SERNS

ROYAL HOLLOWAY UNIVERSITY OF LONDON

Making the most of digital approaches to mental health and wellbeing in schools

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20th June 2024

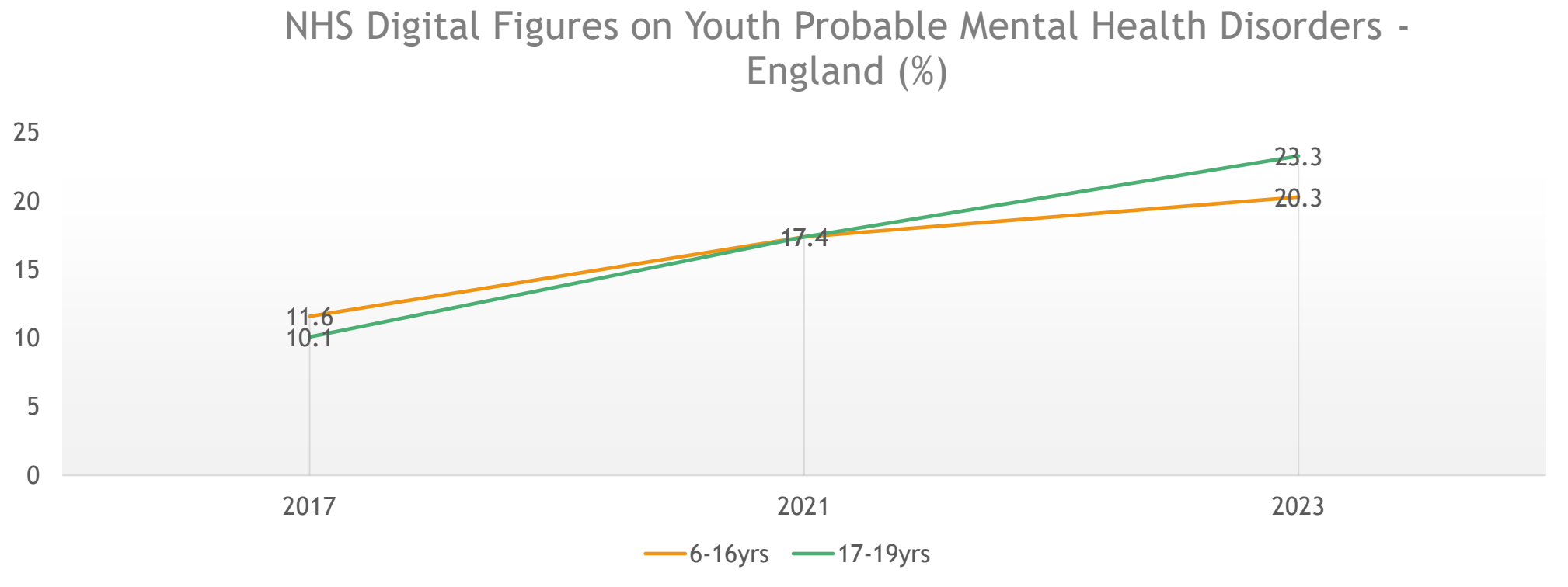
Digital Mental Health in Schools

1. Mental Health of young people
2. Why schools might help
3. EdTech & digital mental health interventions
4. Two examples from RHUL
5. Barriers and facilitators to using digital mental health tools in schools

www.digitalhealthskills.com

Youth mental health problems are on the rise

NHS Digital 2023



£7%

1 in 9

1 in 5

8-25yrs

Young people with mental health problems are having a hard time in school…

5x more likely to have been bullied in-person or online

3x more likely to find extra-curriculars or socialising with friends unaffordable

Compared to peers without mental health problems

NHS Digital, 2023

What is a school?

What type of school did you attend?

How much did you enjoy learning?

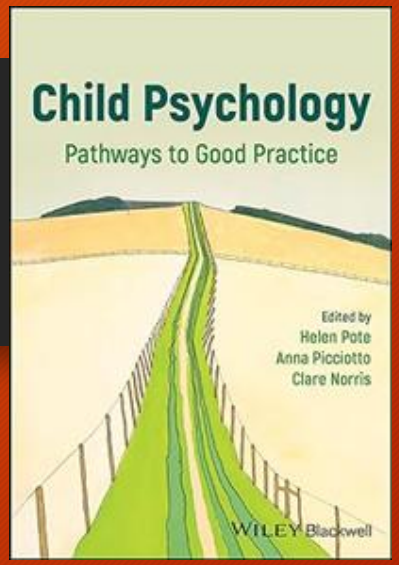
How much did you enjoy the social side of school?

How connected did you feel to the school as a community?

What do remember about the school's provision for social, emotional and mental health needs?

HOW have these experiences shaped your views about the ways mental health support might be provided in school?

Can schools support mental health?

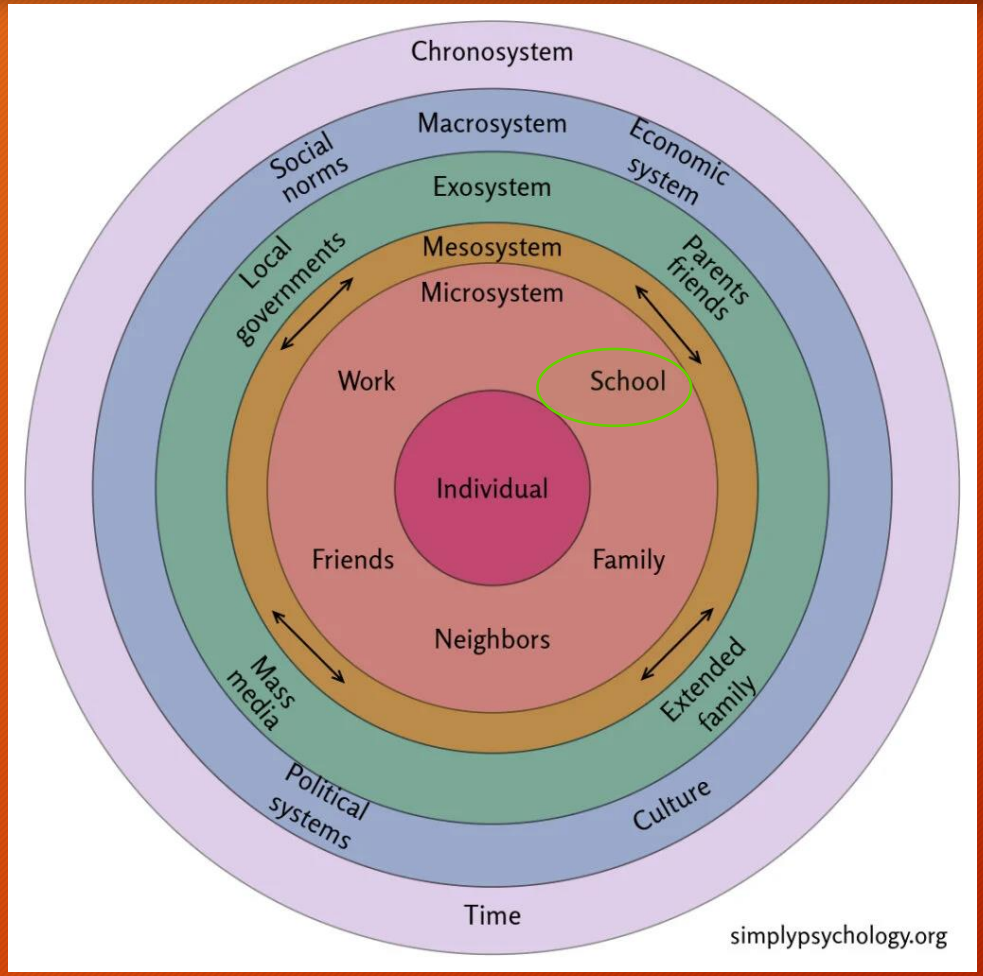


Schools are …

"an immersive social experience as well as centres of learning, and can support the development of good social, emotional and mental health. Schools have the potential to offer a nurturing and protective environment for CYP in the most adverse circumstances"

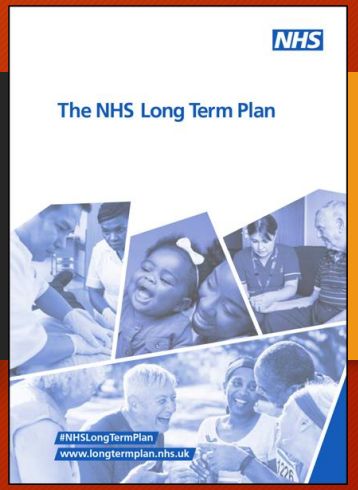
Picciotto, Hickey & Barnet (2024)

Child Mental Health: Complex ecosystems of risk and protective factors



Bronfenbrenner's Ecological Systems Theory (1979)

Mental health & psychological interventions in schools



- A long history of various practitioners supporting mental health in schools
  - Teachers
  - Special educational needs co-ordinators
  - Counsellors
  - Educational Psychologists
  - Clinical Psychologists
  - Education Mental Health Practitioners
- Work spans the health and education systems
- The core task of any school – learning and development – may not always align with the mental health and wellbeing needs of the child

Mentally Health Schools - 8 Principles (2021)

an ethos and environment of respect, valuing diversity	leadership and management champions promotion emotional health and wellbeing	staff development to support their pupils/own wellbeing	curriculum teaching and learning to promote resilience and support social and emotional learning
enabling student voice to influence decisions	identifying the need for and monitoring the impact of interventions	targeted support and appropriate referral	working with parents and carers

What does mental health support in schools look like?

What is your image of how we should support young people with their mental health needs in schools?

Does it involve in-person support from adult to child, peer to peer?

Does it involve digital support (an app, an online session, a computer game) as a supportive option for young people ?

Why not?

Anxiety that technology is bad for kids is not new…

- Calculators
- TV
- Ebooks
- Computers
- Phones
- AI

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Government bans calculators from primary maths tests

9 November 2012 · Comments

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Schools

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Ministers confirm plan to ban use of mobile phones in schools in England

Teaching unions say guidance includes practices already adopted and most schools already have policies in place

Peter Walker *Deputy political editor*

Mon 19 Feb 2024 09.03 GMT

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Health

This article is more than 11 years old

Ban under-threes from watching television, says study

Doctors should curb amount of time children spend watching television to prevent long-term harm, say paediatricians

Children's obsession with the television, computers and screen games is causing developmental damage, warn experts. Photograph: Rob Watkins/Alamy

Doctors and government health officials should set limits, as they do for alcohol, on the amount of time children spend watching screens – and under-threes should be kept away from the television altogether, according to a paper in an influential medical journal published on Tuesday.

The Telegraph

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Most e-books harm children learning to read, research finds, as technology distracts from stories

Digital books including games at the end of chapters were found to have particularly negative effects on young children's learning

Dominic Penna

9 March 2021 • 3:00pm

Print books outperformed their technological alternatives when children between one and eight were assessed on their comprehension of what they had read | CREDIT: Tetra Images/Alamy

Most ebooks actually harm children in their efforts to learn to read because the added use of technology can be distracting, research has found...

ScienceNews

INDEPENDENT JOURNALISM SINCE 1921

ALL TOPICS HEALTH HUMANS LIFE E

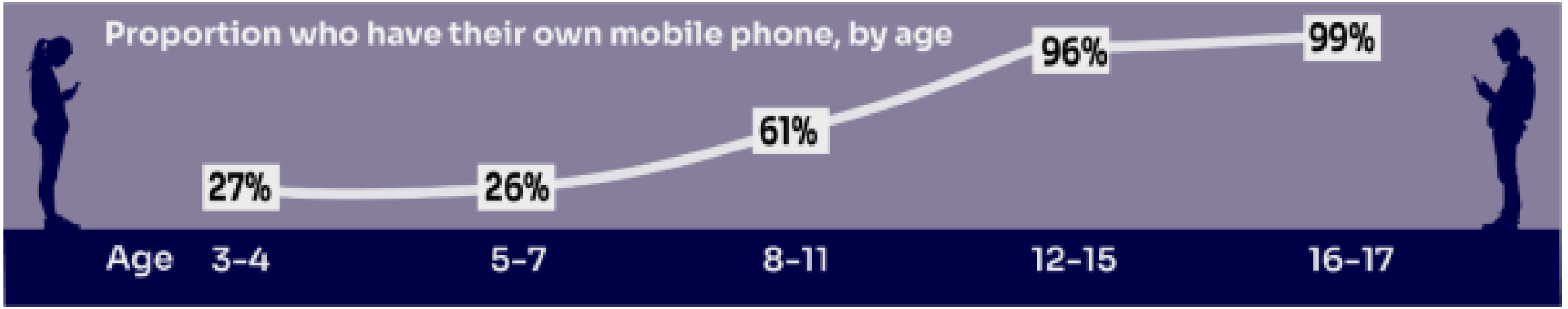
FEATURE TECH

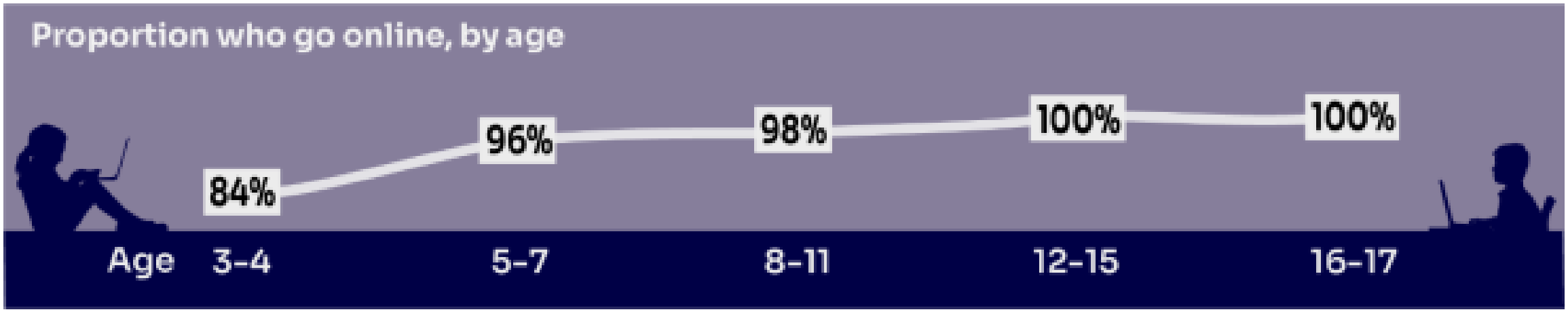
How ChatGPT and similar AI will disrupt education

Teachers are concerned about cheating and inaccurate information

Youth Digital access – phones and online

Ofcom 2024





Harnessing the power of digital for mental health in schools

- We cannot ignore it - Digital influences are an important part of a child's ecosystem/culture
- It influences their developmental, educational and health outcomes
- Could be a more engaging way to improve mental health
- Offers teachers evidence-based wellbeing information / interventions
- Offers easy opportunities for monitoring wellbeing outcomes
- What if we used technology for good
  - Apps
  - Psycho-education and elearning
  - Simulation
  - Serious games

What is digital mental health approach?

eHealth

"A psychological digital approach is any practice which uses health technologies to enhance our work with organisations, networks, families, couples and individuals, to improve wellbeing"

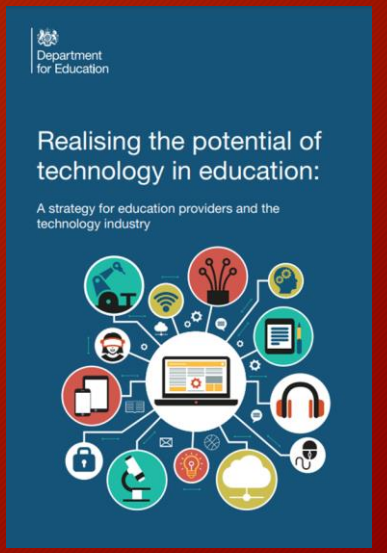
Burbach & Pote (2021)

What is an education technology approach?

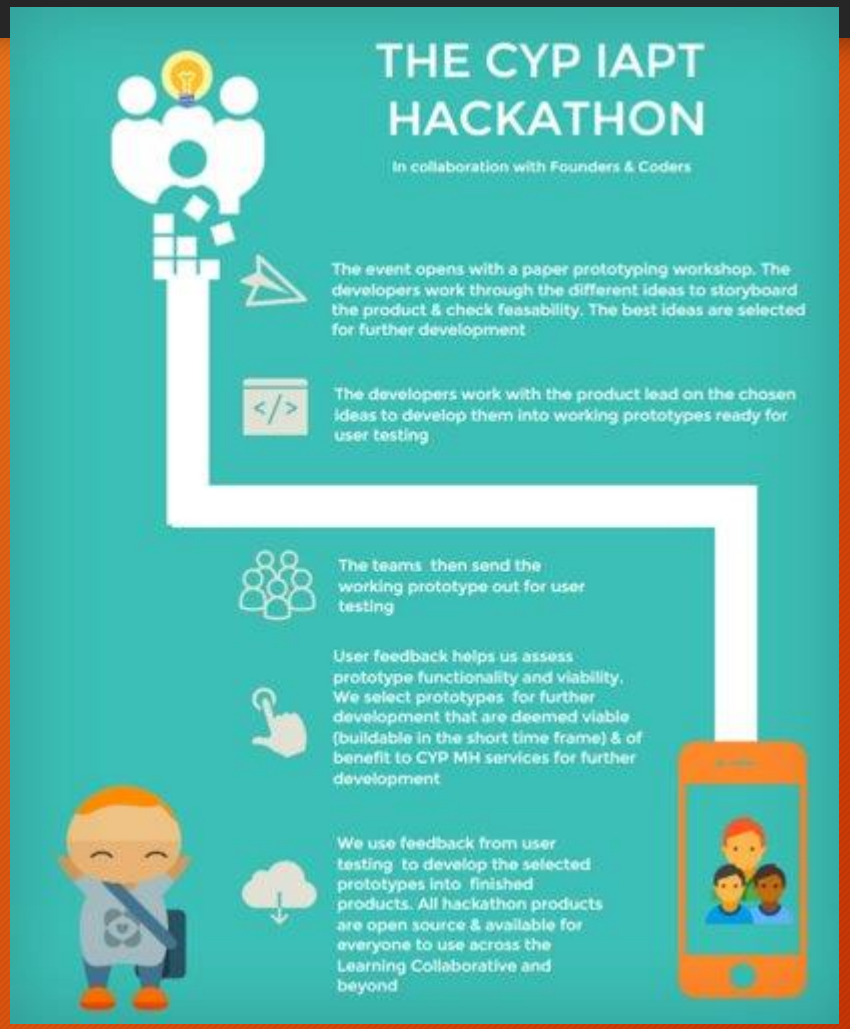
EdTech

"The practice of using technology to support teaching and the effective day-to-day management of education institutions. It includes hardware (such as tablets, laptops or other digital devices), and digital resources, software and services that help aid teaching, meet specific needs, and help the daily running of education institutions (such as management information systems, information sharing platforms and communication tools)."

DfE, 2019



A Fortuitous Invitation: Hackathon



DCP National Digital Healthcare Committee

Division of Clinical Psychology

The British Psychological Society

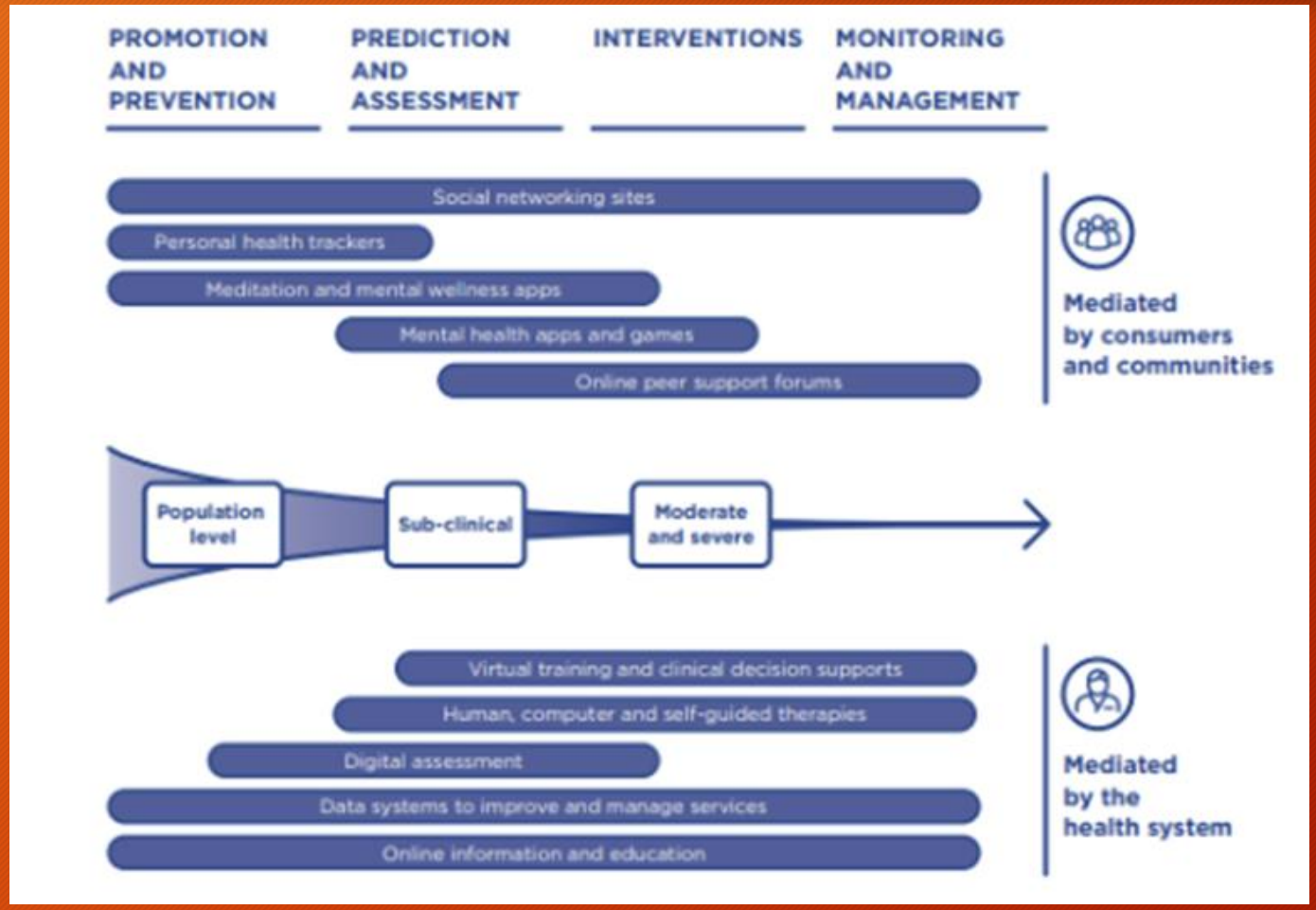
Our Mission

Supporting competent and confident applied psychologists to deliver ethical digital practice

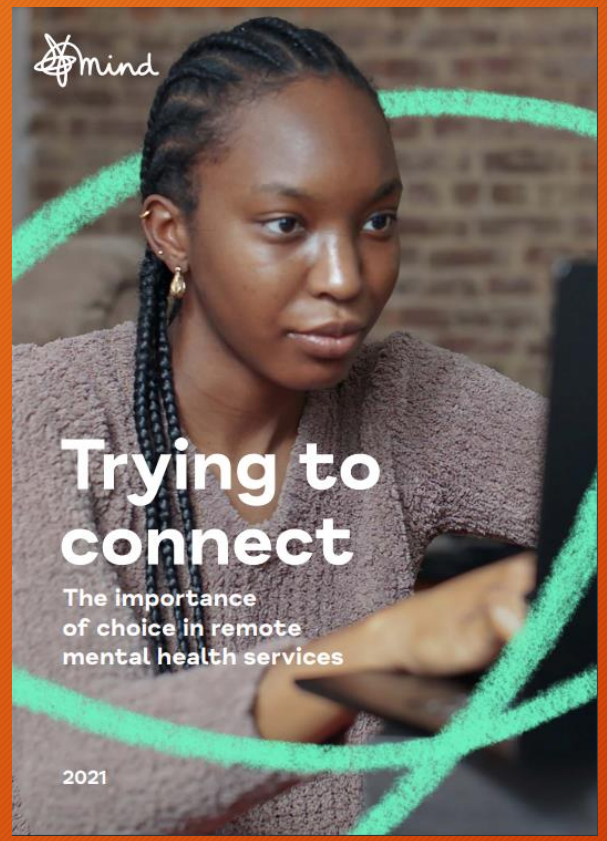
www.digitalhealthskills.com

Digital approach across a range of needs/services

World Innovation Summit for Health Report (2020)



Digital Mental Health as a Choice



Of those who had been offered mental health support by phone or online, 1,094 (80%) took up this offer, and 14% did not take up the offer (others preferred not to say). Types of support people received:

Phone calls
75%

Video calls
39%

Online therapy programmes / apps
26%

Text support
12%

Example 1: Mental Health Literacy App

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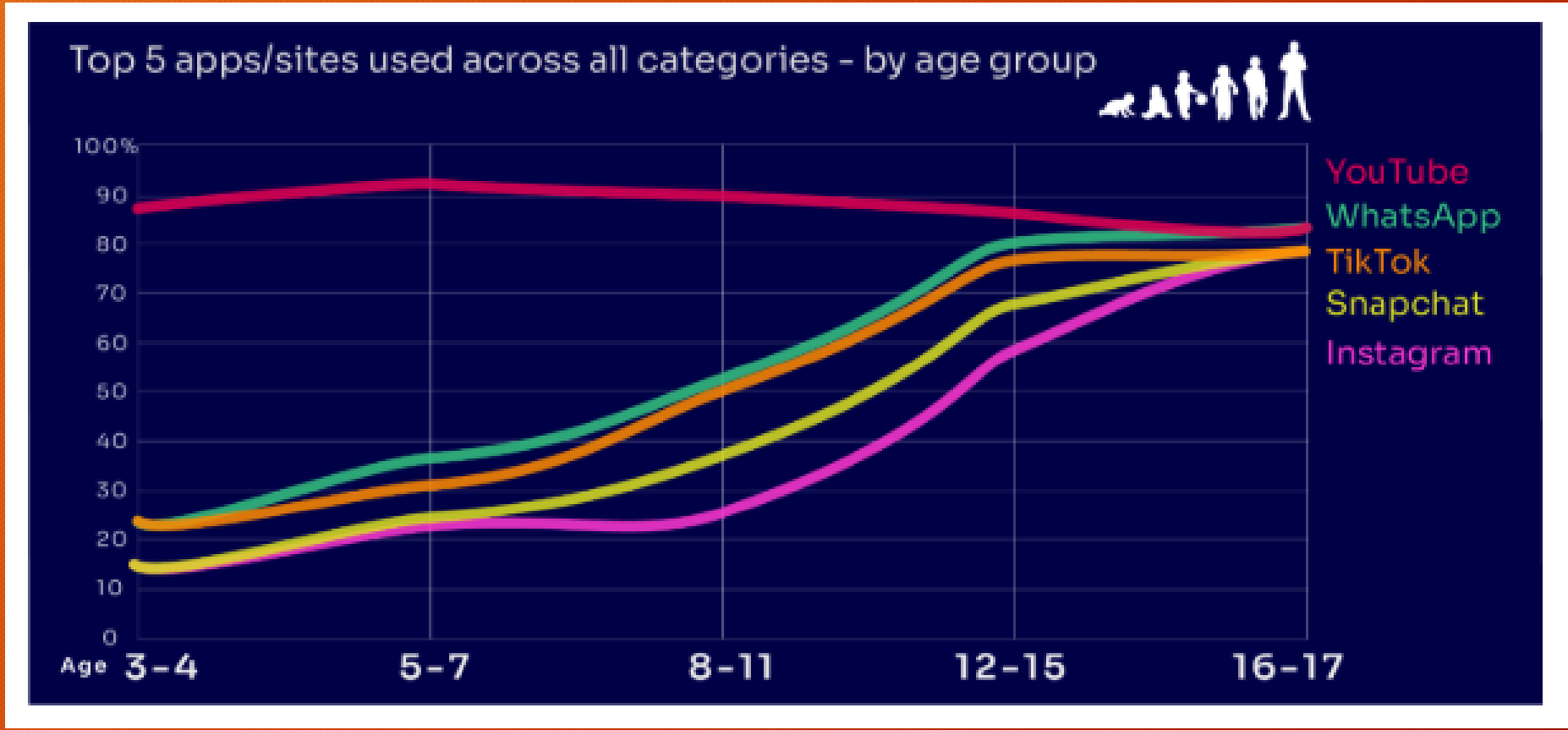
Young people like using apps

OfCom 2024



Mental Health Literacy

- “Knowledge and beliefs about mental health difficulties which aid their recognition, management or prevention” Jorm, 1997, p.182.
- Aims to address barriers to mental health help-seeking in youth
- perceived stigma & embarrassment,
- problems recognising symptoms
- preference for self-help and informal support

MINDAID

www.mindaid.org

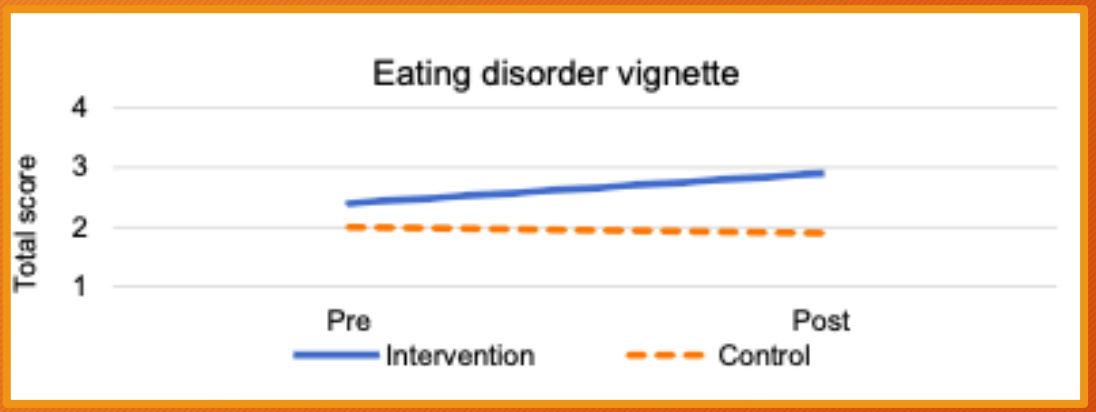
Mental Health Literacy App to a resource to support teachers and CYP to recognise and respond to mental health problems

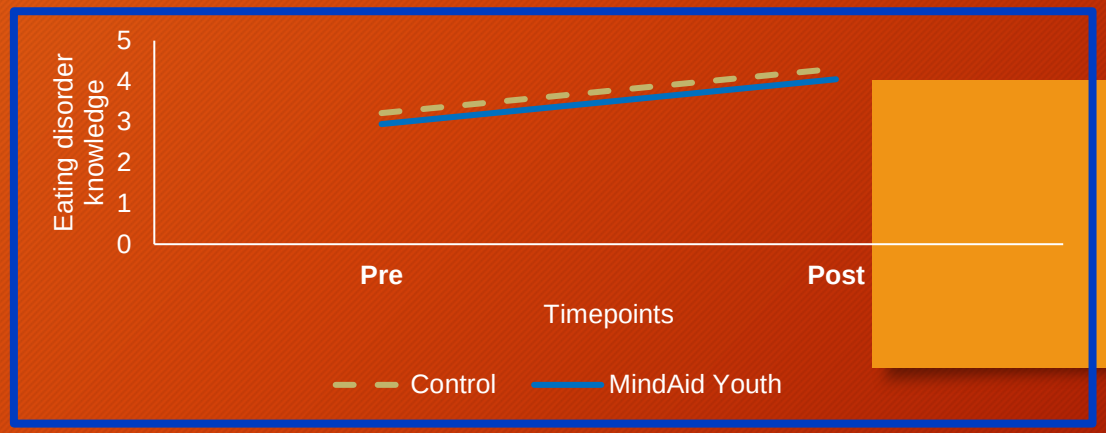
- **Talk**: information and interactive exercises about how to ask for help, support friends and discuss worries.
- **Quiz**: quizzes to check-in with mental wellbeing, identify any difficulties and challenge mental health related stigma.
- **Library**: 12 modules about different aspects of mental health, getting help and initial self-help suggestions.
- **Help**: details of local organisations which can provide appropriate support (using GPS technology) and further self-help information.

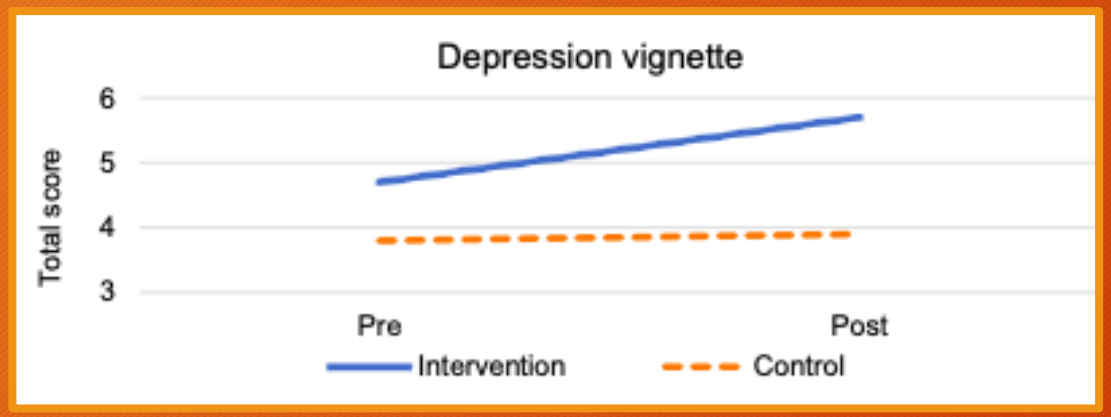
MindAid Youth: 2 Trials in primary & secondary

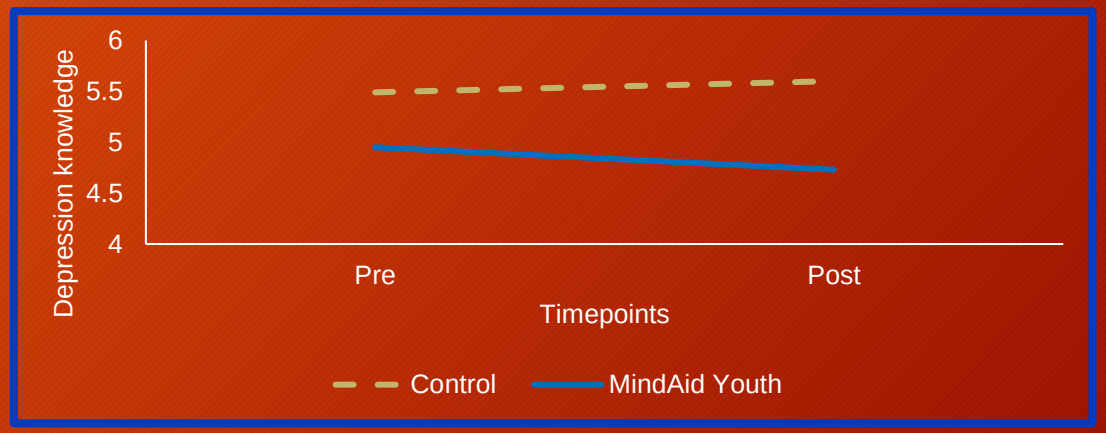
2 Trials	Primary & Secondary Schools 2020-22	10 schools, N=1273 starters N=Completers=686	Longitudinal cluster-controlled design	3 aspects of MHL measured
Trial 1	N=331, Int 204 PSHE lesson	10-13years, mean 10.65	56% female	Retention 76.6%
Trial 2	N=435, Int 299 Pastoral time	11-17 years, mean 13.83	54% female	Retention 51.7%

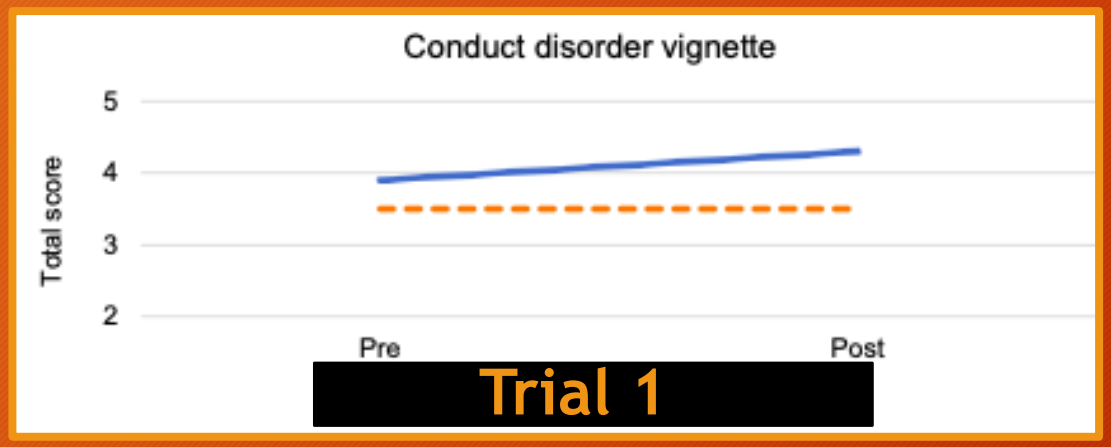
Pote, Bemrose & Good (2022)

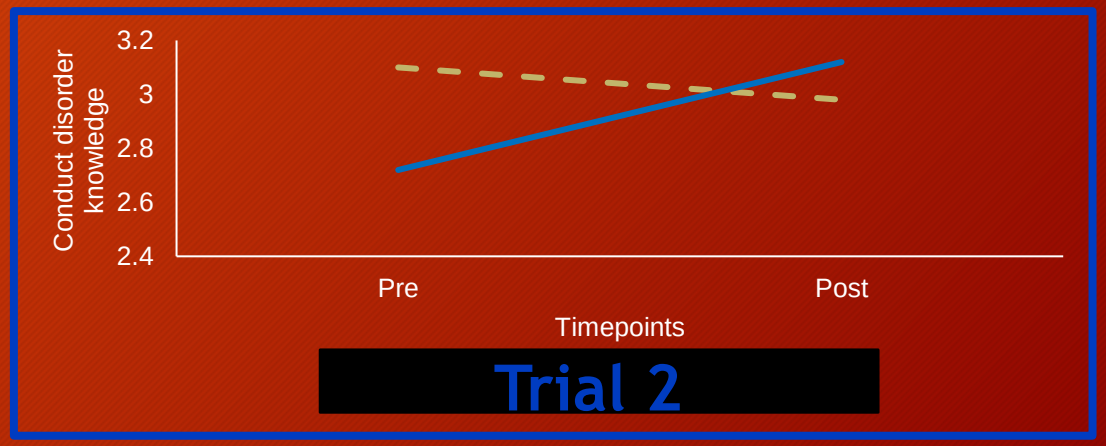

Eating disorder vignette
Total score
4
3
2
1
Pre
Post
Intervention
Control


Eating disorder knowledge
5
4
3
2
1
0
Pre
Post
Timepoints
Control
MindAid Youth


Depression vignette
Total score
6
5
4
3
Pre
Post
Intervention
Control


Depression knowledge
6
5.5
5
4.5
4
Pre
Post
Timepoints
Control
MindAid Youth


Conduct disorder vignette
Total score
5
4
3
2
Pre
Post
Trial 1


Conduct disorder knowledge
3.2
3
2.8
2.6
2.4
Pre
Post
Timepoints
Trial 2

Conclude

MindAid Youth improved younger children's mental health **KNOWLEDGE**

Youth engagement was high in the short term

We need further studies: randomized with improved measures and better retention

Reflect

Young people's experiences of using the product was positive

Consider if there are critical ages for digital intervention for MHL

Future

Need for more interactivity to achieve improvements beyond knowledge-based improvements

A blended approach to MHL interventions may be necessary

Example 2: Wellbeing Augmented Reality Board Game

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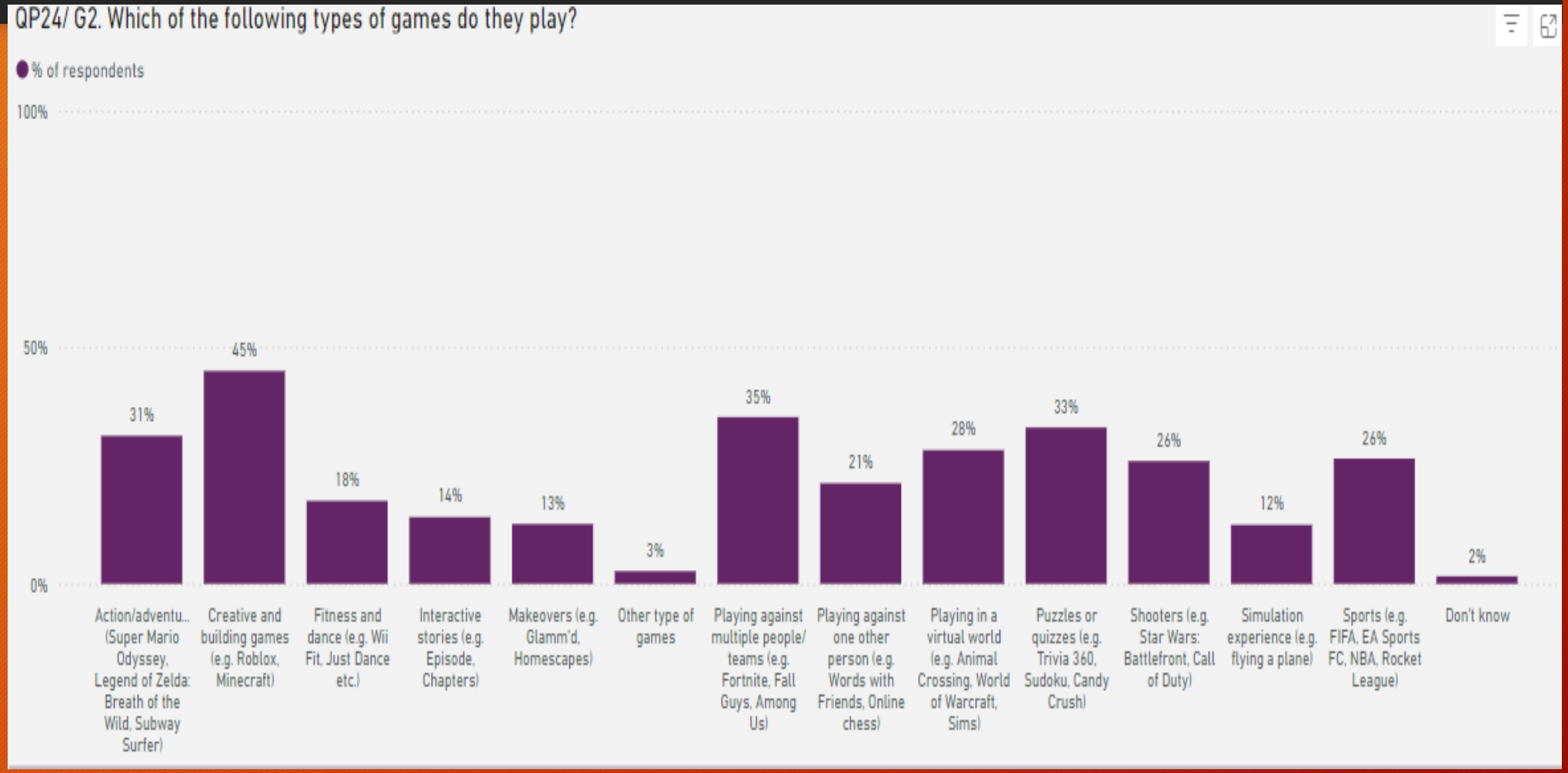
Play Well for Life

Young people are engaged in gaming

Ofcom 2024,



Gaming is surprisingly social…

Complex → Interactive → Stimulating → Promotes engagement → Built in rewards → Wide accessibility → Ease of use.

Serious games might improve adolescent health?

Andrew et al. (2022)

Game evidence from large national Youth MH trials: SPARX

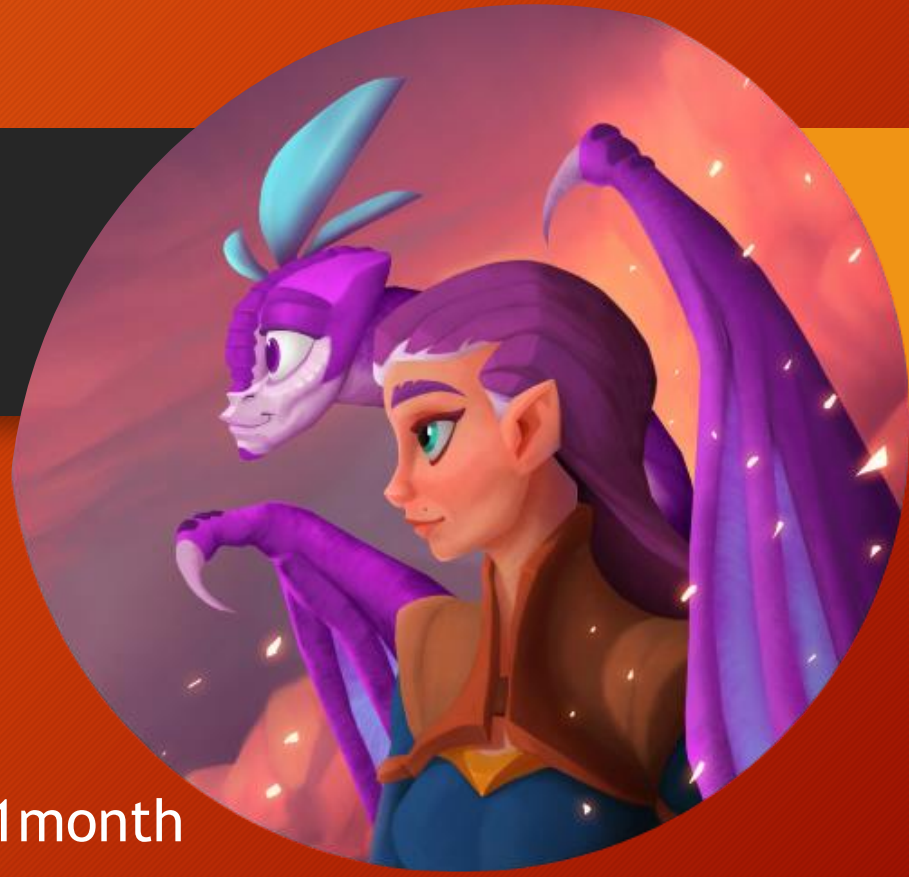
- SPARX is a tried and tested method of e-therapy, providing effective help with feelings of moderate anxiety and depression
- Developed by Sally Merry and team in New Zealand and rolled out nationally free to all CYP
- CBT informed
- Multiple positive outcome trials since 2012

Dragons of Afterlands

Play Well for Life

- An immersive, interactive, multi-player AR board game
- It aims to improve wellbeing in young people, across physical, social, emotional and cognitive realms. 4 Dragon worlds with tasks.
- It can be played in person, remotely or hybrid.
- Co-developed with YP & a multidisciplinary team
- Grounded in evidence-based psychological theory

Dragons of Afterlands Trial

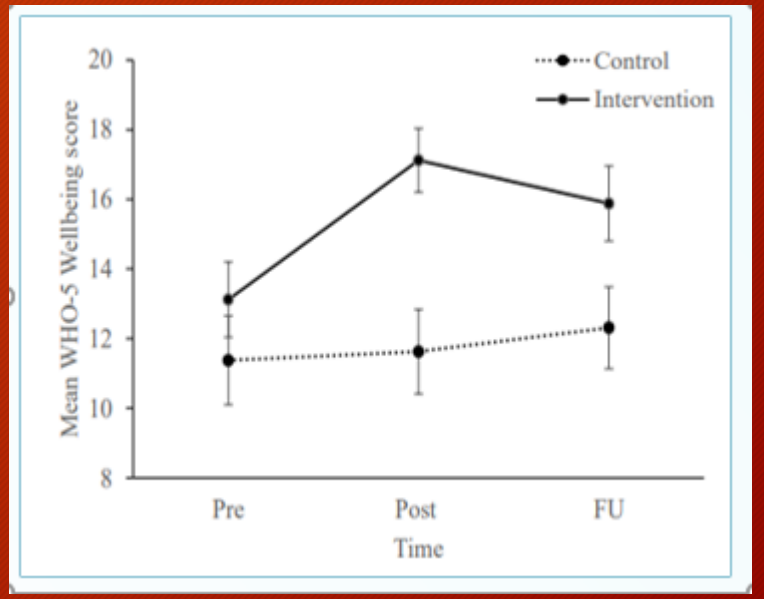


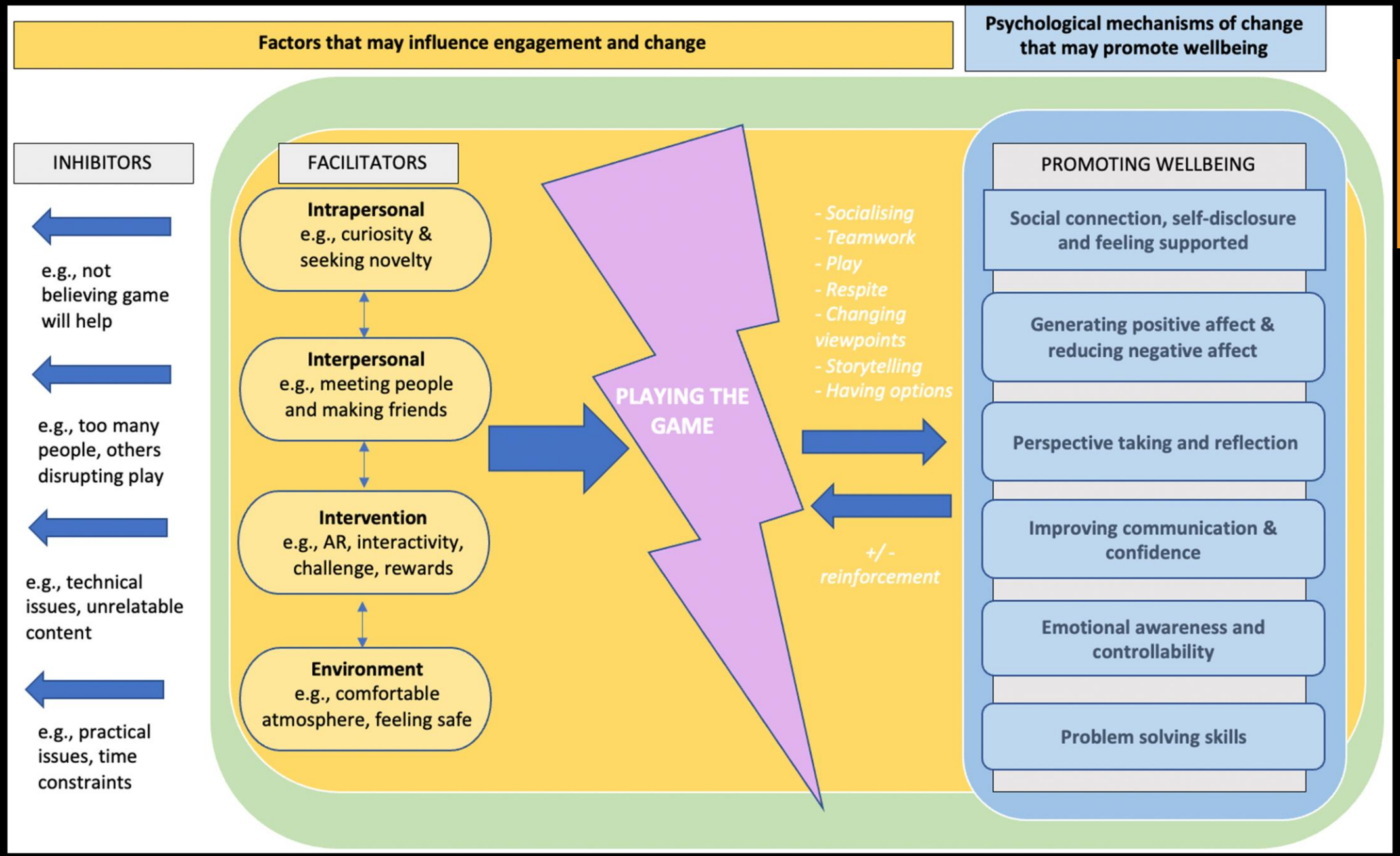
- Two-arm cluster trial over 5 weeks
- 2 schools
- Game play vs PHSE lesson as usual
- N= 71 adolescent girls 11-13yrs
- Wellbeing outcomes compared pre /post /follow-up @1month
- Wellbeing outcomes (WEMWBS and WHO-5)
- Mechanisms of change; emotional awareness, emotional regulation, cognitive awareness, and social problem solving
- Qualitative Grounded Theory analysis on game experience and change from young people

Clark, Rubio, Pote & Campbell (2024)

Results

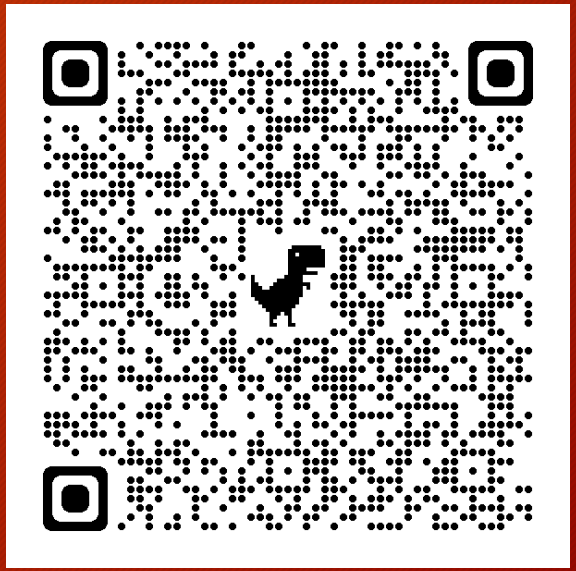
- Wellbeing Improvement: Adolescents playing the AR game reported significantly higher wellbeing scores post-intervention compared to the non-gaming control group on both WEMWBS and WHO-5.
- The effects of the intervention waned over time - declining at follow up
- Gameplay led to improved wellbeing through improvements in emotion awareness and emotion regulation skills




Factors that may influence engagement and change
Psychological mechanisms of change that may promote wellbeing
INHIBITORS
e.g., not believing game will help
e.g., too many people, others disrupting play
e.g., technical issues, unrelatable content
e.g., practical issues, time constraints
FACILITATORS
Intrapersonal
e.g., curiosity & seeking novelty
Interpersonal
e.g., meeting people and making friends
Intervention
e.g., AR, interactivity, challenge, rewards
Environment
e.g., comfortable atmosphere, feeling safe
PLAYING THE GAME
- Socialising
- Teamwork
- Play
- Respite
- Changing viewpoints
- Storytelling
- Having options
+/ - reinforcement
PROMOTING WELLBEING
Social connection, self-disclosure and feeling supported
Generating positive affect & reducing negative affect
Perspective taking and reflection
Improving communication & confidence
Emotional awareness and controllability
Problem solving skills

Reflection and join us:

- What are your immediate reactions to games like DoA?
- What would prevent you from using a DoA within your school / service?
- Would you like to offer feedback to shape DofA V2?



Barriers to EdTech in Schools

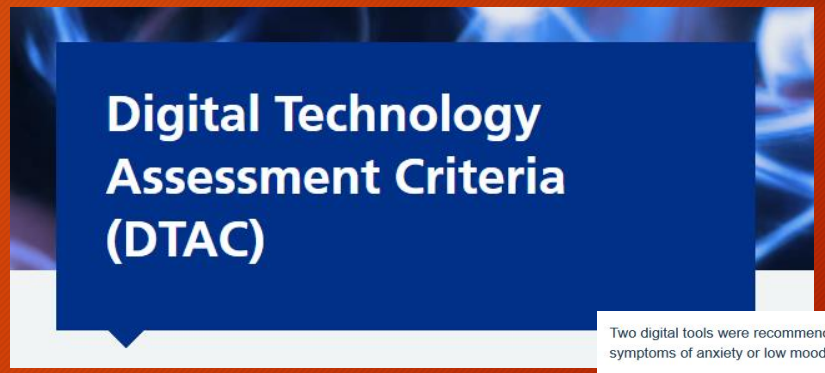
- Limited IT Infrastructure – poor internet connectivity
- Staff digital Capability & Skills
- Staff attitudes
- Parental caution
- Concerns about privacy, safety and data security
- School educational priorities
- Procurement Capabilities

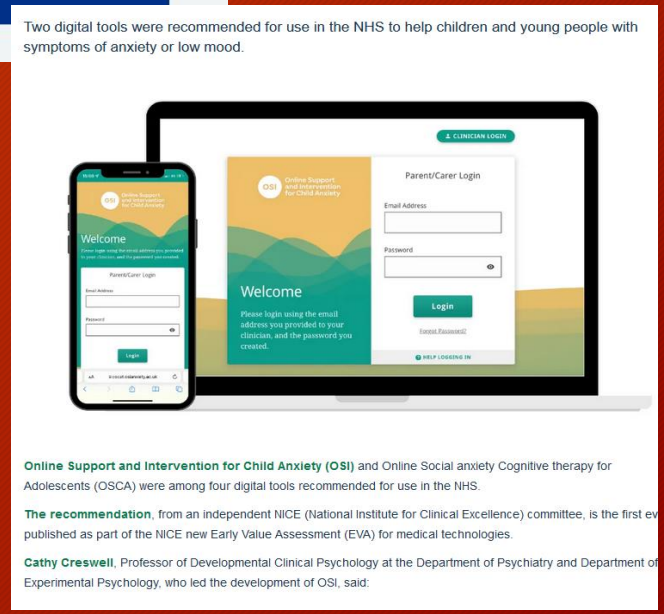
Facilitators to Mental Health EdTech in Schools

- Clear tech strategy in school
- Integrating technology into the curriculum – what is taught, how it is taught
- Shifting teacher – student roles
- AR create immersive learning experiences
- AI personalisation of student experience
- Platforms connecting students and educators (across borders)

Importance of using quality digital products

- NICE approved
- NHS & Social Care evaluations of digital interventions - DTAC
- https://transform.england.nhs.uk/key-tools-and-info/digital-technology-assessment-criteria-dtac/





Two digital tools were recommended for use in the NHS to help children and young people with symptoms of anxiety or low mood.

Online Support and Intervention for Child Anxiety (OSI) and Online Social anxiety Cognitive therapy for Adolescents (OSCA) were among four digital tools recommended for use in the NHS.

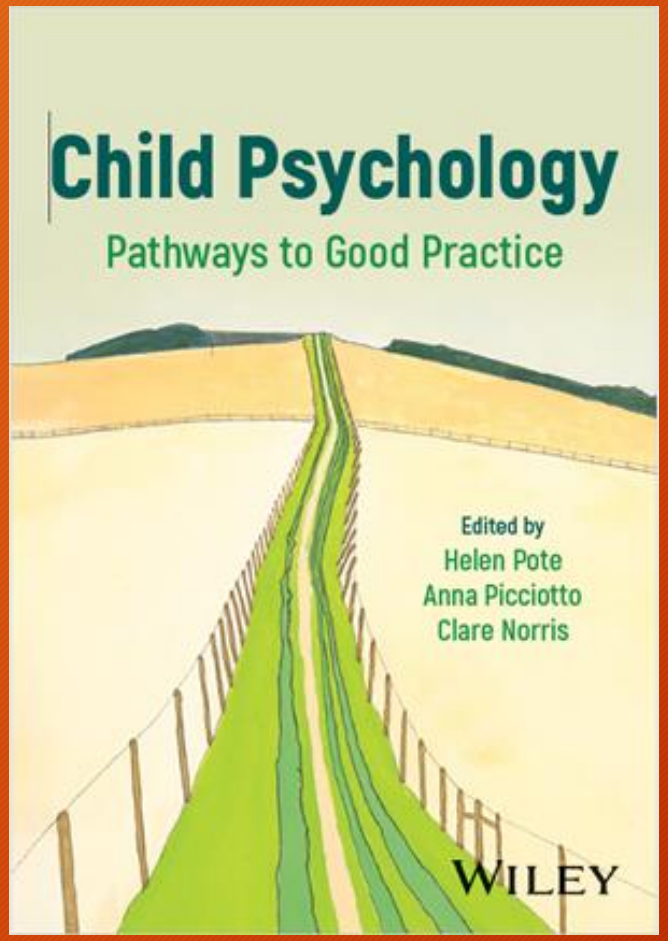
The recommendation, from an independent NICE (National Institute for Clinical Excellence) committee, is the first ev published as part of the NICE new Early Value Assessment (EVA) for medical technologies.

Cathy Creswell, Professor of Developmental Clinical Psychology at the Department of Psychiatry and Department of Experimental Psychology, who led the development of OSI, said:

Importance of training teachers

- In health settings, educating and supporting staff to use and implement digital health interventions has been critical to success
- The same is needed for teachers and education staff
- Interesting approaches in Scotland – Teacher Digital Skills Toolkit - to help teachers evaluate their own digital literacy skills and identify strengths or next steps for developments
- https://education.gov.scot/resources/teacher-digital-skills-toolkit/
- www.digitalhealthskills.com

July 2024



Editors:
Prof Helen Pote,
Dr Anna Picciotto
Dr Clare Norris

Autumn 2024

Digital Psychological Practice – The Basics & Beyond

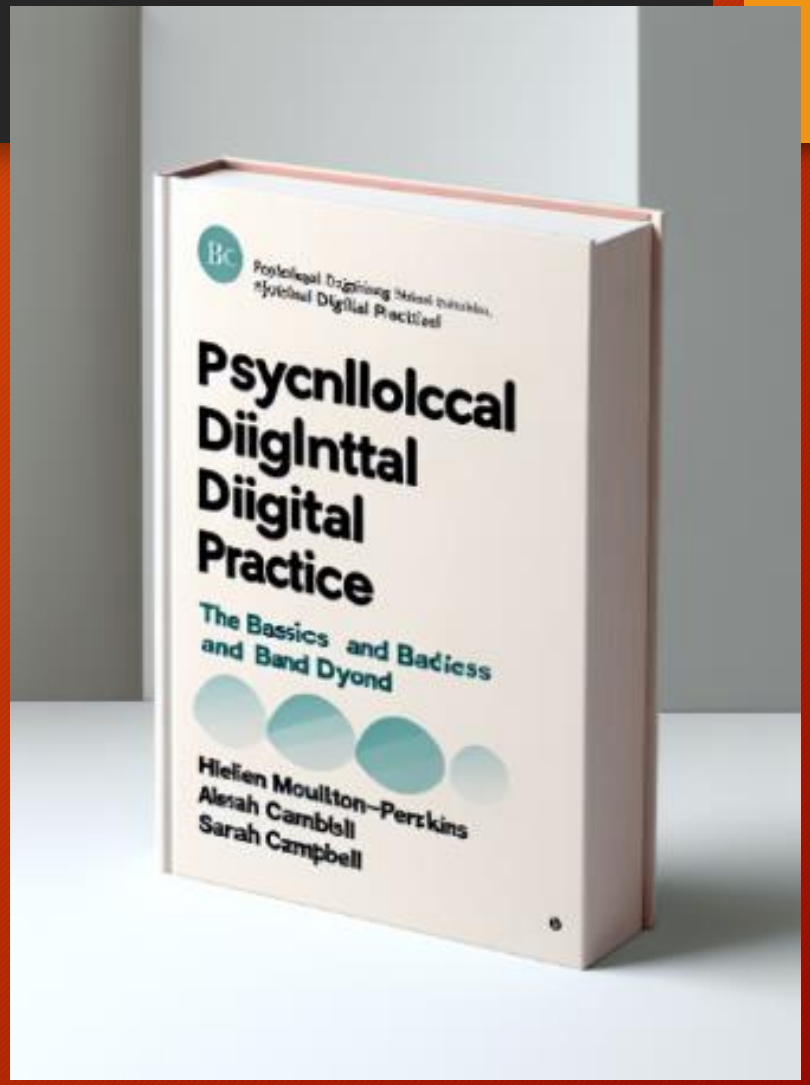
Open University Press.

Editors:

Professor Helen Pote,

Dr Alesia Moulton-Perkins

Dr Sarah Campbell



Thank you

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https://royalholloway.ac.uk/research-and-teaching/departments-and-schools/psychology/research/serns/

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- https://beat.contentfiles.net/media/documents/Beat_Media_Guidelines.pdf