THE FRIENDLY ATTAC GAME AGAINST CYBERBULLYING

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OVERVIEW

- Background
- Development process
- Effects
- Conclusions
CYBERBULLYING

– Peaks in 7th-8th grade (12-14y olds) (Tokunaga, 2010)
– 15% perpetrator, 16% victim (Modecki et al, 2014)
– Bystanders play a role:
  – Passive, joining, reinforcing bully:
    ➣ cyberbullying or its harm
  – Assertive defending, comforting victim, reporting
    ➣ cyberbullying or its harm

➢ Need for evidence-based program to promote positive bystander behaviour and reduce negative bystander behaviour in cyberbullying
**Objective of this step**

**Step 1. Needs assessment**
- Assess health impact, prevalence, risk and protective factors

**Step 2. Change matrices**
- Establish target behavior and most relevant determinants

**Step 3. Change methods**
- Map determinants with change methods and strategies

**Step 4. Design materials**
- Create and pilot test scenario, visuals, instructions, etc.

**Step 5. Implementation plan**
- Decide where, how and when to implement, set up implementation group

**Step 6. Evaluation**
- Conduct process and (cost-) effectiveness evaluation

**Friendly Attac activities**

- Literature review
- Focus groups (n=61)
- Survey youngsters (n=453; n=1750)
- Survey teachers (n=451)
- Survey parents (n=48; n=323)
- Meta-analysis (54 games)
- Survey (n=530)
- Focus groups (n=69)
- Observations (n=8)
- Stakeholder meetings
- Cluster-randomized controlled trial

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DeSmet et al. (2016). Bridging behavior science and gaming theory: using the intervention mapping protocol to design a serious game against cyberbullying. *Computers in Human Behavior, 56*, 337-351
ITERATIVE PROTOTYPE TESTING

Version 1

Version 2
TRANSLATION OF BEHAVIOR CHANGE TECHNIQUES

Step 1: 11 raters
Step 2: 5 raters

How am I doing?
- Instructions on how to perform the behaviour (73%)
- Active learning and guided practice (64%)
- Feedback (73%)

What if I don't do it?
- Info on consequences of not performing the behaviour (64%)
- Info on health-behaviour outcome (9%)
- Follow-up prompts (9%)

What's in it for me?
- Rewards:
  - Individual tailoring (73%)
  - Seen as a consequence of behavior (36%)

What does this say about me?
- Identification as role model (82%)
- Self re-evaluation (18%)
- Info on approval of others (55%)

Sources for clusters: Bartholomew et al., 2011; Dombrowski et al., 2012; Dusseldorp et al., 2014
CLUSTER-RANDOMIZED CONTROLLED TRIAL

Matching of schools

Control condition (eligible participants n=115)
- Non-participating (n=6):
  - Refusers (n=2)
  - Absent (n=4)
- Drop-outs (n=7):
  - Expelled from school (n=1)
  - Absent (n=6)

Random allocation

Intervention condition (eligible participants n=134)
- Non-participating (n=5):
  - Refusers (n=0)
  - Absent (n=5)
- Drop-outs (n=4):
  - Absent (n=4)

Baseline evaluation (T0)
  n=109

Post-(intervention) evaluation (T1)
  n=102

Follow-up evaluation (T2)
  n=96

T0 + 1 week

Intervention

Post-intervention evaluation (T1)
  n=125

Follow-up evaluation (T2)
  n=120

T1 + 4 weeks
PARTICIPANTS AND DESIGN

- Mean age 13.5y in both conditions
- 58.5% girls intervention, 65.3% control condition (p=0.31)
- 0.8% cybervictim intervention, 4.2% control condition (p=0.10)

- Average game play duration: 16.6 minutes
- Participants were only allowed to play the game once
POSITIVE EFFECTS ON SELF-EFFICACY

**High self-efficacy to show positive bystander behaviour**

Baseline T0 | Post-intervention T1 | Follow up T2
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Intervention school | 3.5 | 3.6 |
Control School | 3.4 | 3.5 |

**Low self-efficacy to show positive bystander behaviour**

Baseline T0 | Post-intervention T1 | Follow up T2
---|---|---
Intervention school | 2.5 | 2.6 |
Control School | 2.4 | 2.5 |

F (2, 408) = 4.23 *

F (2, 389) = 4.80 *
POSITIVE EFFECTS ON BEHAVIORAL INTENTION AND SOCIAL SKILLS

Appropriate social skills

Baseline T0 | Post-intervention T1 | Follow up T2
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Intervention school | Control School

F (2, 422) = 4.20 *

Intention to show positive bystander behavior in cyberbullying

Baseline T0 | Post-intervention T1 | Follow up T2
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Intervention school | Control School

F (2, 410) = 3.49 *
POSITIVE EFFECTS ON QUALITY OF LIFE

But **no effects** on:
- Prevalence
- Attitudes
- Behavior
- Negative bystander behavior and its specific determinants (e.g. empathy, behavioral intention)
CONCLUSION AND NEXT STEPS

- Positive effects on self-efficacy: repeated practice in safe environment

- Changing attitudes: include narrative?

- Dynamic tailoring to offer more practice on negative behaviours

- Need for integration in whole-school approach to tackle prevalence
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Thanks to all colleagues of the Friendly Attac team

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