



A smartphone-based intervention for the prevention of psychosocial stress in vulnerable families during pregnancy and the postpartum period

A presentation about the Development and Evaluation Process

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Background

- The transition to parenthood represents a critical period of time (Saxbe et al., 2018, *AM PSYCHOL*)
- Parental health problems (e.g. postpartum depression) lead to an increased risk for poorer development in children (Erickson et al., 2019, *Int.Rev.Psychiatry*; Pearlstein et al., 2009, *AJOG*)
- Psychosocially burdened families as a vulnerable group are often not reached through preventive measures (Stein et al., 2014, *Lancet*; Wang et al., 2021, *JADID*)

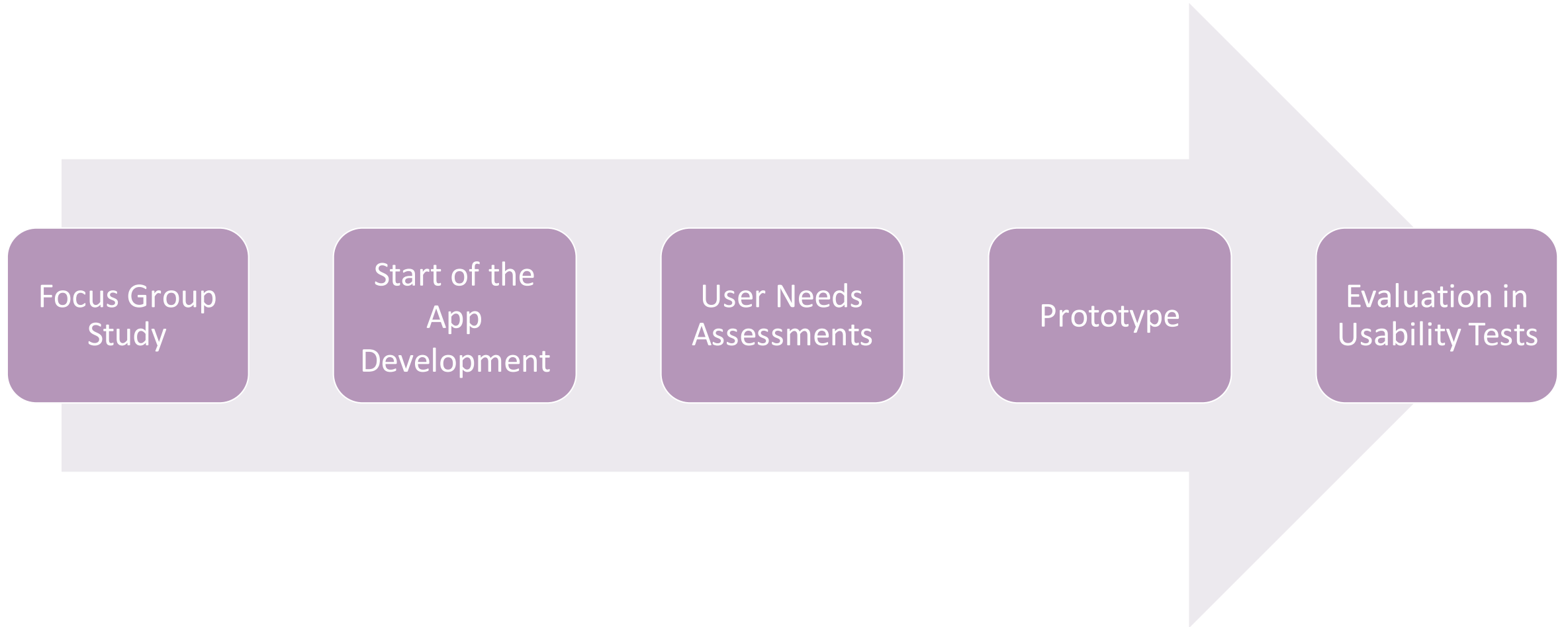
Objectives of I-PREGNO

- ➔ Development of a smartphone-based intervention
- ➔ Tailored to the needs of psychosocially burdened families
- ➔ Promote parental health and well-being
- ➔ During pregnancy and postpartum period

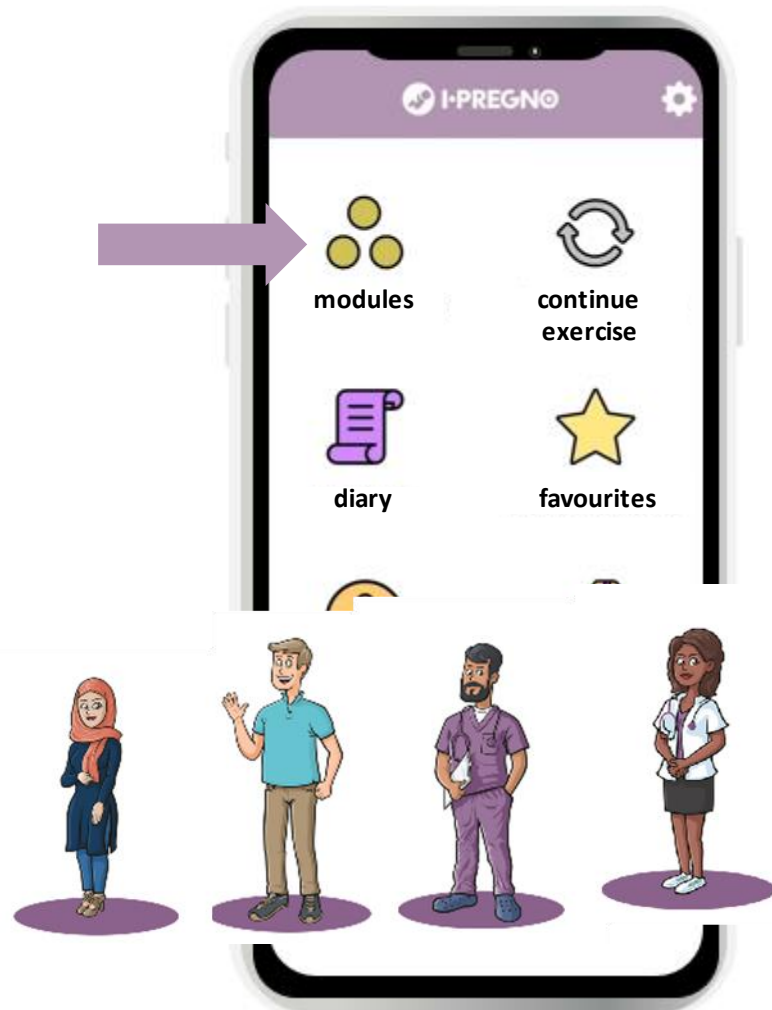
I-PREGNO: an mhealth enhanced intervention



Development of the app

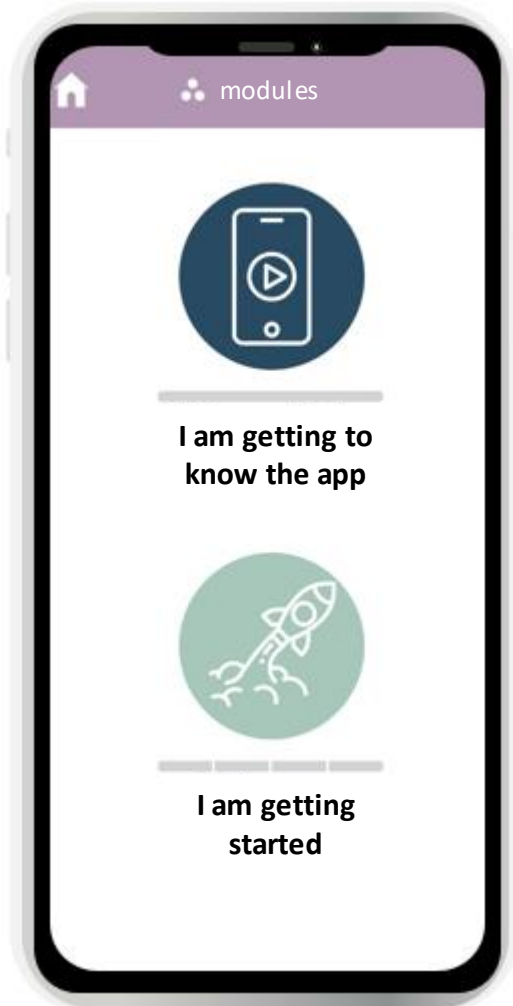


I-PREGNO app



- Mothers and fathers explore psychological and health-related topics (self-guided)
- Knowledge transfer (i.e., exercises, audios, texts)
- Associations between these topics and health behavior (eating, physical activity and sleeping behaviour)
- Scientifically based information and strategies from an interdisciplinary project team
- 2 versions: pregnancy and postpartum
- Individualisation through coaches

I-PREGNO app



I am enough
(Self-esteem)



**I have confidence
in myself**
(Self-efficacy)



physical activity



I stay calm
(Reducing stress)



**I am getting the
support I need**
*(Training of social
competences)*



nutrition



**I pay attention to
my feelings**
*(Emotion
regulation)*

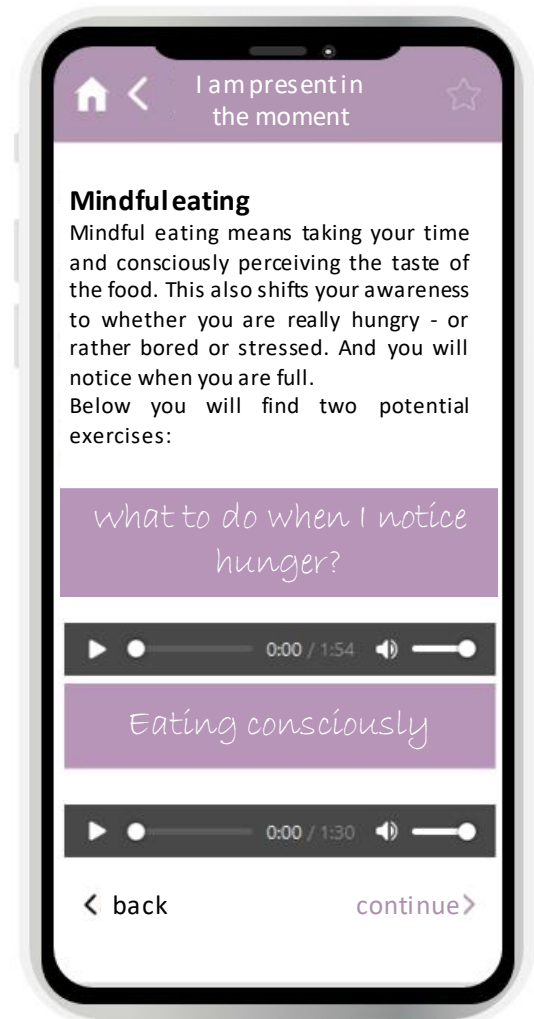
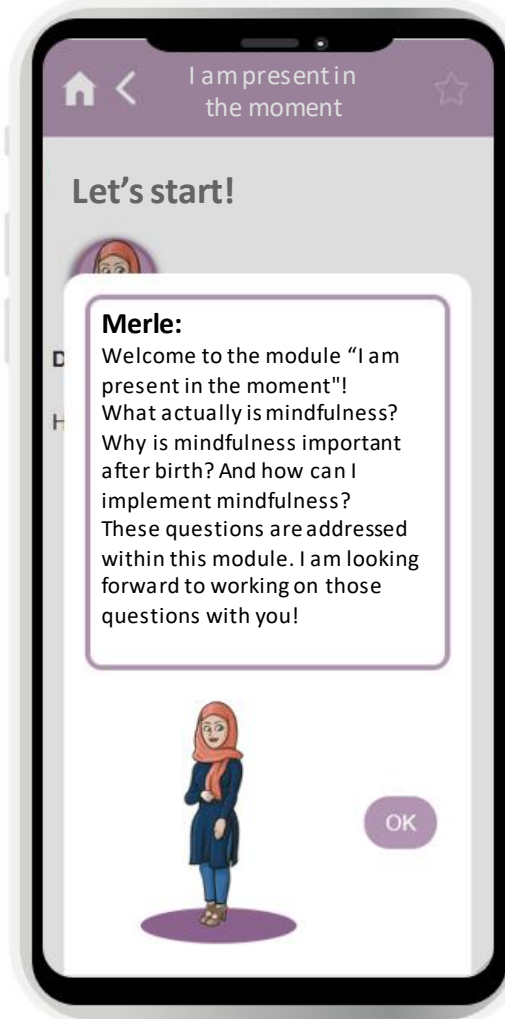
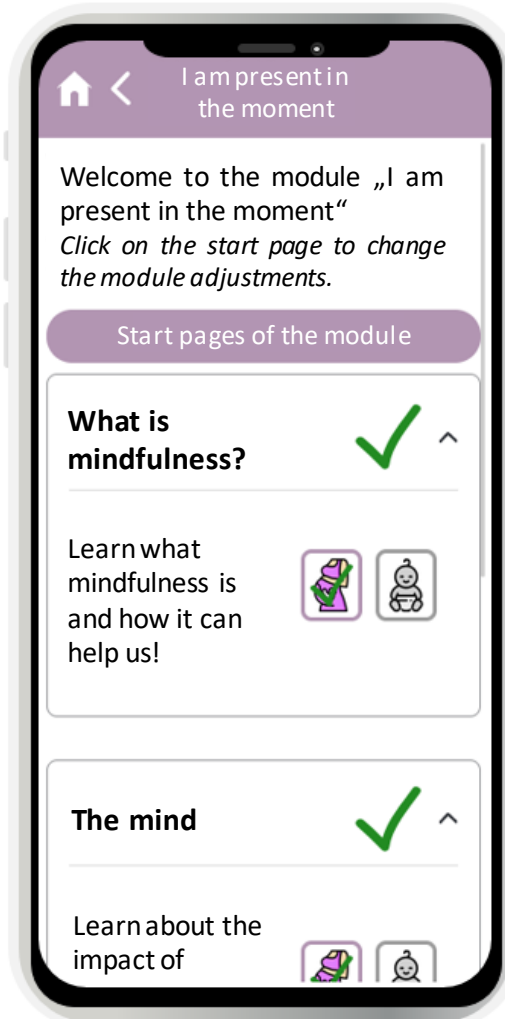
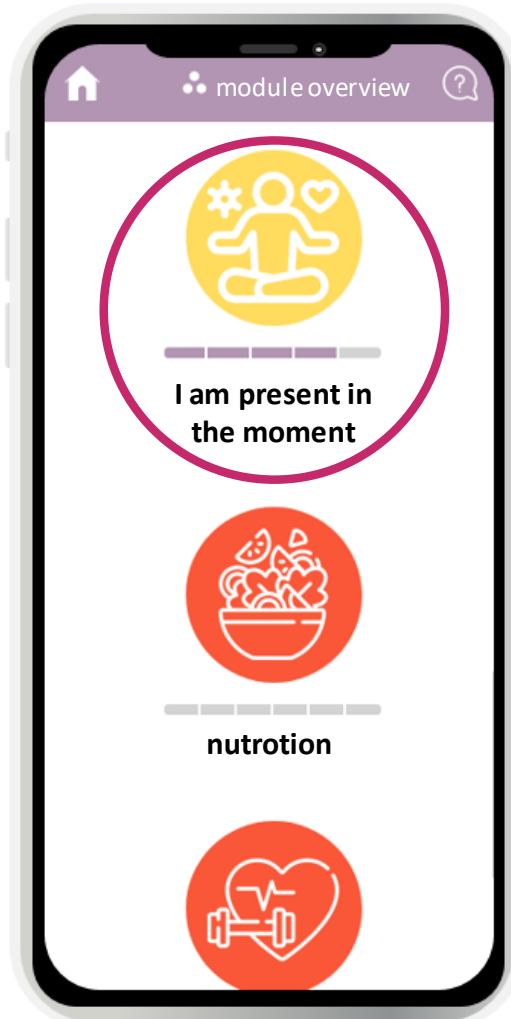


**I am present in
the moment**
(Mindfulness)

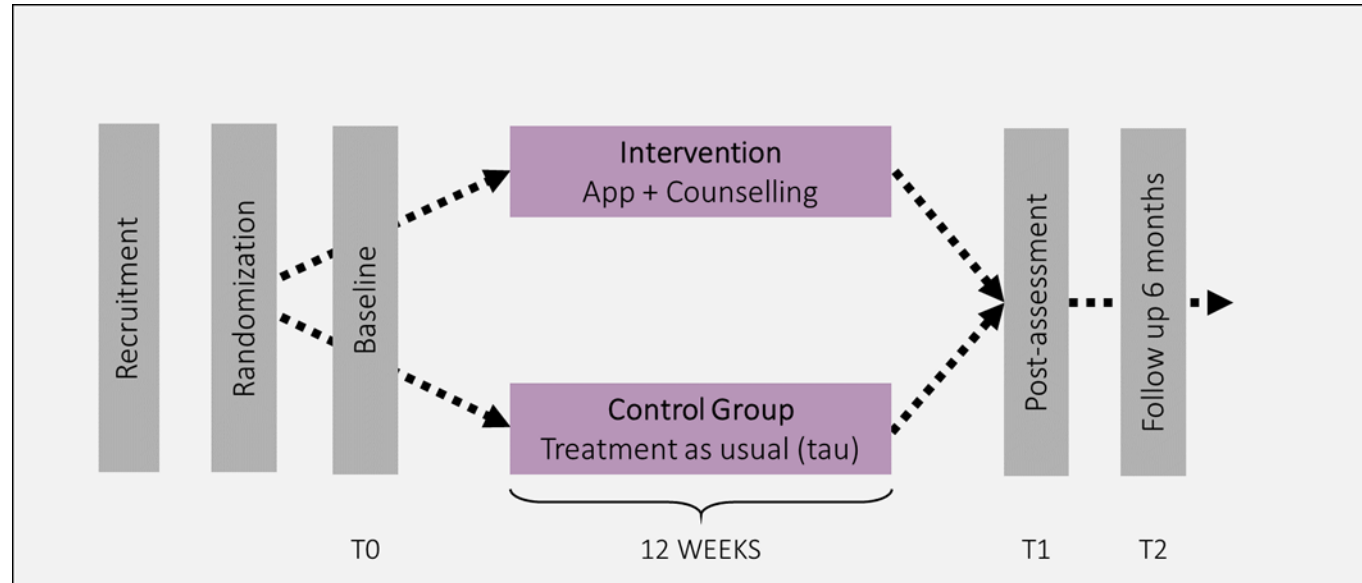


I stay tuned

I-PREGNO app



Study I: a cluster randomized controlled trial

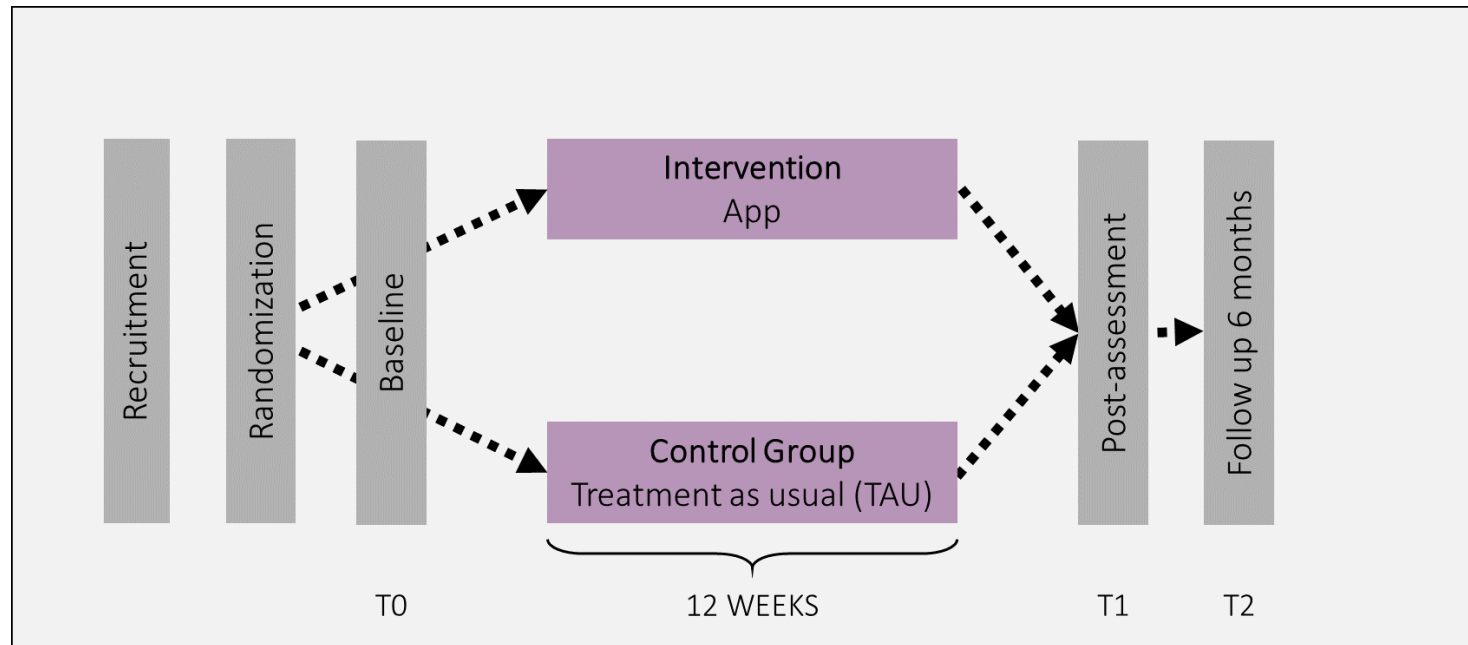


- 107 Psychosocially burdened families
- During pregnancy and postpartum
- Germany and Austria

Study I: inclusion criteria

- Psychosocially burdened families: at least one risk factor
 - Being a single parent
 - Social isolation
 - Conflicts in partnership
 - Traumatic life events in the past
 - Parent with mental illness
 - Child with regulatory disorder, chronic severe illness
 - pregnancy at young age
 - low SES
- Smartphone
- Sufficient knowledge of the German language
- Receive support through a midwife (pregnancy), family midwife/ nurse (postpartum) for at least 12 weeks

Study II: a randomized controlled trial



288 Mothers with a child between 0 -12 months in Austria and Germany

App evaluation: outcomes & hypotheses



Primary Outcomes

- parenting stress (PSI-SF)
- depression (EPDS)
- weight composition (BMI)

Secondary Outcomes

- emotion regulation (DERS-SF)
- self-efficacy (GSE)
- Physical activity (IPAQ)
- eating behavior (FFQ & DEBQ)

Thank you for your attention!
We like to thank all participating
families and professionals!



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