Foundations
What Works Centre for Children & Families

Last reviewed: February 2018

Intervention website: www.extension.iastate.edu/sfp10-14

GUIDEBOOK INTERVENTION INFORMATION SHEET

Strengthening Families 10-14

Please note that in the 'Intervention summary' table below, 'child age', 'level of need', and 'race and ethnicities' information is **as evaluated in studies**. Information in other fields describes the intervention as **offered/supported by the intervention provider**.

Intervention summary	
Description	Strengthening Families 10-14 (SF 10-14) is for any family with a child between 10 and 14 years old. It is delivered by three trained facilitators (one lead practitioner and two co-practitioners) to groups of between 8 and 12 families through seven weekly sessions lasting two hours each.
Evidence rating	3
Cost rating	1
Child outcomes	• Supporting children's mental health and wellbeing - Improved emotional wellbeing. • Preventing crime, violence and antisocial behaviour - Improved behaviour - Reduced antisocial behaviour. • Preventing risky sexual behaviour and teen pregnancy - Reduced number of sexual partners - Reduced risky sexual behaviour. • Preventing substance misuse - Reduced alcohol use - Reduced substance misuse. • Enhancing school achievement and employment - Improved school achievement.
Child age (population characteristic)	11 to 12 years

Intervention summary	
Level of need (population characteristic)	Targeted Selected
Race and ethnicities (population characteristic)	White
Type (model characteristic)	Group
Setting (model characteristic)	• Secondary school • Community centres.
Workforce (model characteristic)	Three trained facilitators
UK available?	No
UK tested?	Yes

Model description

Strengthening Families 10-14 (SF 10-14) is for any family with a young person aged between 10 and 14 years. The parents and young person attend seven two-hour sessions where they learn how to communicate effectively, agree appropriate limits, and resist peer pressure to use drugs and alcohol.

SFP 10-14 is delivered by three practitioners to groups of eight to 12 parents. Because parents attend with their children, up to 36 people may be present in a group session. Ideally, two practitioners co-deliver the parenting sessions and one practitioner delivers the young person sessions.

During the first hour, the parents and young people attend separate skill-building groups. These sessions make use of an instructional video that provides the basis for a group discussion and practice activities.

The parents and child then come together for the second hour for supervised family activities. The topics for each session are provided in Table 1.

Table 1: SF 10-14 topics for weeks 1 to 7

	Parent sessions	Youth sessions	Family sessions
1.	Using love and limits	Having goals and dreams	Supporting goals and dreams
2.	Making house rules	Appreciating parents	Appreciating family members
3.	Encouraging good behaviour	Dealing with stress	Using family meetings
4.	Using consequences	Following rules	Understanding family values
5.	Building bridges	Handling peer pressure 1	Building family communication
6.	Protecting against substance misuse	Handling peer pressure 2	Reaching our goals
7.	Using community resources	Reaching out to others	Putting it all together and graduating

Youth sessions focus on setting and strengthening goals, dealing with stress and strong emotions, communication skills, increasing responsible behaviour and improving skills to deal with peer pressure.

Parents discuss the importance of both nurturing their youth while, at the same time, setting rules, monitoring compliance, and applying appropriate discipline. Topics include: making house rules, encouraging good behaviour, using consequences, building bridges, and protecting against alcohol and substance misuse.

Between 6 and 12 months after the seventh session, the parents and young people return for four more booster sessions that occur at regular intervals. During these sessions, parents discuss methods for handling parental stress, communicating when partners don't agree, and reinforcing their earlier skills training. Young people focus on making good friends, handling conflict, and reinforcing skills learned in the first seven sessions. The topics for the booster sessions are provided in Table 2.

Table 2: SF 10-14 topics for booster sessions

	Parent sessions	Youth sessions	Family sessions
1.	Handling stress	Handling conflict	Understanding each other

2.	Communicating when you don't agree	Making good friends	Listing to each other
3.	Reviewing love and limit-settings skills	Getting the message across	Understanding family rules
4.	Reviewing how to help with peer pressure	Practising skills	Using family strengths

Target population

Age of child	10 to 14 years
Target population	This intervention targets the general population of school-aged children

Please note that the information in this section on target population is as **offered/supported by the intervention provider**.

Theory of change

Why		Who	How		What	
Science-based assumption	**Science-based assumption**	**Science-based assumption**	**Intervention**	**Short-term outcomes**	**Medium-term outcomes**	**Long-term outcomes**
Increasing levels of autonomy in adolescence increases the risks associated with substance misuse and antisocial behaviour.	Effective parenting practices and positive family relationships can decrease the risks associated with the adolescent years.	All families with a young person can benefit from knowledge about the risks associated with adolescence autonomy and substance misuse and strategies for managing these risks.	Parents and young people learn: • How to communicate effectively • Agree age-appropriate autonomy for the young person • Agree age-appropriate limits • Manage family conflict • Enforce age-appropriate consequences • Manage and resist negative peer pressure.	• The relationship between the parents and the young person improves • Family conflict decreases • Parents provide age-appropriate autonomy and limits.	• The young person is at less risk of behavioural problems • The young person makes responsible decisions and can better manage their autonomy.	• The young person is at reduced risk of substance misuse and antisocial behaviour problems • The young person is better prepared to make a successful transition into adulthood.

Implementation requirements

Who is eligible?	All parents with a young person between 10 and 14 years.
How is it delivered?	Strengthening Families (10-14) is delivered in seven sessions of two hours' duration each by three trained practitioners (one lead practitioner and two co-practitioners), to groups of between 8 and 12 families.
What happens during the intervention?	• During the first hour, the parents and children attend separate sessions on a related family skill (e.g. family communication or peer-refusal skills for substance misuse). • These sessions make use of an instructional video that provides the basis for a group discussion and practice activities. • During the second hour, the parents and children are reunited to review and practise skills and competencies together.
Who can deliver it?	The practitioner who delivers SF 10 – 14 typically has a qualification and experience in education or youth work.
What are the training requirements?	The practitioners have three full days of intervention training. Booster training of practitioners is recommended.
How are practitioners supervised?	It is recommended that practitioners are supervised by one host-agency supervisor
What are the systems for maintaining fidelity?	Intervention fidelity is maintained through the following processes: • A certification training where the research is presented, activities are modelled, and practice sessions are encouraged • A comprehensive manual with detailed lesson plans • Fidelity observations throughout the seven weeks of the intervention.
Is there a licensing requirement?	No
***Contact details**	Contact person: Cathy Hockaday Organisation: Strengthening Families 10-14 Email address: hockaday@iastate.edu Website: www.extension.iastate.edu/sfp10-14 *Please note that this information may not be up to date. In this case, please visit the listed intervention website for up to date contact details.

Evidence summary

SF 10-14's most rigorous evidence comes from a single RCT conducted in the United States consistent with Foundations' Level 3 evidence strength criteria.

This study observed a wide variety of benefits for SF 10-14 parents and children compared to families who did not attend the intervention, including a number of long-term benefits.

- Children in the intervention group showed statistically significant reductions in alcohol initiation behaviours at 1.5 and 2.5 years post-baseline.
- At 4 years post-intervention, they exhibited fewer aggressive and hostile behaviours, as well as less aggressive and destructive conduct.
- At 6 years post-intervention, statistically significant improvements in academic success and school engagement, as well as reductions in student substance related risk were evident. Reduced polysubstance use and a reduced rate of increase in internalising symptoms were also reported for the intervention group. Studies also reported reductions in substance use during sex, the number of sexual partners in the past year, and sexually transmitted diseases for the intervention group.

SF 10-14 can be described as evidence-based: it has evidence from at least one rigorously conducted RCT or QED demonstrating a statistically significant positive impact on at least one child outcome.

While this intervention has robust evidence from the United States suggesting positive impact, the findings from recent European trials have been more equivocal, showing less positive results. However, these more recent trials have not been as methodologically robust as the US evidence, therefore we cannot draw strong conclusions from them. Please see reference list for details of all trials identified. The study contributing towards the rating tested the 'Iowa Strengthening Families Program', which Strengthening Families 10-14 was formerly known as. It is based on the same seven-session model.

Child outcomes			
Outcome	**Improvement index**	**Interpretation**	**Study**
Improved academic success	Not reported	Improvement on a 9-point scale of grades received at school (child and parent report) – long term, 6 years later	1c
Reduced internalising symptoms	Not reported	Improvement on the Anxiety-Depression index from the Child Behaviour Checklist (self-report) – long term, between 1 and 6 years later	1d

Reduced substance use during sex	+2	5.6-percentage point reduction in proportion of participants who have used substances during sex (measured using a self-report measure) – long term, 10 years later	1e
Reduced number of sexual partners in past year	+1	7.3-percentage point reduction in proportion of participants who have had more than one sexual partner in the past year (measured using a self-report measure) – long term, 10 years later	1e
Reduced sexually transmitted diseases	+15	2.5-percentage point reduction in proportion of participants who have had sexually transmitted diseases (measured using a self-report measure) – long term, 10 years later	1e
Reduced aggression and hostility	+13	0.48-point improvement on the Observer Index of Aggressive and Hostile Behavior (consists of subscales from the Iowa Family Interaction Rating Scales - expert observation of behaviour) – long term, 4 years later	1b
Reduced aggressive and destructive conduct	+14	0.22-point improvement on the Adolescent Report of Aggressive and Hostile Behaviours in Interactions (self-report) – long term, 4 years later	lb
Reduced alcohol initiation	+10 +15	0.23-point improvement on the alcohol initiation index (self-report) – long term, 1 year later 0.65-point improvement on the alcohol initiation index (self-report) – long term, 2 years later	1a
Reduced monthly polysubstance use	Not reported	Improvement on a polysubstance use scale of past month use of alcohol, cigarettes, and other substances – long term, between 1 and 6 years later	1d

Search and review

	Number of studies
Identified in search	10
Studies reviewed	1
Meeting the L2 threshold	0
Meeting the L3 threshold	1
Contributing to the L4 threshold	0
Ineligible	9

Individual study summary: Study 1

Study 1	
Study design	RCT
Country	United States
Sample characteristics	This study involved a sample of 446 families of sixth-graders (mean age 11.3 years) from 22 rural school districts in the United States
Race, ethnicities, and nationalities	98% White
Population risk factors	None reported
Timing	• Baseline • Post-intervention • 1.5-year post-baseline • 2.5-year post-baseline • 4-year post-baseline • 6-year post-baseline.

Study 1	
Child outcomes	• Reduced alcohol initiation behaviours (Child report) • Reduced aggression and hostility (Observer report) • Reduced aggressive and destructive conduct (Child report) • Improved academic success (Parent and child report) • Improved school engagement (Child report) • Reduced student substance related risk (Child report) • Reduced rate of increase in internalising symptoms (Child report) • Reduced monthly polysubstance use (Child report) • Reduced substance use during sex (Child report) • Reduced number of sexual partners in past year (Child report) • Reduced sexually transmitted diseases (Child report).
Other outcomes	None
Study Rating	3
Citations	**Study 1a:** Spoth, R., Redmond, C. & Lepper, H. (1999) Alcohol initiation outcomes of universal family-focused preventive interventions: One- and two-year follow-ups of a controlled study. *Journal of Studies on Alcohol*. 13, 103–111. **Study 1b:** Spoth, R. L., Redmond, C. & Shin, C. (2000) Reducing adolescents' aggressive and hostile behaviors. *Archives of Pediatric and Adolescent Medicine*. 154, 1248–1257. **Study 1c:** Spoth, R., Randall, G. K. & Shin, C. (2008) Increasing school success through partnership-based family competency training: Experimental study of long-term outcomes. *School Psychology Quarterly*. 23 (1), 70. **Study 1d:** Trudeau, L., Spoth, R., Randall, G. K. & Azevedo, K. (2007) Longitudinal effects of a universal family-focused intervention on growth patterns of adolescent internalizing symptoms and polysubstance use: Gender comparisons. *Journal of Youth and Adolescence*. 36, 725–740. **Study 1e:** Spoth, R., Clair, S. & Trudeau, L. (2014) Universal family-focused intervention with young adolescents: Effects on health-risking sexual behaviors and STDs among young adults. *Prevention Science*. 15 (Supplement 1), S47–S58.

Brief summary

Population characteristics

This study involved a sample of 446 families of sixth-graders (mean age 11.3 years) from 22 rural school districts in the United States. Schools were selected on the basis of eligibility for school lunch programmes (15% or more district families eligible for free or reduced-cost lunches) and community size (populations 8,500 or more).

48% participants were boys. Most families were dual-parent households (86%), and the majority of parents were White (98%). Parents' average ages were 37.2 years for mothers and 39.4 years for fathers. All families of sixth-grade students in selected rural schools were eligible.

Study design

The study used a three-armed cluster randomised controlled trial design to evaluate the intervention's effectiveness. Stratified randomisation occurred via blocking based on school size and proportion of lower-income students.

- 238 participants (11 schools) were randomly assigned to the intervention group and received the Strengthening Families intervention.
- 208 participants (11 schools) were assigned to a minimal contact control group.
- 221 participants were also enrolled into a second intervention group (Preparing for the Drug Free Years), though adolescents in this condition were not a focus of this study.

The intervention and control groups were equivalent at baseline across all outcome measures, in addition to individual and school-level variables.

Measurement

Measurement took place at baseline, post-intervention, 1 year post-intervention, 2 years post-intervention, 4 years post-baseline, 6 years post-intervention, and 10 years post-intervention.

At post-intervention, 1 year post-intervention, and 2 years post-intervention (Study 1a)

- **Child report** measures included Alcohol Initiation Index (AII).

At 4 years post-baseline (Study 1b)

- **Child report** measures included selected items from the National Youth Survey.
- **Child and parent report** measures included the Iowa Youth and Family Rating Scales on Perceptions of Hostility/Warmth.
- **Observer report** measures included the Iowa Family Interaction Rating Scales.

At 6 years post-intervention (Study 1c, 1d, 1e)

- **Child report** measures included three indicators created for study 1c to assess affective, cognitive, and behavioural components of school engagement. Three indicators were also created for study 1c to assess student substance-related risk. Study 1d utilised Child Behavior Checklist—Youth Self Report (CBCL-YSR) Anxiety Depression index (Child

report) as well as child report on past month use of alcohol, cigarettes, smokeless tobacco, marijuana, inhalants, and other illicit drugs. Study 1e included a single-item measure on number of sexual partners in the past year, a single-item measure on condom use in the past year, a two-item measure on substance use and sex, and a single-item measure on lifetime sexually transmitted disease.

- **Child and parent report** measures included a 9-point scale on school grades (study 1c).

Study retention

Post-intervention (Study 1a)

84% (374) families participated in the post-intervention assessment, representing 79% (189) of intervention participants and 89% (185) of control participants.

1.5-year post-baseline (Study 1a)

85% (317) families participated in the 1-year post-intervention assessment, representing 85% (161) of intervention participants and 84% (156) of control participants.

2.5-year post-baseline (Study 1a)

93% (294) families participated in the 2-year post-intervention assessment, representing 95% (153) of intervention participants and 90% (141) of control participants.

4-year post-baseline (Study 1b)

68% (303) families participated in the 4-year post-intervention assessment, representing 63.9% (152) of intervention participants and 72.6% (151) of control participants.

6-year post-baseline (Study 1c, 1d, 1e)

69% (308) families participated in the 6-year post-intervention assessment.

Results

Data-analytic strategy

An intent-to-treat approach was applied. Mixed model analysis of covariance (ANCOVA) was used to assess the intervention's effects on the outcomes in study 1a, while study 1b used multilevel ANCOVA. Study 1c and 1d used structural equation modeling. Study 1e utilised latent growth curve models and structural equation modeling to assess intervention effects.

Findings

Children in the intervention group showed statistically significant reductions in alcohol initiation behaviours at 1.5 and 2.5 years post-baseline. At 4 years post-intervention, they exhibited fewer aggressive and hostile behaviours, as well as less aggressive and destructive conduct.

At 6 years post-intervention, statistically significant improvements in academic success and school engagement, as well as reductions in student substance related risk were evident. Reduced

polysubstance use and a reduced rate of increase in internalising symptoms were also reported for the intervention group. Studies also reported reductions in substance use during sex, the number of sexual partners in the past year, and sexually transmitted diseases for the intervention group.

Study 1: Outcomes table

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Child outcomes					
Alcohol initiation behaviours	Alcohol Initiation Index (AII) (Child report)	d = .26	Yes	316	1.5-year post-baseline
Alcohol initiation behaviours	Alcohol Initiation Index (AII) (Child report)	d = .39	Yes	294	2.5-year post-baseline
Aggressive and hostile behaviours	Iowa Family Interaction Rating Scales (Observer report)	d = 0.33	Yes	303	4-year post-baseline
Aggressive and hostile behaviours in parent-adolescent interactions	Iowa Youth and Family Rating Scales on Perceptions of Hostility/Warmth (Child and parent report)	d = 0.08	No	303	4-year post-baseline
Aggressive and destructive conduct	Selected items from the National Youth Survey (Child report)	d = 0.35	Yes	303	4-year post-baseline
Academic success	9-point scale on school grades (Child and parent report)	Not reported	Yes	308	6 years post-baseline

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
School engagement	Three indicators assessing affective, cognitive, and behavioural components of school engagement (Child report)	Not reported	Yes	308	6 years post-baseline
Student substance related risk	Three indicators assessing student substance-related risk (Child report)	Not reported	Yes	308	6 years post-baseline
Internalising symptoms	Child Behavior Checklist—Youth Self Report (CBCL-YSR) Anxiety Depression index (Child report)	Not reported	No, but the study reported a reduced rate of increase in internalising symptoms for the intervention group	308	6 years post-baseline
Polysubstance use	Child report on past month use of alcohol, cigarettes, smokeless tobacco, marijuana, inhalants, and other illicit drugs	Not reported	Yes	308	6 years post-baseline
Young Adult Number of Sexual Partners in the Past Year	Single item measure on number of sexual partners in the past year	Not reported	Yes	Not reported	6 years post-baseline

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Young Adult Condom Use in Past Year	Single item measure on condom use in the past year	Not reported	No	Not reported	6 years post-baseline
Young Adult Substance Use during Sex	Two item measure on substance use and sex	Not reported	Yes	Not reported	6 years post-baseline
Young Adult Lifetime Sexually Transmitted Disease	Single item measure on lifetime sexually transmitted disease	Not reported	Yes	Not reported	6 years post-baseline
Parent outcomes					
Parenting competency	13 self-report questionnaire items	Not reported	Yes	308	6 years post-baseline

Other studies

The following studies were identified for this intervention but did not count towards the intervention's overall evidence rating. An intervention receives the same rating as its most robust study or studies.

Allen, D., Coombes, L. & Foxcroft, D. R. (2006) Cultural accommodation of the strengthening families programme 10–14: UK Phase I study. *Health Education Research*. 22 (4), 547–560.

Baldus, C., Thomsen, M., Sack, P. M., et al. (2016) Evaluation of a German version of the Strengthening Families Programme 10-14: A randomised controlled trial. *European Journal of Public Health*. 26 (6), 953–959.

Coatsworth, J. D., Duncan, L. G., Nix, R. L., Greenberg, M. G., Gayles, J. G., Bamberger, ..., Demi, M. A. (2015) Integrating mindfulness with parent training: Effects of the Mindfulness-enhanced Strengthening Families Program. *Developmental Psychology*. 51 (1), 26–35.

Coombes, L., Allen, D. & Foxcroft, D. (2012) An exploratory pilot study of the Strengthening Families Programme 10-14 (UK). *Drugs: Education, Prevention and Policy*. 19 (5), 387–396.

Coombes, L., Allen, D., Marsh, M. & Foxcroft, D. (2009) The Strengthening Families Programme (SFP) 10-14 and substance misuse in Barnsley: The perspectives of facilitators and families. *Child Abuse Review*. 18 (1), 41–59.

Crowley, D. M., Jones, D. E., Coffman, D. L. & Greenberg, M. T. (2014) Can we build an efficient response to the prescription drug abuse epidemic? Assessing the cost-effectiveness of universal prevention in the PROSPER trial. *Preventive Medicine*. 62, 71–77.

Foxcroft, D.R ., Callen, H., Davies, E. L. & Okulicz-Kozaryn, K. (2016) Effectiveness of the Strengthening Families Programme 10–14 in Poland: Cluster randomized controlled trial. *The European Journal of Public Health*. 27 (3), 494–500.

Ragan, D. T. (2016) Peer beliefs and smoking in adolescence: A longitudinal social network analysis. *The American Journal of Drug and Alcohol Abuse*. 42 (2), 222–230.

Riesch, S. K., Brown, R. L., Anderson, L. S., Wang, K., Canty-Mitchell, J. & Johnson, D. L. (2012) Strengthening Families Program (10-14) effects on the family environment. *Western Journal of Nursing Research*. 34 (3), 340–376.

Rulison, K. L., Feinberg, M. E., Gest, S. D. & Osgood, D. W. (2015) Diffusion of intervention effects: The impact of a family-based substance use prevention program on friends of participants. *Journal of Adolescent Health*. 57 (4), 433–440.

Russell, M. A., Schlomer, G. L., Cleveland, H. H., Feinberg, M. E., Greenberg, M. T. & Spoth, R. L., et al. (2017) PROSPER intervention effects on adolescents' alcohol misuse vary by GABRA2. *Prevention Science*. 19 (1), 27–37.

Schlomer, G. L., Cleveland, H. H., Vandenbergh, D. J., Feinberg, M. E., Neiderhiser, J. M., Greenberg, M. T., et al. (2015) Developmental differences in early adolescent aggression: A gene × environment × intervention analysis. *Journal of Youth and Adolescence*. 44 (3), 581–597.

Siennick, S. E., Widdowson, A. O., Woessner, M. K., Feinberg, M. E. & Spoth, R. L. (2017) Risk factors for substance use and adolescents' symptoms of depression. *Journal of Adolescent Health*. 60 (1), 50–56.

Spoth, R. L., Redmond, C., Trudeau, L. & Shin, C. (2002) Longitudinal substance initiation outcomes for a universal preventive intervention combining family and school programs. *Psychology of Addictive Behaviors*. 2, 129–134.

Spoth, R., Randall, G. K., Shin, C. & Redmond, C. (2005) Randomized study of combined universal family and school preventive interventions: Patterns of long-term effects on initiation, regular use, and weekly drunkenness. *Psychology of Addictive Behaviors*. 19 (4), 372.

Spoth, R., Redmond, C., Shin, C., Greenberg, M., Clair, S. & Feinberg, M. (2007) Substance-use outcomes at 18 months past baseline: The PROSPER community–university partnership trial. *American Journal of Preventive Medicine*. 32 (5), 395–402.

Spoth, R., Trudeau, L., Redmond, C., Shin, C., Greenberg, M. T., Feinberg, M. E. & Hyun, G. H. (2015) PROSPER partnership delivery system: Effects on adolescent conduct problem behavior outcomes through 6.5 years past baseline. Journal of Adolescence. 45, 44–55.

Spoth, R., Redmond, C., Shin, C., Greenberg, M. T., Feinberg, M. E. & Trudeau, L. (2017) PROSPER delivery of universal preventive interventions with young adolescents: Long-term effects on emerging adult substance misuse and associated risk behaviors. *Psychological Medicine*. 47 (13), 2246–2259.

Trudeau, L., Spoth, R., Mason, W. A., Randall, G. K., Redmond, C. & Schainker, L. M. (2016) Effects of adolescent universal substance misuse preventive interventions on young adult depression symptoms: Mediational modeling. *Journal of Abnormal Child Psychology*. 44 (2), 257–268.

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Note on provider involvement: This provider has agreed to Foundations' terms of reference (or the Early Intervention Foundation's terms of reference), and the assessment has been conducted and published with the full cooperation of the intervention provider.