HEALTHY GAMES
- Games as a method to promote health

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CONTENT OF THE PRESENTATION

• What is a health game and gamification?
  • Why to use games or gamification for health promotion?
    • Examples of health games
WHAT IS A HEALTH GAME AND GAMIFICATION?
HEALTH GAMES

• Health games are games that are developed and/or used for different kinds of health related purposes
  - The health related goal is embedded into the game’s design
  - Game elements are designed to influence determinants of the targeted health behavior or the actual behavior at the time of the game play

• Entertaining games (such as active video games) can be called as health games as well
GAMIFICATION

• Game elements can be used also in a non-game context
  = gamification
  • The purpose is to utilize the elements that make games interesting
  • These kinds of elements are for example points, levels and leaderboards

(Deterding et al. 2011; Hamari et al. 2014)
WHY TO USE GAMES OR GAMIFICATION FOR HEALTH PROMOTION?
WHY GAMES?

• Games are fun and playing games is popular
  • Games are played regardless of age, gender and background (Inchley et al. 2016; Mäyrä et al. 2016)
  • The game play of young children (0-8 years) is also increasing and playing games is started at a younger age than before
    • 62% of children aged 0 to 8 years played digital games at least occasionally in Finland (Suoninen 2013)
Percentage of children playing digital games at least occasionally in Finland

(Suoninen 2013)
Percentage of adolescents playing games for 2 or more hours on weekdays (2013/2014)

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<th>11-year-olds (%)</th>
<th>13-year-olds (%)</th>
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<td>Latvia</td>
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(Inchley et al. 2016)
BENEFITS OF GAMES IN HEALTH PROMOTION

- Use of game elements can engage and motivate users
  - Possibility to reach those that are difficult to reach with traditional health promotion methods
  - Possibility to encourage setting and reaching health-related goals
- Digital games can
  - be used to practice skills that are impossible to practice in real life environments
  - support interactive learning and communication
  - be tailored based on individual needs
  - be used to provide individualized feedback

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(Hamari et al. 2014; Parisod et al. 2014a)
Examples of positive outcomes achieved with health games:

- Adherence to medication or other treatment
- Change in attitudes
- Health related knowledge
- Change in symptoms
- Medical visits/school absence
- Cognitive skill development
- Improved communication
- Health behavior change
- Understanding negative effects
- Health-related motivation
- Motor skill development
- Improved balance
- Improved hand-eye coordination
- Perceived competence in sport
- Reaching psychotherapeutic goals
- Self-efficacy
- Self-esteem
- Self-management/skills/self-care
- Decrease in pain and anxiety

EXAMPLES OF HEALTH GAMES
In children (3-18 year-olds) active video games appear to:

- be effective in achieving light to moderate physical activity levels
- increase energy expenditure, heart rate and oxygen consumption

However, active video games cannot be recommended only for meeting daily physical activity recommendations.

Parisod et al. 2014b
ALIEN HEALTH GAME

- **Alien Health** has been used to teach adolescents to learn about nutrition while playing an active video game.

(Johnson-Glenberg et al. 2014)
MOBILE HEALTH GAME
”FUME”

- **FUME** aims to support tobacco-related health literacy among early adolescents
  - i.e. motivation and ability to achieve, understand and use tobacco-related information
- The game includes five minigames with short tasks given to the player
- The feedback provided illustrates the positive sides of tobacco-free life or negative consequences of tobacco use
• Health games have potential in promoting children’s health and they can make health related issues fun for children
• Games offer many possibilities, use imagination!
Thank you for your interest!

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REFERENCES


Serious Game Association. Available from: www.seriousgamesassociation.com