WELL@SCHOOL

Part 5

### *Digital methods to promote mental health*

Erasmus+

Health promotion in primary schools using digital methods

The materials of syllabus 5 are:
➢ Inroductory Power Point to the topic
➢ Four (4) articles
➢ The Quiz
➢ Reflective essay

We focus on:
a) Digital methods for mental health promotion in primary schools
b) Specific features of these digital methods
c) Potential positive outcomes of digital methods
d) Evaluation and impact of digital methods that promote pupils' mental well-being
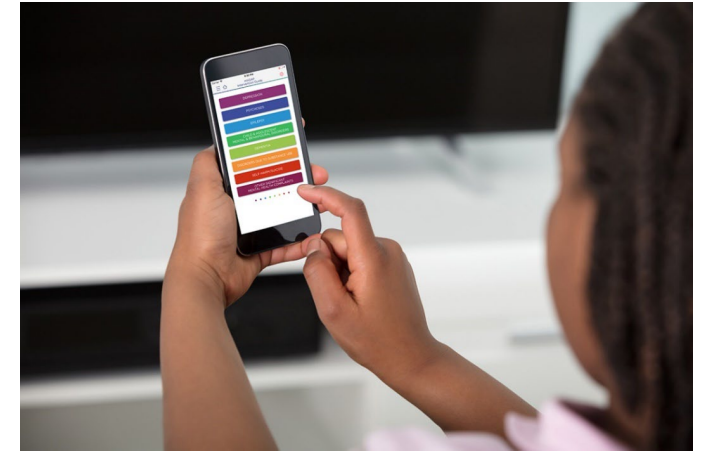
Background

- Digital methods for health promotion (i.e., eHealth, mobile health) have been used since late 1990s (Aungst & Patel 2020)

- There is still lack of digital interventions, using e.g. artificial intelligence (AI), informatics, robotics, social media, or internet-based approaches in schools (O'Reilly et al., 2018)

- Studies highlight the use of online technologies among youth as a promising method to increase access to evidence-based mental health resources (Sakellari et al., 2021)

- School is the place where mental health can be promoted (Sakellari et al., 2021)

- 'The whole school' approach with digital interventions supports positive mental health (O'Reilly et al.,2018)

Digital health promotion

- The Global Strategy on Digital Health focuses on promoting healthy lives and well-being for everyone, everywhere, and at all ages (WHO, 2021)

- Great expansion of health technology from the medical field to wider health care contexts (Aungst & Patel, 2020)

- Digital health has been seen as a cost-effective, diverse method for promoting health (FDA, 2020)

- There is still no consensus on the clarification of concept of "digital health" (i.e. health information technology (HIT), telehealth telemedicine, personalized medicine, and general wellness) (see more on FDA 2020)

Evidence on digital methods for mental health promotion in schools

<u>Sakellari et al. (2021):</u>

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- Studies indicated digital mental health interventions barely exist in primary school settings

- Studies have showed strong evidence for the effectiveness of interventions, especially to support positive gains in students' social-emotional and academic outcomes

- In addition to mental health promotion, the **usual areas of school-based health promotion interventions** are related to physical activity and fitness, nutrition, prevention of substances abuse.
    - Traditional health promotion methods have gained the desired effect
    - New, promising online methods for mental health promotion have been developed

Gigantesco et al. (2019):

- Secondary school students prefer different digital tools and digital learning activities

- Students in different countries prefer slightly different digital tools and methods

- Smartphones are very frequently preferred by secondary school students for sharing and receiving information as well as communication

- Tablets are frequently preferred for better use in classroom environments

- Collaborative games and online videos are considered very beneficial educational activities by students

- Teachers need insight into the pedagogical role of digital tools for education, including health promotion activities

- Teachers need support in producing opportunities for children and implementing digital methods for mental health promotion purposes

Markkanen (2021):

- Children have shown proper adherence to web-based interventions on mental health in schools
- Web-based interventions may promote recognition of mental health issues and help-seeking possibilities for those in need

Anttila et al. (2021)

- Several digital methods may foster positive mental health and mental health literacy
    - gamification, interactive exercises/modules, videos/animations, social media/messaging, and chatbots have all shown to be promising in mental health improvement.

Pros and cons of digital mental health methods in schools

Benefits

- Besides communication, smart phones, social networks, and internet applications provide innovative ways for monitoring the mental health and well-being of children: (FDA 2020, Sakellari et al., 2021)
  - access to information
  - convergence of people, information, technology, and connectivity to improve health care and health outcomes
- Technology as an opportunity in solving problematic situations that traditional face-to-face methods lacks (Anttila et al., 2021)
  - improving well-being, increasing equality, and employing trustworthiness and self-monitoring
- Studies highlight the school environment in that children's mental health should be supported in schools, and schools are the best settings for implementing interventions to promote adolescents' mental health (Markkanen,2021)

Challenges

Expanding prevalence of digital health requires $_{who}$

- "Digital determinants of health"
  - Knowledge on digital solutions of health
  - Engagement of different sectors and stakeholders at all levels
  - Safety concerns: global challenge of digital waste (health data and the environment) must be responsively managed
  - Requires teachers' adherence and constant updating of eHealth solutions
- School staff's close connection and enthusiasm may lead to better outcomes of digital mental health promotion
  - Education and training is needed

What's next?

- There is "room to be creative with universal mental health promotion" (O'Reilly et al., 2018)

- Studies showed promising results, but future research is needed as the evidence of results of methods on digital mental health promotion is still limited (Sakellari et. al., 2021)

WHO's strategy (2020-2025)

- Acknowledge that institutionalization of digital health in the national health system requires a decision and commitment by countries

- Recognize that successful digital health initiatives require an integrated strategy

- Promote the appropriate use of digital technologies for health

- Recognize the urgent need to address the major impediments faced by least-developed countries in implementing digital health technologies

(WHO, 2021)

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