Effectiveness of the Strengthening Families Programme 10-14. Results of a randomized controlled trial in Poland.

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Introduction

1. Between the ages of 11 and 15 years alcohol and other drug use increases markedly amongst young people in Poland.
   - Lifetime cigarettes smoking: from 12% to 59%.
   - Lifetime drunkenness: from 10% to 53%.
   - Lifetime cannabis use: 18% of 15 year olds.

2. The Strengthening Families Program 10–14 (SFP10-14) is a US-developed family-based, universal intervention (authors: Kumpfer, Molgaard) for preventing alcohol and other drug use and problems amongst young people.

3. It was evaluated in two large-scale randomized controlled trials in USA.

4. Several systematic reviews have highlighted the promising results from these trials but also note the question of whether this US-developed intervention will be applicable in other countries and settings.
1. The program is delivered within parent, youth, and family sessions using narrated videos portraying typical youth and parent situations with diverse families.
2. Parents and youth meet in separate groups for the first hour and together during the second hour.
3. Sessions are highly interactive (role-playing, discussions, learning games, and family projects)
4. The program is taught with 8-13 families over seven weeks
5. Four booster sessions can be held 3-12 months after the basic sessions.

Adaptation of the SFP10-14 for Polish socio-cultural conditions

- Initiated by Prof. David Foxcroft from Oxford Brookes University
- In cooperation with Virginia and Lee Molgaard
- Supported by Polish National Bureau for Drug Prevention
- Sponsored by Diageo plc.
- Conducted by the Maratón Foundation
- 2007-2009
The process of adaptation

1. Experts’ opinions about the usefulness of SFP10-14 in Poland – very positive
2. Translation of the English materials (manual and DVD’s)
3. Focus groups with parents and youth – program well received, some ideas for preparation of Polish materials and modifications proposed
4. Training of trainers
5. Production of educational DVD with Polish actors
6. Pilot implementation in 3 local communities – very promising 😊

Conclusion

Polish version of the SFP10-14 is ready for outcome evaluation!
Aims of the Polish evaluation project *

The aim of the trial is to assess the effectiveness of the Polish version of the SFP10-14 when compared with a control group, in a large randomized controlled trial in Poland.

The objectives of this trial are to examine the effectiveness of the SFP10-14 in Polish families of 10–14 year-olds in:

1. promoting positive parenting practices
2. promoting positive parent–child relations
3. reducing alcohol and drug use, and other problem behavior amongst 10–14 year-olds

* Project sponsored by the National Bureau for Drug Prevention

Design

Volunteering communities (n=20)
(team of 3 persons, willing to become SFP10-14 trainers)

Random assignment with concealed allocation

Families from the communities in the intervention arm (n=13) participated in SFP10-14 group sessions

Assessments:

Families from the communities in the control arm (n=7) received:
• information leaflets, opportunity to participate in SFP10-14 in 2012
Recruitment

1. Within communities, families were recruited by community workers (through community agencies, schools and via information leaflets and personal contact)
2. Eligible participants:
   • families with 10–14 year-old children
   • at least one parent agreed to participate (if two children from the same family were involved in the intervention group then both parents were asked to participate)
3. Each family recruited into the trial received an information sheet describing the trial and data collection procedures before giving their written and signed consent to participate.
4. Consent was obtained from parent(s) and, separately, from children.

Outcome measures

1. **Primary outcomes** – frequency of alcohol, cigarette, other drugs use in 12 months, 30 days
2. **Secondary outcomes:**
   • Maternal/paternal General Child Management (GCM + 2 subscales)
   • Mother/father – Child Affective Quality
   • Aggressive and Hostile Behaviors in Interactions (M/F)
   • Intervention-targeted Parenting Behavior scales
   • Index of Aggressive and Destructive Conduct
   • Family aggressiveness
   • Family togetherness
   • Family rituals
   • Maternal/paternal support
   • Parental monitoring
   • Family Life Questionnaire (FLQ + 2 subscales)
3. **Demographic questions** (family size and structure, parental education, work status, disposable income)
Sample size and attrition

20 communities

346 parent-child dyads recruited and assessed

238 families assessed in 2011

215 families included into experimental group

2010-2011 data matched N=185

240 parent-child dyads recruited and assessed

23 families declared not participating in any SFP session

198 families assessed in 2011

221 families included into control group

2010-2011 data matched N=218

Respondents’ characteristics

<table>
<thead>
<tr>
<th></th>
<th>2010 (N=586)</th>
<th>2010/11 (N=403)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth 12 + years old</td>
<td>58%</td>
<td>59%</td>
</tr>
<tr>
<td>Boys</td>
<td>59%</td>
<td>57%</td>
</tr>
<tr>
<td>Living with both parents</td>
<td>68%</td>
<td>72%</td>
</tr>
<tr>
<td>Family with financial problems</td>
<td>42%</td>
<td>42%</td>
</tr>
<tr>
<td>In the past year adolescent has:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smoked cigarettes</td>
<td>8%</td>
<td>7%</td>
</tr>
<tr>
<td>Drunk alcohol</td>
<td>15%</td>
<td>14%</td>
</tr>
<tr>
<td>Used cannabis</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>In the past month adolescent has:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smoked cigarettes</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Drunk alcohol</td>
<td>5%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Group differences

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2010-2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth 12 + years old</td>
<td>E: 61%</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>C: 54%</td>
<td>E: 67%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C: 52%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>p=0.004</td>
</tr>
<tr>
<td>Boys</td>
<td>E: 62%</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>C: 55%</td>
<td>E: 63%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C: 52%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>p=0.031</td>
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</tbody>
</table>
Results

Drug use among pre-adolescents (9-11 years old)

- Cigarettes 12 months: 2% (E baseline), 2% (E follow-up), 0% (C baseline), 0% (C follow-up)
- Cigarettes 30 days: 3% (E baseline), 0% (E follow-up), 0% (C baseline), 0% (C follow-up)
- Alcohol 12 months: 4% (E baseline), 0% (E follow-up), 0% (C baseline), 0% (C follow-up)
- Alcohol 30 days: 6% (E baseline), 0% (E follow-up), 2% (C baseline), 0% (C follow-up)
- Cannabis 12 months: 5% (E baseline), 0% (E follow-up), 2% (C baseline), 0% (C follow-up)
Drug use among adolescents (12-15 years old)

Attempt to assess group x time interaction using dichotomous scales

1. Substance use: „no“ = 0, „yes“ = 1
   - Time2 use – Time1 use = 0 – no difference
   - Time2 use – Time1 use = -1 – positive effect
   - Time2 use – Time1 use = 1 – negative effect

Positive changes among adolescents 12-15 years old
Parent-child relations
(children perception, GLM results)

<table>
<thead>
<tr>
<th></th>
<th>All (N=133)</th>
<th>Younger (N=48)</th>
<th>Older (N=84)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group effect</td>
<td>F=1,376, p=0,150</td>
<td>F=1,567, p=0,137</td>
<td>F=1,161, p=0,317</td>
</tr>
<tr>
<td>Time effect:</td>
<td>F=2,148, p=0,006</td>
<td>F=1,853, p=0,068</td>
<td>F=2,153, p=0,011</td>
</tr>
<tr>
<td>Interaction effect</td>
<td>F=1,620, p=0,060</td>
<td>F=0,591, p=0,886</td>
<td>F=1,673, p=0,063</td>
</tr>
</tbody>
</table>

Significant changes in parent-child relations (adolescents 12-15)
### Parent-child relations and parenting skills

*parents perception, GLM results*

<table>
<thead>
<tr>
<th></th>
<th>All parents (N=166)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group effect</td>
<td>F=2,262, p=0.003</td>
</tr>
<tr>
<td>Time effect:</td>
<td>F=2,508, p=0.001</td>
</tr>
<tr>
<td>Interaction effect (group x time)</td>
<td>F=2,724, p=0.000</td>
</tr>
</tbody>
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#### Significant changes (10)
- Family rituals
- Family togetherness
- Family aggressiveness
- Family Life Questionnaire
  - cohesion
  - support
- Affective quality of relations
- General Child Management
  - control
  - rules concerning drug use

#### Non-significant changes (5)
- Maternal/paternal support
- Aggressive and Hostile Behaviors
- Child monitoring
  - rules concerning child’s behavior
- Intervention Targeted Parenting Behavior
Conclusions

1. Polish adaptation of SFP10-14 is effective in reducing substance use among adolescents
   - The results are visible among older participants (12-15 years old)

2. The results concerning parent-child relations and parenting skills are stronger among parents than children

Questions

1. Why the reduction in substance use is visible only among older adolescents?
   - Pre-adolescents level of use is too low?
   - The SFP10-14 is less effective for younger participants?

2. Why adolescents’ perception of their relations with parents is less affected by the SFP10-14 than parents’ perception?
   - They are too young to answer the questions in a meaningful manner?
   - They are too young to assess their interpersonal relationships?
   - The SFP10-14 is less effective for younger participants?
Limitations

1. Sample attrition
   • 25% of the sample lost between 2010-2011
   • 8% did not matched in 2010 and 2011 surveys

2. Data attrition
   • In multivariable analysis, up to 60% cases are lost
   • The need for missing data imputation

3. Measure of primary outcomes do not allow parametric tests use

Thank you!