Scaled Prevention & Early Intervention in Real-World Contexts for Students
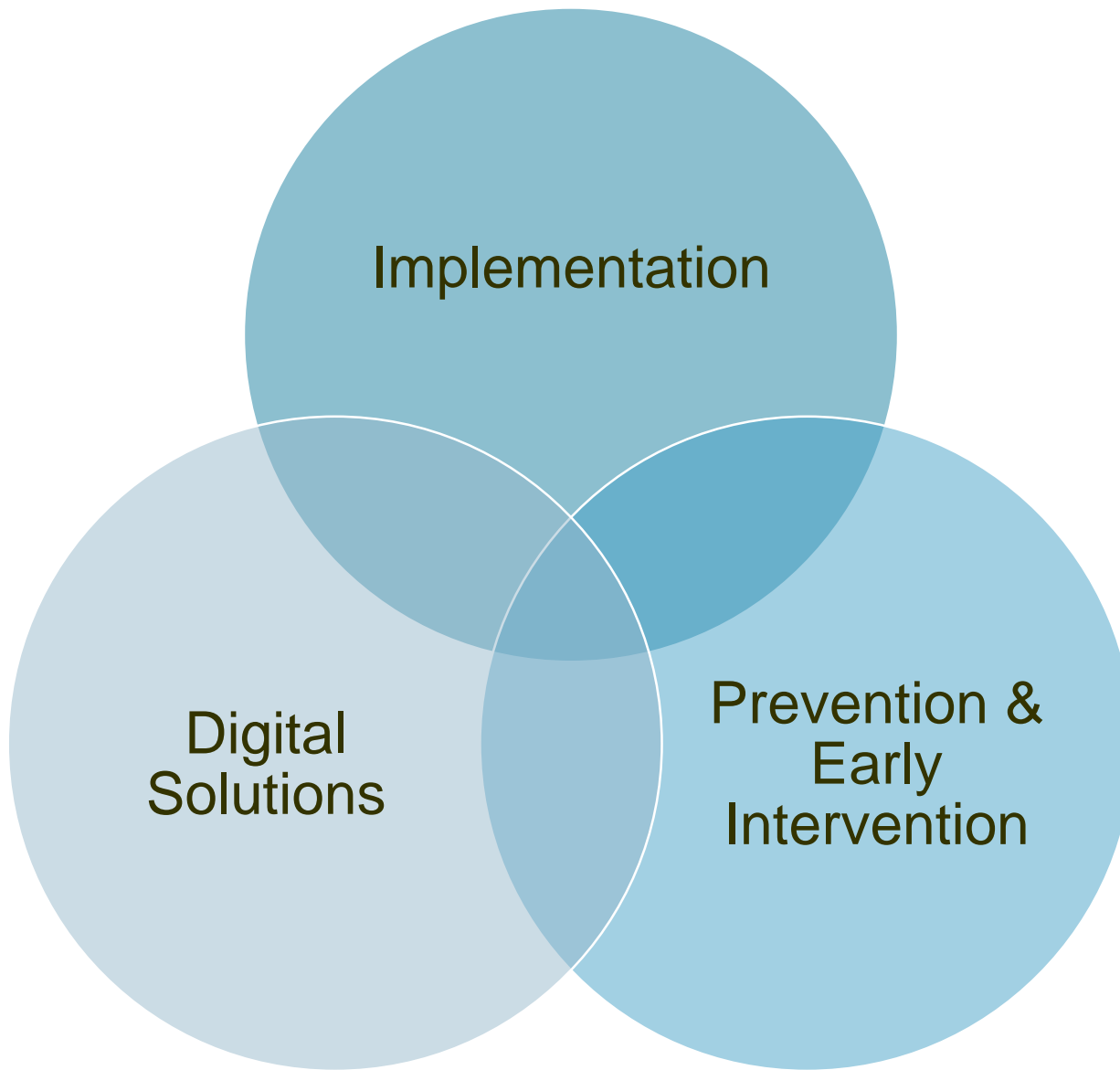
Dr Joanne Beames

Marie-Skłodowska-Curie Fellow
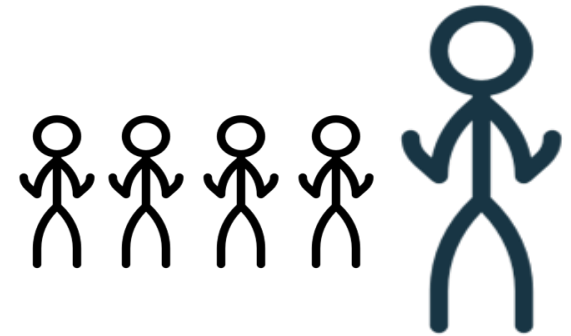
Clinical Psychologist

Funded by the European Union

KU LEUVEN

Prevention & Early Intervention

Van Zoonen et al., 2014; Werner-Seidler et al 2017; 2021

KU LEUVEN

…in Schools

Feasibility

Appropriateness

KU LEUVEN

Perspectives of Teachers & Counsellors

Aims

1. To explore how teachers & counsellors perceive the role of the school in student mental health

Methods

- Online surveys of 97 teachers and 93 counsellors from secondary schools in Aus (Nov 2017-July 2018)

Role of school in student mental health	→	Role of teachers & counsellors in student mental health	→	Use and recommendation of online programs

KU LEUVEN
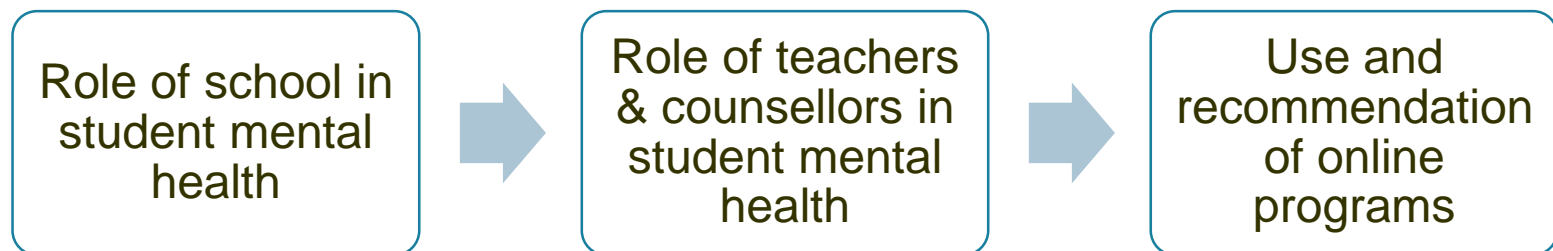
Key Themes

Support
Holistic model of care

"…part of students education just like reading or writing"

Frontline
•Identification & assessment

"Screening and assessing for mental health issues""

Collaboration
Working together

Education
Mental health literacy

"…to understand that mental health issues are as common as having a cold and it's ok…""

KU LEUVEN

Perspectives of Teachers & Counsellors
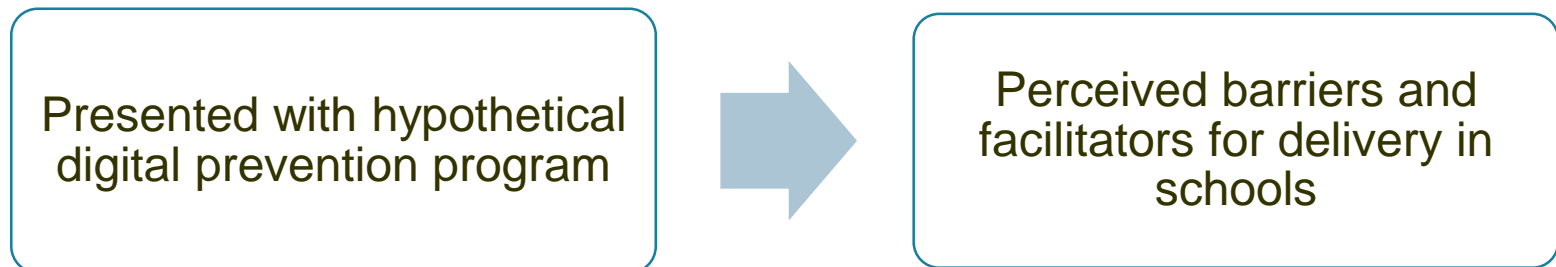
Aims

2. To explore the barriers and facilitators to implementing a digital depression prevention program

Methods

• Online surveys of 97 teachers, 93 counsellors, & 11 principals from secondary schools in Aus (Nov 2017-July 2018)

| Presented with hypothetical digital prevention program | → | Perceived barriers and facilitators for delivery in schools |

KU LEUVEN

Facilitators

- Program suitability
- Staff support
- Free
- Curriculum alignment
- Student feedback
- Personal devices

KU LEUVEN

Facilitators

Program suitability

Staff support

Free

Curriculum alignment

Screening + referral

Student feedback

Personal devices

When to deliver

Research Group Psychiatry, Center for Contextual Psychiatry

KU LEUVEN

Variation by School Type

Low SES	Rural	Government
• Admin support • Time • Computers	• Technical infrastructure & support • Computers	• Support from other teachers

KU LEUVEN

Key Implications

1. **Different approaches** are needed to target various staff members in different school types

2. It is important to consider factors that impact decisions related to **adopting** digital programs ahead of time

3. Extending this research to digitally delivered programs may help to design and develop **school appropriate products**

KU LEUVEN

THE
FUTURE
PROOFING
STUDY

2019 - 2026

KU LEUVEN

Future Proofing Study

5-year study involving 6,300+ students in 134 AUS high schools

1. Largest cohort study of adolescent mental health in Australia

2. Comprehensive data collected through annual online surveys about mental health, wellbeing and life experiences

3. Largest study to explore how smartphone data can be used to predict mental health symptoms

KU LEUVEN

Research Group Psychiatry, Center for Contextual Psychiatry

KU LEUVEN

Types of Hybrids

Clinical Effectiveness Research · · · · · · · · · · · · · · · · · · ▶ Implementation Research

The Continuum

Hybrid Type 1

Primary Aim: Determine effectiveness of a clinical intervention

Secondary Aim: Better understand the context for implementation (i.e., potential barriers and facilitating factors)

Hybrid Type 2

Primary Aim: Determine effectiveness of a clinical intervention

Co-Primary Aim: Determine feasibility and/or (potential) impact of an implementation strategy
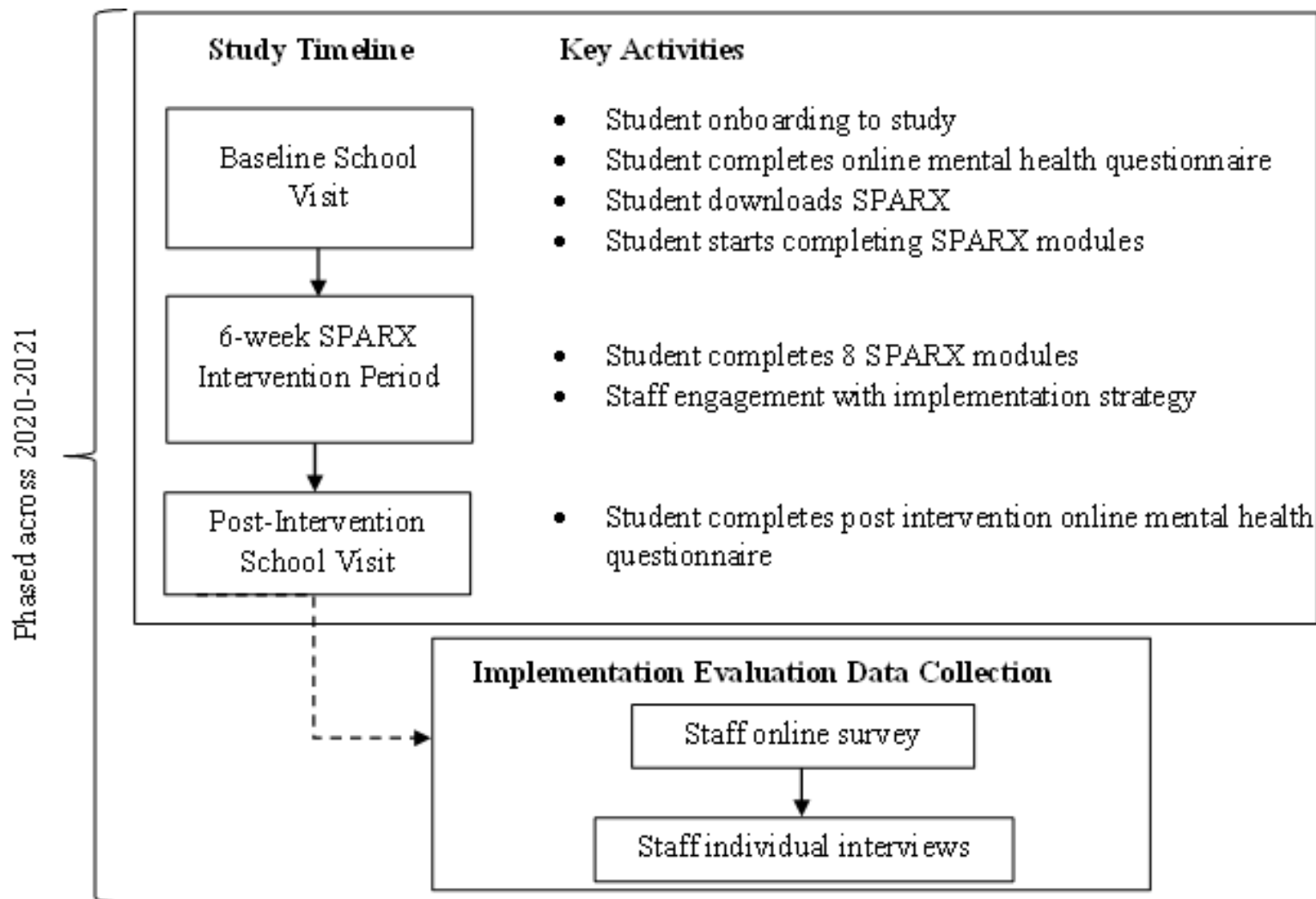
Hybrid Type 3

Primary Aim: Determine impact of an implementation strategy

Secondary Aim: Assess clinical outcomes associated with implementation trial

(Curran, Bauer et al., 2012)

Methods

KU LEUVEN

Implementation Strategy

(1) Establishment of study implementation teams responsible for the implementation of the intervention and liaising with the research team.

(2) Allocation of a minimum of 4 x 20-minute school class sessions during which students complete the SPARX intervention (the remaining sessions could be completed in class if permitted by schools or in students' own time).
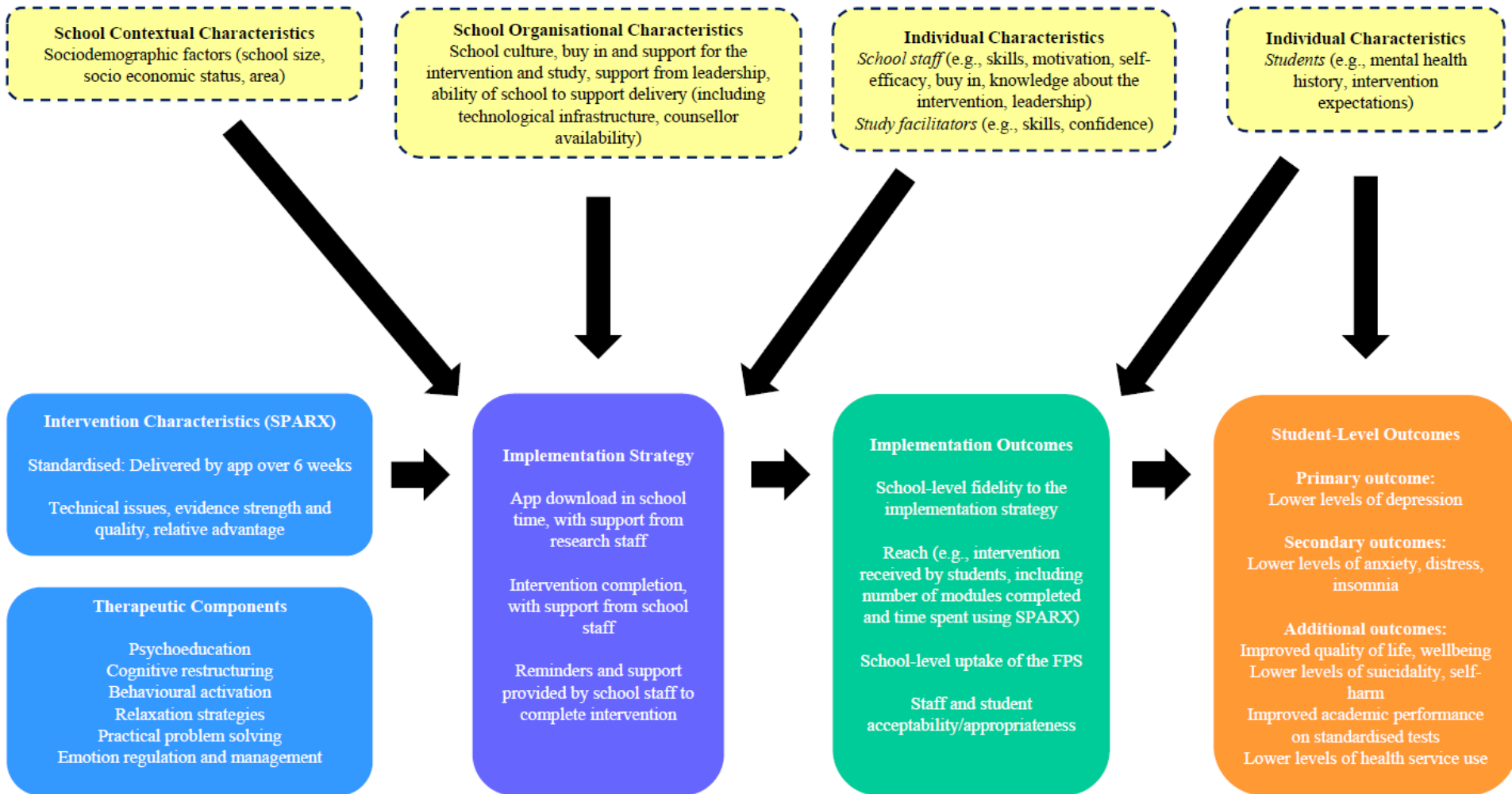
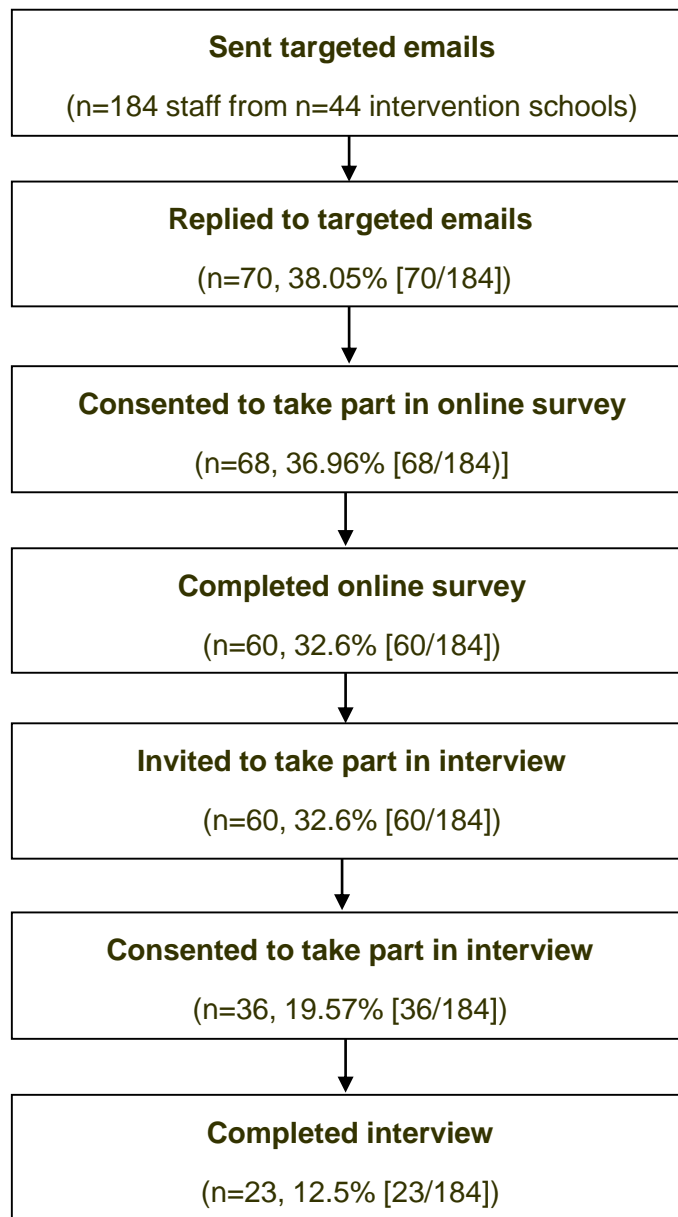(3) Provision of information about SPARX from the research team for school visits.

(4) Weekly verbal reminders from the implementation teams to students to use the app.

(5) Dissemination of information about the study and mental health tips in the school weekly newsletter by the research team.
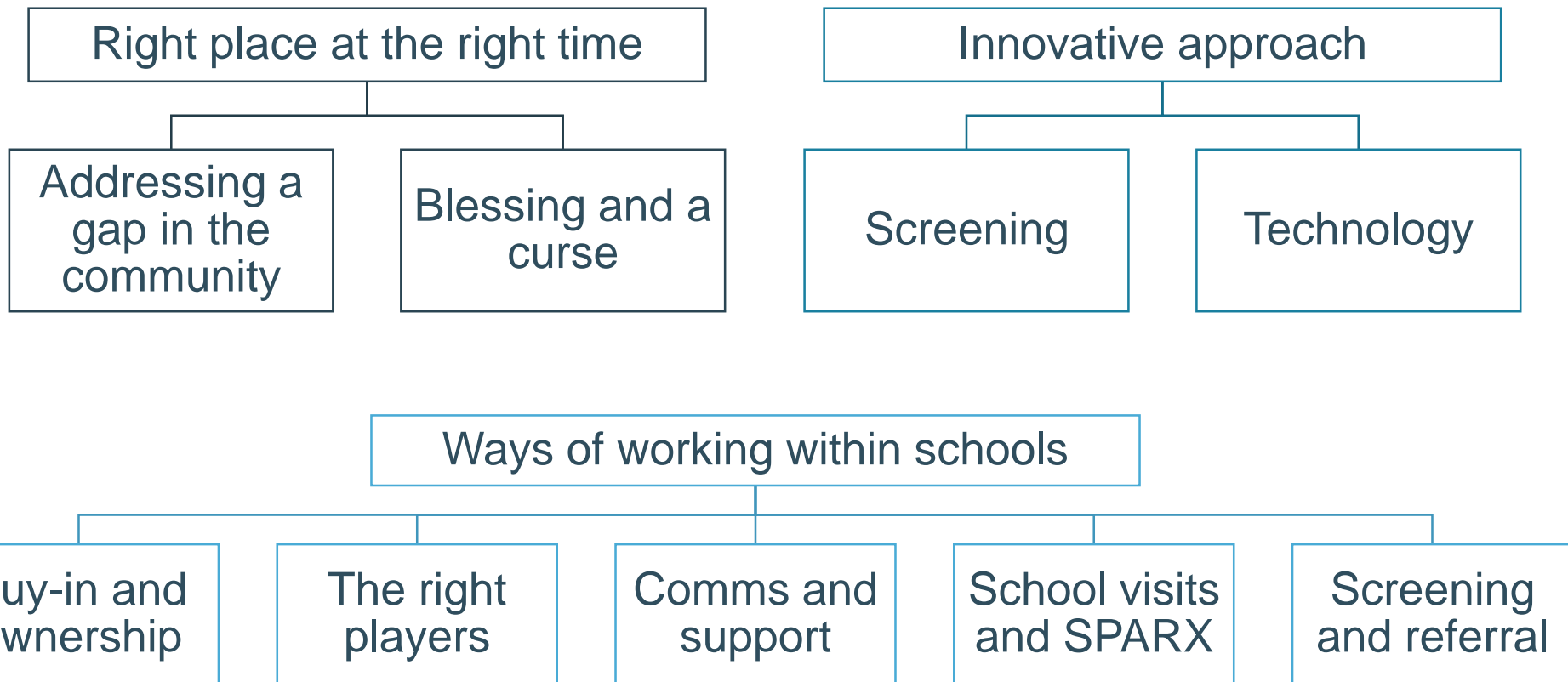
(6) Weekly liaison with the research team to troubleshoot problems.

KU LEUVEN

Implementation Evaluation

School Contextual Characteristics
Sociodemographic factors (school size, socio economic status, area)

School Organisational Characteristics
School culture, buy in and support for the intervention and study, support from leadership, ability of school to support delivery (including technological infrastructure, counsellor availability)

Individual Characteristics
School staff (e.g., skills, motivation, self-efficacy, buy in, knowledge about the intervention, leadership)
Study facilitators (e.g., skills, confidence)

Individual Characteristics
Students (e.g., mental health history, intervention expectations)

Intervention Characteristics (SPARX)

Standardised: Delivered by app over 6 weeks

Technical issues, evidence strength and quality, relative advantage

Therapeutic Components

Psychoeducation
Cognitive restructuring
Behavioural activation
Relaxation strategies
Practical problem solving
Emotion regulation and management

Implementation Strategy

App download in school time, with support from research staff

Intervention completion, with support from school staff

Reminders and support provided by school staff to complete intervention

Implementation Outcomes

School-level fidelity to the implementation strategy

Reach (e.g., intervention received by students, including number of modules completed and time spent using SPARX)

School-level uptake of the FPS

Staff and student acceptability/appropriateness

Student-Level Outcomes

Primary outcome:
Lower levels of depression

Secondary outcomes:
Lower levels of anxiety, distress, insomnia

Additional outcomes:
Improved quality of life, wellbeing
Lower levels of suicidality, self-harm
Improved academic performance on standardised tests
Lower levels of health service use

KU LEUVEN

KU LEUVEN

Qualitative Themes

Right place at the right time
- Addressing a gap in the community
- Blessing and a curse

Innovative approach
- Screening
- Technology

Ways of working within schools
- Buy-in and ownership
- The right players
- Comms and support
- School visits and SPARX
- Screening and referral

Recommendations

Facilitators		FPP Status
Planning & Engaging	1. Reputable implementing institution and provision of high-quality resources	Provided
	2. Active leadership support (including recognition of staff input) and school ownership	Encouraged
	3. Counsellors involved in decisions about FPP adoption and planning	Encouraged
	4. In-school champion that engages staff and students	Encouraged
	5. Engagement strategy for students and parents to encourage buy-in	Provided
	6. Supportive school implementation team with clear responsibilities to share load	Encouraged
	7. Dedicated staff time for planning and reviewing	Encouraged
	8. Established community support for referrals of high-risk students that are outside the remit or resources of schools	Ideal
Executing	1. Flexible delivery of FPP	Provided
	2. Integration into school curriculum as an adjunct program	Ideal
	3. Technology support from implementing institution	Provided
	4. Adequate school-level resources (e.g., rooms, WiFi, laptops)	Encouraged
	5. Standardised risk follow-up and referral processes for counsellors	Encouraged
	6. Availability of counsellors and provision of adequate time to respond to risk follow-ups	Encouraged
	7. In school reminders about SPARX completion for students	Encouraged

KU LEUVEN

Study References

Beames, Joanne R., et al. "Addressing the mental health of school students: Perspectives of secondary school teachers and counselors." *International Journal of School & Educational Psychology* 10.1 (2022): 128-143.

Beames, Joanne R., et al. "Factors that help and hinder the implementation of digital depression prevention programs: School-based cross-sectional study." *Journal of Medical Internet Research* 23.8 (2021): e26223.

Werner-Seidler, Aliza, et al. "A trial protocol for the effectiveness of digital interventions for preventing depression in adolescents: The Future Proofing Study." *Trials* 21.1 (2020): 1-21.

Beames, Joanne R., et al. "Protocol for the process evaluation of a complex intervention delivered in schools to prevent adolescent depression: the Future Proofing Study." *BMJ open* 11.1 (2021): e042133. FPS trial paper

Werner-Seidler, Aliza, et al. "The Future Proofing Study: Design, methods and baseline characteristics of a prospective cohort study of the mental health of Australian adolescents." *International Journal of Methods in Psychiatric Research* (2022): e1954.

Beames, Joanne R., et al. "Intervention Programs Targeting the Mental Health, Professional Burnout, and/or Wellbeing of School Teachers: Systematic Review and Meta-Analyses." *Educational Psychology Review* 35.1 (2023): 26.

Research Group Psychiatry, Center for Contextual Psychiatry

KU LEUVEN

Funding
- Ramsay
- General Pants
- NHMRC

Acknowledgments
- Future Proofing Team

Contact
- joanne.beames@kuleuven.be
- @joannebeames

KU LEUVEN