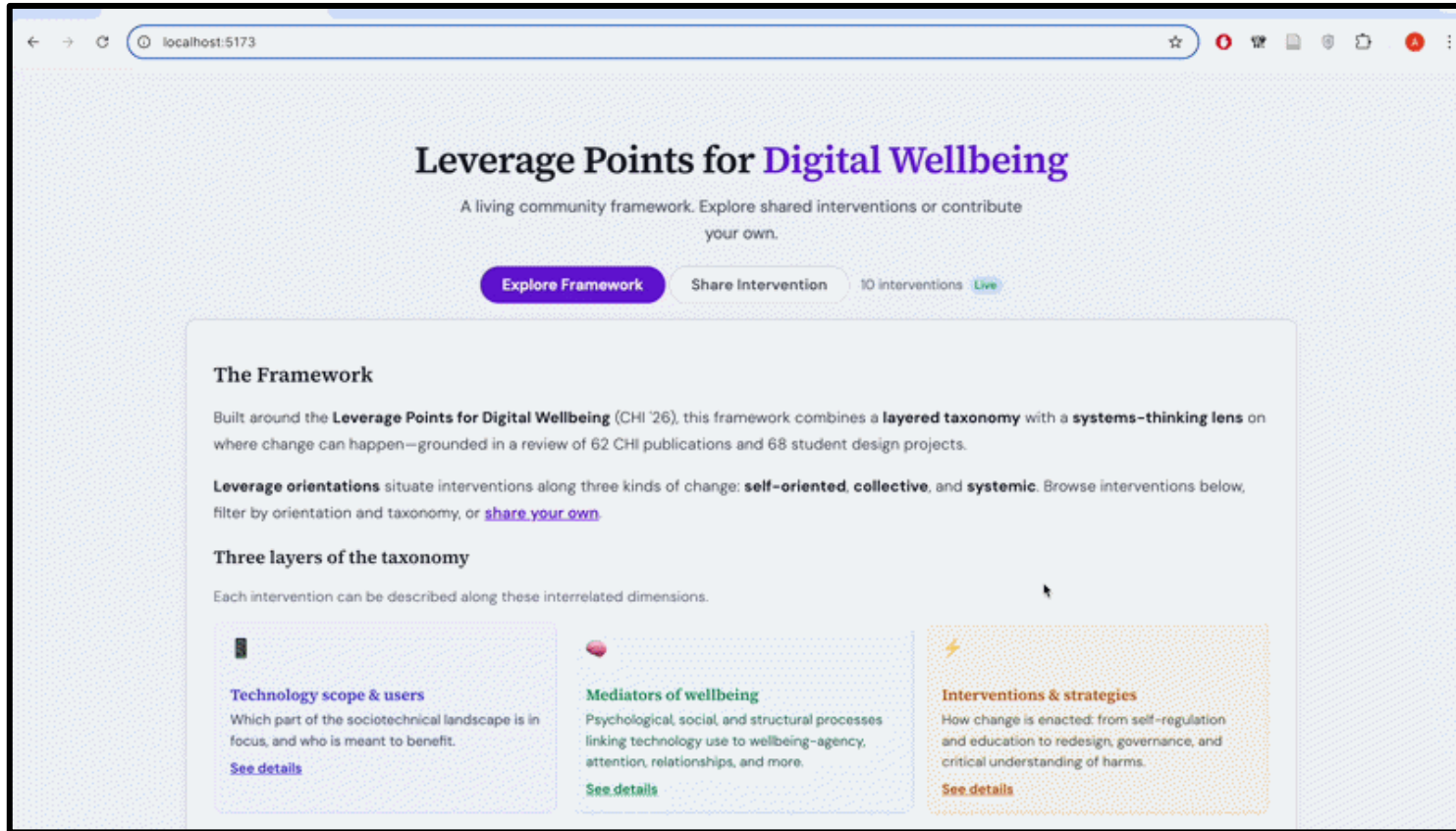
## Regulators

A tool to diagnose gaps and align interventions with policies, evaluating how digital wellbeing is currently operationalized in regulation and practice.

# What is Digital Wellbeing?

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**Scan to explore the  
framework!**

[lys.polito.it/dwb-leverage-points](https://lys.polito.it/dwb-leverage-points)



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