Key study

Doing it together strengthens families and helps prevent substance use

Where school-based prevention programmes disappoint, family interventions have a better record, and some say the one with the best record of all is the US Strengthening Families Programme now being tried in Britain. Where does it come from, and what is the evidence?

Drug and Alcohol Findings, phone/fax 020 8888 6277, e-mail da.findings@blueyonder.co.uk

The Strengthening Families Programme[i] is one of the very few whose substance use prevention credentials have survived rigorous inspection by independent scholars, in this case a team from Britain's Oxford Brookes University who singled it out as the most promising "effective intervention over the longer-term for the primary prevention of alcohol misuse".[1] Their judgement carries considerable weight because it was based on a Cochrane review, a scrupulously scientific process for assessing evaluation research.

Strengthening Families' benefits potentially extend to youth crime and anti-social behaviour, educational achievement, and child welfare, consistent with advice from Britain's national drug prevention service that family interventions should not deal with drugs in isolation.[2] Though the programme and most of the research is US-based, at least one British centre is using it to gain these broader benefits (see *The British experience*) and at another centre an evaluation is under way (see *Accolade from Cochrane review*).

[i]Apologies to our US readers for adopting the English spelling of 'programme'.

Roots: drug using families and primary school children

The study which caught the Cochrane reviewers' eyes involved a version of the programme designed to be universally applicable to the families of secondary school children and tested on mainly rural, white, intact families.[3 4] However, its origins were in an attempt to help drug using parents do the best for their primary-school age children.[5]

Patients at a methadone clinic in Salt Lake City provided the impetus. By improving their parenting, they wanted to help their children avoid replicating their own fates and to achieve happiness and success. In response Karol Kumpfer, a developmental psychologist at the University of Utah, created an intervention to reduce the chances that the 6–10-year-old children of problem drug users would themselves later develop drug problems. She planned to achieve this by "improving parent-child relationships ... We try to change the family dynamics, to create a more democratic family where they actually have family meetings, talk together, and plan activities together."[6]

Careful construction

Work started in 1983 with a review of research on how family processes might lead to or protect against later drug problems, and of existing family programmes which might divert this trajectory.

Based largely on the Utah team's own research, a careful unpicking of how the drug problems of the parent(s) affect their children established that a state of disorganised stress in the household often results in a lack of consistent and responsible parenting.[7] Parents spend relatively little time with their children, particularly 'quality time' in rewarding joint activities. Stigma and fear of exposure lead to the social isolation of the family and sometimes directly of the child. To their peers, children from these families can seem 'strange', unable to engage in the normal give and take of social interaction or to share their homes and their families with their friends.[ii]

The result is an impoverished social environment which lacks alternative adult supports. Family dysfunction takes its toll on the child in the form of emotional stress, low self-esteem, under-achievement at school, conflict at home, and avoidance of intimate relationships.

To meet these needs elements were blended and adapted from existing approaches.[8] Despite the achievements of some parent-only approaches, Dr Kumpfer believed that the best response would involve the whole family – parents and children. Ironically given its later transformation into an across-the-board ('universal') prevention programme, she was also convinced that there was a "qualitative difference" between trying to prevent drug *abuse* in these high-risk families and trying to prevent recreational and experimental drug *use* by the children of more typical families.

[ii]Similar processes were highlighted in *Hidden harm (*2003), a report from the British Advisory Council on the Misuse of Drugs.

What emerged was the first Strengthening Families Programme. Its basic format has remained unaltered. The weekly sessions last two to three hours. For about an hour parallel groups of children and parents from four to 14 families develop their understandings and skills led by two parent and two child trainers. In a second hour parents and children come together as individual family units to practice the principles they have learned.[9] The remaining time is spent in logistics, meals, and enjoyable family activities.[5]

Its tripartite nature (parents only, children only, then the whole family) departed from previous approaches as did the fact that parents put their learning into effect during the 14 sessions, providing the opportunity for them to receive immediate feedback from the trainers.[8] During parent-child play sessions parents are coached in how to enjoy their children and reinforce good behaviour. At first the accent is on building up the positives before tackling the more thorny issues of limit-setting and discipline. The programme is highly structured with detailed manuals, videos and 'homework' activities, but also very interactive and designed to be adapted sensitively to the participating families.[5]

The first test

The approach was first trialed in Salt Lake City on 90 families with parents in outpatient substance abuse treatment. Though its findings were convincing enough to generate follow-on federal funding, this study was never fully documented in a scientific journal[iii] [10] and the reports we have seem inconsistent.[vv] Its enduring importance is that while many studies followed, it remains one of the few to have deployed a randomised design, eliminating the risk that the benefits were not due to the programme but because families who opted to undergo it differed from those who did not.[5]

Thirty families were randomly allocated to continue with the parent's normal substance abuse treatment (the controls)[9] while 20 each additionally received the Strengthening Families parents' sessions, these plus the children's sessions, or the full programme including the parent-child family sessions.[11] At issue was which approach would generate the greatest before–after improvements. The clear answer was the full programme.[5 6 8 11]

Compared to controls, families offered the full intervention improved in parenting skills, children's social skills, and family relationships. Parents became less depressed and their drug use diminished. Their children became less aggressive, better behaved at home, said their relationships with other children had improved, and were more able to express themselves. Older children reduced their use of tobacco, drugs, and alcohol. The differences were usually substantial and highly statistically significant.

Without the joint family component, there were positive changes in the parenting and child social skills targeted by the parallel sessions, but these did not gel into

[iii]At the time Karol Kumpfer was not an academic but working for Utah's alcohol and drug service.

[vv]The account of the study's design used here is from the latest document received from the Utah team bb reference 11.

improved family relationships. It was the package 'tied together' by parents and children themselves coming together which made the difference.[5]

Extended and adapted for new populations

A series of trials followed in which Strengthening Families was adapted for and tested on high-risk families with pre-teenage children from disparate backgrounds.[5] [12] As far as we know, except for two as yet unpublished studies[11] [13] none were randomised and only one has been published in a scientific journal.[14]

Results from one of the randomised studies are still being analysed. It involved not just US but also Canadian families, probably culturally closer to Britain.[13] Participants were families with children aged 9–12 one of whose parents had a drinking problem. They were randomly assigned to a minimal contact control group or to Strengthening Families. An initial report on 365 families who completed before-and-after interviews found that the second group exhibited significant extra improvements in parenting, particularly when the child was a boy.

One of the largest of the non-randomised studies involved a predominantly poor, multi-ethnic sample of 421 parents and their 703 youngsters aged 6–13.[5] Strengthening Families was compared against a local variant which omitted the joint parent-child sessions found so important in the original study. Again their importance was demonstrated when the full programme led to significantly better family environment, parenting, and child behaviour/emotion outcomes. A five-year follow-up of just the Strengthening Families sample found that the gains had largely persisted, but without a comparison group this finding can only be considered suggestive.

Other implementations included one aiming to disseminate an adapted programme throughout Hawaii's schools, churches, and public service organisations.[5] Though multiply-flawed, a local evaluation which compared a longer 'culturally appropriate' version against the original programme came up with the interesting finding that the customised version was less beneficial – a warning that such modifications can undermine the programme by departing from core content or principles. In this case a shift from behavioural training to 'family values' sessions could have been the culprit.

Hawaii also demonstrated that the promise of widespread benefits can stimulate support and cooperation from disparate agencies, enabling large-scale implementation.[v] It also underlined the importance of skilled trainers, good facilities and a realistic group size (with these big families numbers were best kept low) if drop-out is to be minimised.

Rural black mothers benefit

For America with its large black drug treatment caseload, whether the programme would work with these families was a major issue. An adapted version was tested on

[v]Politicians, government, schools, community services agencies, health services and voluntary bodies all joined in the organising committee.

62 black, single-parent (all mothers) families in rural Alabama in a study which featured a one-year follow-up.[5 11 12] Four results echo other work on the programme.

First, recruitment beyond women already in treatment at a mental health centre proved difficult. The solution was to employ a recruiter from the same background who enrolled participants from venues such as housing estates, churches, and classes for problem children. 'Indigenous' recruiters also proved valuable in later trials. Secondly, over 80% of the recruited families virtually completed the 14 sessions, typical (perhaps after teething problems) of the programme.

Thirdly, the most at-risk families made the greatest gains – mothers who used illicit drugs as well as alcohol. Here there was more scope to normalise the children's and the parents' functioning (and this included the parent's drug use). Children of less at-risk families improved only in the areas where they happened to be problematic in the first place. The implication is that the programme works by helping families with unusually severe problems move closer to the normal range. For those already within this range, it makes less difference.[ii]

Lastly, the degree to which mothers spoke up in the group sessions made no difference to how much they and their children profited from them[12] – again, a finding later replicated.

And so do urban black fathers

The replication came in research on black fathers with 6–12-year-old children. In preparation the Alabama manual was revised for inner-city, black drug using parents and renamed the 'Safe Haven Programme'.[5 12] It was trialed on the residents of a Salvation Army drug treatment centre in Detroit, using specially trained drug counsellors to lead the groups.[14]

Again the recruiting agent was crucial, a charismatic ex-addict who had become a drug counsellor. Another typical feature was the integration of the programme into the life of ordinary community venues (in this case local churches at night), destigmatising participation and enhancing sustainability. Also typical was the provision of child care, meals, transport, and other basic supports, much from church members or the treatment agency itself. These helped promote recruitment and retention as did the introduction of the specially tailored programme.[11 iii]

At first poor, the retention rate rose to 80% where it remained for four years while applicants exceeded capacity. Within the first two years, 88 families had entered the programme. Most had below-poverty incomes and half the children had fallen seriously behind at school, but still 58 attended at least 10 of the 12 sessions.[11] For the analysis they were roughly divided in two into families whose adults (not just the father) consumed higher or lower levels of alcohol and illicit drugs.

[ii]This could be why the replications with the weakest results attempted to generalise the programme to families with non-drug-abusing parents or those whose children (sometimes despite multiple deprivation) did not exhibit significant problems.

[iii]Though compared to the unadapted programme it did not improve outcomes once families had been recruited.

Before-to-after gains were concentrated in the high drug use families where there were highly significant improvements in family and parental illicit drug use, parental depression, confidence in parenting ability, time spent with the children, and in the children's behaviour including delinquency, aggression, and withdrawn or compulsive behaviour, and some improvements in family 'atmosphere'. Parents also reported significant improvements in their child's relationship with school.

Feel the weight

Though encouraging, in both studies of black families parents chose to commit to the sessions,[iiii] giving the intervention a head start by selecting out less committed families, and neither included a comparison group who did not go through the programme. Without this we cannot know whether in these families the improvements would have occurred anyway[15] or after any reasonably supportive intervention. Extra improvements in the high drug use families[xx] may also have been partly due to their gaining greater benefits from the other treatments they were receiving. Such limitations apply to most of the work on high-risk families, a by-product of ethical concerns over deliberately depriving at-risk youngsters of help in order to create a control group.

Rather than a few rigorous studies, it is the accretion of relatively low-level research from disparate investigators and disparate groups which testifies to the effectiveness of the intervention with high-risk families. Appropriately, Karol Kumpfer warns against placing too much store by these studies. They show that the programme "can be implemented by others with integrity and fidelity"[5] but when it comes to the outcomes, her generalised claims are limited to intermediate variables such as "family-focused risk and protective factors or processes and children's behaviors".[x] These can be expected to lead to reduced drug problems but the brevity of the studies and the youth of the children would generally make such reductions hard to detect. Where it has been feasible to find them, they have been substantial.

Extended to all families with primary school children

A big step was taken by Karol Kumpfer and colleagues when they moved away from high-risk families to offer the programme to the full range of families with primary school children. In recruitment terms it was not a success but the study did suggest yet again that the full three-strand intervention works best.[16]

The location was 12 rural schools in the Rocky Mountains. Families of all 1110 first-grade children (aged 6–8) were invited to participate. Typically those who agreed were white, middle class families, few of whose children had recognised special educational needs. Classes were randomly allocated to act as controls or to

[iiii] And only those who attended nearly all of them were included in the study but in practice this was the great majority.

[xx] In Detroit this referred not specifically to the father in treatment but to "most" adults related to the child, but the fathers in such families also tended to use drugs more heavily.

[x] Of course, for many agencies these 'intermediate' processes will be the outcomes they are looking for.

one of three interventions. The first was a classroom-based curriculum teaching children problem solving and critical thinking. Other families were in addition offered the Strengthening Families parent sessions and others the full programme. Just a quarter took up these offers.

This left 56 children whose families went through the full programme and 21 the parent-only component. The analysis is confined to these unusually committed participants, making it difficult to determine to what degree the outcomes were due to the programme as opposed to the types of families who agreed to undergo it.[ii]

Before and after questionnaires completed by children, parents and teachers were used to assess the outcomes. Given the methodological problems, not too much can be read into the finding that compared to controls, only families given the full programme significantly improved on all outcome measures including parenting skills and family relationships.

Another (but as yet unpublished) randomised trial of the programme for across-the-board prevention involved primarily black families.[11] 715 were randomly allocated to a minimal contact control group, to the Strengthening Families parents' sessions, to its child training sessions, or to the full programme. The latter created extra significant post-programme gains in parenting, child social skills, sociability, and school progress, and in family organisation and harmony.

These studies show that families committed to improving their functioning through this type of intervention get most out of the full programme, but among the general population, only a minority of may be sufficiently committed.

New programme for families with older children

A still bigger step was taken when Richard Spoth and colleagues at Iowa State University developed a version of the programme intended for universal application to families with children in the early years of secondary school.[17] With Dr Kumpfer they slimmed it to seven weekly sessions and substantially revised it for rural families from the economically disadvantaged Midwest areas where the study was to be conducted. However, the 'Iowa Strengthening Families Programme' retained the three-strand format of the Utah original and, as before, the aim was to reduce substance use by improving parenting, child behaviour and family functioning.[3]

Twenty-two schools were randomly assigned to the Iowa programme or to act as controls. Of the 873 families with sixth-grade children (age 11–12), 446 agreed to participate in the study (which they knew might involve evening intervention sessions) and completed baseline measures. Before-and-after questionnaires completed by parents and observations of the family confirmed that the four targeted parenting behaviours had indeed improved: communicating rules about substance use, managing the child's anger, involving the child in family activities and decisions, and communicating understanding of the child as well as the parent's wishes.[18 19 20] In turn these led to generalised improvements in the parents'

[ii]Another methodological problem was that classrooms were allocated to the interventions but the results analysed in terms of individual children.

management of the child and in the emotional quality of the parent-child relationship.

Did improved parenting reduce drug use?

Other papers assessed whether these (or other) changes really had helped retard substance use or abuse. Such an effect was evident in the two years following the end of the programme when fewer pupils from Strengthening Families schools started to drink, smoke, get drunk, or progress to regular/heavy smoking or drinking.[4 21]

A later follow-up tracked outcomes for drinking, smoking and cannabis use three and a half years following the end of the programme when the children were roughly aged 15–16.[3] On most measures drug use was significantly and substantially less in pupils whose families had been offered the programme. Among children yet to have done these things before its start, 40% had begun to drink alcohol without their parent's permission compared to 59% of controls, 26% had now got drunk versus 44% of controls, 33% versus 50% had tried smoking, and 7% versus 17% had tried cannabis, all significant differences. The Cochrane review used these figures to estimate that for every nine offered the intervention, one child was prevented from beginning to drink, drink without permission, or to get drunk see *Accolade from Cochrane review*.

Benefits despite minority participation

The benefits were not confined to one-off experimentation. At the last follow-up 30% fewer Strengthening Families children had drunk alcohol in the past month and 46% fewer had smoked cigarettes. They had also used less often – on average drinking once and smoking less than one cigarette in the past month, 32% and 51% less than control group children.[iii] On both uptake and frequency measures, far from fading away, the gap between the Strengthening Families and control children seemed to become wider the older they got.

On the basis of these figures, Richard Spoth estimates that the programme saves nearly ten times its costs by averting alcohol-related harm.[22] Savings in relation to smoking may also be substantial. Also reduced on some measures were incidents of hostility directed to the parents and aggressive behaviour outside the home.[23]

The main factor taking the shine off these findings is that they derived from just over a third of the families asked to participate in the study. The remainder either refused to do so or their children did not complete the follow-up assessment. Results from these families may be a poor guide to the programme's impact on children in general, even in the same schools. Generalising the results beyond the rural, white, intact families in the area to the rest of the USA would be even more risky, still more so to the UK with its different legal and cultural attitude to alcohol and under-age drinking.

[iii]Differences were not significant for past-year cannabis use and the skewed distribution precluded testing whether cannabis use frequency was lower after the Strengthening Families Programme.

Still, the results were impressive. For families prepared to enter a study with fairly onerous research and intervention requirements, the Iowa Strengthening Families Programme prevented many of their children from an early introduction to smoking, cannabis and alcohol use and abuse, and the indications were that the impacts would persist and grow at least to the end of secondary schooling.

Fascinating footnotes

From this study there were two intriguing secondary findings. The first arises from that fact that it included not just the Iowa programme but also an alternative family skills programme. This ran over five rather than seven sessions and in just one did children participate as well as parents. As its title (Preparing for the Drug-Free Years) suggests, it was also more directly oriented to preventing substance use. Yet, in contrast to the less substance-focused Strengthening Families, at the last follow up it had failed to prevent children starting to use any of the substances included in the analysis and only with respect to drinking had it significantly reduced frequency of use.[3]

The second is that whether families actually attended the Strengthening Families sessions seemed not to matter. At the two-year follow-up it made no difference to drinking outcomes whether children had attended at least half the sessions,[21] and at the four-year follow-up whether they had attended any at all made no difference to any of the substance use measures.[3] The presumption was that though they constituted just a third of their year group, the influence of children and families who went through the programme spread to other children and families at the same schools via reduced 'peer pressure' to start using.

Latest incarnation for secondary school children

With a little revision to for more ethnically diverse and urban populations, the Iowa Strengthening Families Programme became the Strengthening Families Programme: for Parents and Youth 10-14 – the numbers designate the intended age group.[17] The core seven-session format was retained but following its delivery in the first years of secondary schooling, families are invited back the next year for four 'booster' sessions.

The new version's most well documented outing was in a study which tested whether running it alongside the Life Skills Training drug education curriculum improved outcomes compared to either Life Skills alone or to an 'education as usual' control condition.[24] The programmes were offered to grade seven pupils (aged 12–13) and their families in 36 schools in the rural US Midwest which were randomly allocated to the three conditions. Questionnaires completed by pupils a month after the initial sessions were used as the baseline from which to assess a year later how many had started to use either alcohol, tobacco or cannabis. Only 38% of families allocated to these attended any of the Strengthening Families sessions, but results are reported for all the families offered the interventions.

A year after the interventions about 26% of the Strengthening Families children went on to start drinking compared to 35–37% not offered the programme. Only with respect to cannabis use did Life Skills Training on its own improve on 'education as usual'. On this measure, adding the family sessions did not further

improve outcomes, but the numbers were too small to be relied on. There were no statistically significant results for tobacco.

Stringent test

This was a stringent test of Strengthening Families since the programme to which it would have to add value was itself a well constructed and extensive curriculum and, unlike the voluntary evening sessions, it was experienced by nearly all the targeted children. Yet compared to normal education this had little impact on drinking, while family sessions attended by only about a third of pupils/parents had a significant effect across the whole group.

In this study all the targeted children participated in the baseline survey and follow-up rates were high, increasing confidence that the outcomes are generalisable across the schools and communities sampled. The decision not to use pre-intervention but immediate post-intervention measures as the baseline is unusual, but unlikely to have materially affected the conclusions.

Though the new programme had been revised to embrace ethnically diverse and urban populations, all but a handful of the families recruited for this study were white and they were drawn from rural areas. However, research is under way on African-American families[25] and Iowa State University says that a variety of US groups have successfully used the programme, including families with children already experiencing problems or at risk of doing so.[26] The US government recommends it for at-risk youth and families as well as for universal application.[27] How well it works for these families is unclear. Many groups have conducted pre- and post-tests using the programme's surveys which apparently recorded significant gains in targeted behaviours[25] but these often small local initiatives have not been funded to conduct scientific trials.

It's not easy but they're worth it

If Strengthening Families is one of the most promising prevention programmes, it is also one much harder to implement than lessons directed at the 'captive' school audience. This is one reason why its potentially wide appeal across public and voluntary sectors is important:[28] more hands dipped into more purses and a larger pool of staff to draw on aid dissemination.

For both major versions the developers have made implementation as easy as possible by providing detailed manuals and videotapes,[20] but the programmes' interactive natures demands committed and skilled group leaders who will not just follow the manual but intuitively react to events. For the programme for at-risk primary school children, they should be "warm, empathetic, genuine, and creative",[9] while for the 10–14 programme, leaders must have "strong presentation and facilitation skills ... and the ability to be flexible".[20] Just organising the sessions with rooms, transport, child care and meals, and orchestrating multi-agency and volunteer inputs, is a major task requiring administrative support.

The trick is to get them in

To achieve acceptable recruitment and retention rates a run-in period is required during which local supporters are found and motivated to provide resources and to

recruit families. The latter is perhaps the key task. Once recruited, given good leaders and facilities, the great majority attend most sessions. Both sets of US researchers have developed a toolkit of recruitment strategies. These have a strong track record in recruiting identified at-need families where an 'indigenous' local champion seems the most important factor.

But when the programme has been offered across the board to all families, only around a third have been drawn in. In the small, rural communities where a 'diffusion' effect seems to have been identified, the minority who participate may strongly influence the remainder, but this cannot be assumed in more socially fragmented settings.

US research suggests that time constraints and scheduling conflicts are the main blockages to participation.[29] However, British experience is that there is a serious risk of missing out on families in greatest need due factors such as poor contact with the school, lack of commitment to parenting, or inability to attend.[2 30] Unless this perception can be overcome, British funders may be reluctant to support Strengthening Families as an across-the-board programme.

Another risk is that attempts to make the time commitment acceptable and the programme applicable to families at different risk levels encourages a lowest common denominator approach which mitigates against effectiveness. It would probably be a mistake, for example, to short change on the second hour of the sessions where the families come together. When the target is narrowed to high-risk families where problems are already apparent, there is less temptation to cut back and the approach can be both intensive and individually tailored.[31]

Grass roots appeal

Strengthening Families is not the only family/parenting intervention to have demonstrated its value in preventing substance use/problems,[32] but it is hard to think of another which has done so across such a spectrum. Most impressive and perhaps too most instructive, it does so by defocusing almost entirely from substance use and concentrating on the processes which sustain family life and promote healthy development. In the process it recommends itself not just (or not even primarily) as a substance use programme, but as a generic approach of equal interest to mental health, crime prevention, education, child welfare, and family services.

Despite its bulk, the research behind the programme is often far from 'hard' science, conducted instead by small-scale community initiatives neither funded for nor primarily interested in research of the kind which would satisfy a peer-reviewed journal. The original randomised trial was for this reason never fully documented in a scientific journal.

Later trials have been, and some were also randomised and used control groups, but these tested the programme as a universal prevention initiative rather than one for at-risk families. Most of these randomised trials suffered from research and/or programme recruitment shortfalls which raise question marks over the generalisability of the results. The one which did not still found substantial short-term benefits in reduced uptake of drinking.[24]

In David Foxcroft's words, Strengthening Families is certainly a "promising" programme, and workers and families across the USA and now too in Britain believe their experience and in-house evaluations prove its value. It would be good to see Professor Foxcroft's call for a well designed trial in Britain come to fruition.

For more information

On the programme for families with primary school age children

The Strengthening Families Programme web site at the University of Utah offers a guide to using the programme from age three to young adulthood but concentrates on the 14-session version for families with 6-11-year-old children. From here you can order manuals on CDS. Visit www.strengtheningfamiliesprogram.org or contact the Department of Health Promotion and Education, 250 South 1850 East, Room 215, University of Utah, Salt Lake City, Utah 84112, USA. Also contact Karol Kumpfer at Karol.Kumpfer@health.utah.edu.

Particularly valuable for its account of the unpublished as well as the published research is: Kumpfer K.L. "Selective prevention interventions: the Strengthening Families Program." In: Ashery R.S. *et al, eds. Drug abuse prevention through family interventions*. Download from www.nida.nih.gov/DrugPages/Prevention.html.

On the universal programme for families with secondary school age children

The seven-session version for 10–14-year-old children has been developed as part of Project Family at Iowa State University. Its web site provides information on the background to the programme and the research. Visit www.projectfamily.isbr.iastate.edu.

To order programme materials and to organise training, contact the university's 'Extension' arm. This also gives guidance on how much money is needed to mount the programme and on recruitment strategies. Visit www.extension.iastate.edu/sfp or contact Catherine Webb, Iowa State University, 2625 N. Loop Drive, Suite 500, Ames, IA 50010-8296, USA, cwebb@iastate.edu.

The US Department of Justice has published a useful practical guide to the research and to what it takes to implement the programme: Molgaard V.K. *et al*. "Competency training. The Strengthening Families Program: for Parents and Youth 10–14." *Juvenile Justice Bulletin*: August 2000. Download from www.ojjdp.ncjrs.org/pubs/generalsum.html#182208.

General guides to parenting and family programmes

An expert panel which included Karol Kumpfer and Richard Spoth has analysed the evidence on the effectiveness of family approaches: *Preventing substance abuse among children and adolescents: family-centred approaches.* Prevention Enhancement Systems Protocol reference guide. US Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Prevention, 1998.

The Strengthening America's Families Project run by US federal juvenile justice and substance abuse prevention agencies has conducted a search for "best practice" family programmes. The results are available on their web site from where you can also download Karol Kumpfer's review of *Exemplary Parenting and Family Strategies for Delinquency Prevention* (University of Utah, 1999). Visit www.strengtheningfamilies.org

For a British perspective read: Velleman R. *et al. Taking the message home: involving parents in drugs prevention*. DPAS, 2000, download from www.drugs.gov.uk, and *Hidden Harm* from the Advisory Council on the Misuse of Drugs, download from www.drugs.gov.uk/ReportsandPublications/NationalStrategy/1054733801/hidden_harm.pdf.

Accolade from Cochrane review

Strengthening Families received a boost when a Cochrane review team led by Professor David Foxcroft singled it out as the most promising "effective intervention over the longer-term for the primary prevention of alcohol misuse".[1] The same work was later published in the journal *Addiction*.[33]

Foxcroft's team examined over 600 reports of studies of psychosocial or educational interventions intended to prevent alcohol use or misuse by young people. Just 56 were relevant and rigorous enough to be included in the review and just three reported alcohol use or misuse reductions which persisted over a follow-up period of at least three years. One was the seriously flawed study of Life Skills Training[34] analysed previously in FINDINGS[35] and another investigated an approach tailored for Native Americans.[36]

That left Strengthening Families, specifically the study in Iowa where the seven-session version was offered across the board to families with children in the early years of secondary school.[4] This featured a "strong design, and ... a consistent pattern of effectiveness across the three drinking behaviour variables". Unusually, its effectiveness "seemed to increase over time, reflecting the developmentally orientated ... model on which the intervention is based".

To the original analysis David Foxcroft added one accounting for children who could not be re-interviewed at the tenth-grade (age 15–16) follow-up. This assumed that they had behaved similarly to children whose families had not been offered any intervention at all. The resulting estimate was that for every nine children whose families had been offered the Iowa Strengthening Families Programme, one was prevented from beginning to drink, to drink without permission, or for the first time getting drunk, the last two being statistically significant. This may not seem spectacular but it was around twice as good as the estimate for the other two programmes and more consistent across different drinking measures. It was enough to persuade Professor Foxcroft to call for "a project to translate, develop and pilot the Strengthening Families Programme in the United Kingdom".[37]

One such trial is under way, but using it to help troubled families rather than as a universal prevention intervention. The trial is being run by the Trust for the Study of Adolescence in a project whose main aim is to test whether involving young people in a family programme is more effective than parenting programmes which focus just on parents/carers. Participants will be drawn from families referred by the courts because of the anti-social or criminal behaviour of their children. One of the five services in the study is using the Strengthening Families Programme as an example of a whole-family approach. The project ends in August 2004.[38,39]

The British experience

Parent training coordinators Megan Marsh and Sara Male at the Barnsley Child and Adolescent Unit Mental Health Service scouted round for an approach which would fill a gap in their work with families of troubled young teenagers.[40] A literature search identified the Strengthening Families Programme and they visited the Iowa centre for training.

The way they set about implementing a pilot programme illustrates that the approach has the potential to draw support from well beyond substance misuse circles. Apart from their own service, workers for the pilot came from "the education service behaviour support team, the youth offending team and the intensive prevention team". A school made available two classrooms and a third which could be used as a creche. Such cooperation was important because "One agency would find it difficult to provide all the resources necessary to run the groups".

The Barnsley centre is using the seven-session (plus boosters) 10–14 version of the programme for referred families whose children evidenced a variety of problems. For these families they found it an attractive and feasible option but also that they needed more than the recommended number of group leaders – for ten families, two for the parents and four for the children. They trained 30 multi-agency professionals in the city as group leaders and the five facilitators of the pilot programme received training to be trainers for the UK. Neither recruitment[41] nor retention were a problem.

In their experience the 15 families who attended the first two groups showed significantly improved parenting in the targeted areas leading to improved general child management. "For example, there was standard setting, monitoring, effective discipline, together with a greater quality of affection between parent and child, which we saw positively expressed."

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1 Foxcroft D.R. *et al*. "Primary prevention for alcohol misuse in young people (Cochrane Review)." In: The Cochrane Library: 2002, 4. Oxford: Update Software.

2 Velleman R. *et al*. *Taking the message home: involving parents in drugs prevention*. DPAS, 2000.

3 Spoth R.L. *et al*. "Randomized trial of brief family interventions for general populations: adolescent substance use outcomes 4 years following baseline." *Journal of Consulting and Clinical Psychology*: 2001, 69(4), p. 627–642.

4 Spoth R.L. *et al*. "Assessing a public health approach to delay onset and progression of adolescent substance use: latent transition and log-linear analyses of longitudinal family preventive intervention outcomes." *Journal of Consulting and Clinical Psychology*: 1999, 67(5), p. 619–630.

5 Kumpfer K.L. "Selective prevention interventions: the Strengthening Families Program." In: Ashery R.S. *et al, eds. Drug abuse prevention through family interventions*. NIDA Research Monograph 177. [US] National Institute on Drug Abuse, 1998, p. 160–201.

6 Wyman J.R. "Multifaceted prevention programs reach at-risk children through their families." *NIDA Notes*: 1997, 12(3).

7 Kumpfer K.L. *et al*. "Family environmental and genetic influences on children's future chemical dependency." J. Child Cont. Soc.: 1985, 18(1-2), p.49–91.

8 DeMarsh J. *et al*. "Family-oriented interventions for the prevention of chemical dependency in children and adolescents." *J. Child Cont. Soc.*: 1985, 18(1-2), p.117–151.

9 [US] Center for Substance Abuse Prevention. *Strengthening Families Program*. SAMHSA Model Program. http://modelprograms.samhsa.gov, accessed November 2003.

10 Personal communication from Karol Kumpfer, December 2003.

11 *Table 1: Study design and outcomes for Strengthening Families Program studies*. Received 4 December 2003 from Karol Kumpfer.

12 Results pages of www.strengtheningfamiliesprogram.org accessed November 2003.

13 Safyer A. *et al*. "The impact of a family-based alcohol prevention program on parenting." Abstract for SSWR presentation. 2003.

14 Aktan G.B. *et al*. "Effectiveness of a family skills training program for substance use prevention with inner city African-American families." *Substance Use & Misuse*: 1996, 31(2), p.157–175.

15 Kumpfer K.L. *et al*. "The Strengthening Families Program for the prevention of delinquency and drug use." In: Peters R. *et al, eds. Preventing childhood disorders, substance abuse, and delinquency*. Thousand Oaks, CA: Sage, 1996.

16 Kumpfer K.L. *et al*. "Effectiveness of school-based family and children's skills training for substance abuse prevention among 6–8-year-old rural children." *Psychology of Addictive Behaviors*: 2002, 16(4 suppl.), p S65–S71.

17 Molgaard V.K. *et al*. "Competency training. The Strengthening Families Program: for parents and youth 10–14." *Juvenile Justice Bulletin*: August 2000, p. 1–11.

18 Spoth R. *et al*. "Direct and indirect latent-variable parenting outcomes of two universal family-focused preventive interventions: extending a public health-oriented research base." *Journal of Consulting and Clinical Psychology*: 1998, 66(2), p. 385–399.

19 Redmond C. *et al*. "Modeling long-term parent outcomes of two universal family-focused preventive interventions: one-year follow-up results." *Journal of Consulting and Clinical Psychology*: 1999, 67(6), p. 975–984.

20 Molgaard V. *et al*. "The Strengthening Families Program for young adolescents: overview and outcomes." In: Pfeiffer S.I. *et al, eds. Innovative mental health interventions for children: programs that work*. Haworth Press, Inc, 2001, p. 15–29.

21 Spoth R. *et al*. "Alcohol initiation outcomes of universal family-focused preventive interventions: one- and two-year follow-ups of a controlled study." *Journal of Studies on Alcohol*: 1999, supp. 13, p. 103–111.

22 Spoth R.L. *et al*. "Universal family-focused interventions in alcohol-use disorder prevention. Cost-effectiveness and cost-benefit analyses of two interventions." *Journal of Studies on Alcohol*: 2002, 63(2), p.219–228.

23 Spoth R.L. *et al*. "Reducing adolescents' aggressive and hostile behaviors. Randomized trial effects of a brief family intervention 4 years past baseline." *Arch. Pediatr. Adolesc. Med.*: 2003, 154, p. 1248–1257.

24 Spoth R.L. *et al*. "Longitudinal substance initiation outcomes for a universal preventive intervention combining family and school programs." *Psychology of Addictive Behaviors*: 2002, 16(2), p. 129–134.

25 Project Family web site, www.projectfamily.isbr.iastate.edu, 3 accessed December 2003.

26 ISU Extension web site, www.extension.iastate.edu/sfp/sfpaudiences.html, accessed December 2003.

27 [US] Center for Substance Abuse Prevention. *Strengthening Families Program for Parents and Youth 10–14*. SAMHSA Model Program. http://modelprograms.samhsa.gov, accessed December 2003.

28 Gilvarry E. *et al. The substance of young needs: review 2001*. Health Advisory Service, 2001.

29 Spoth R. *et al*. "Project Family prevention trials based in community-university partnerships: toward scaled-up preventive interventions." *Prevention Science*: 2002 3(3), 203-221.

30 Home Office Drugs Prevention Initiative. *Developing local drugs prevention strategies: a supplement to the DPI's overview guidance to drug action teams on developing local drugs prevention strategies*. HMSO, 1998, p. 21–25.

31 Kumpfer K.L. *Sparenting strategies for delinquency prevention. User's guide.* U.S. Department of Justice, 1993. Extracts at http://www.strengtheningfamilies.org/html/literature_review_1993.html

32 *Preventing substance abuse among children and adolescents: family-centred approaches. Reference guide.* US Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Prevention, 1998.

33 Foxcroft D.R. "Longer-term primary prevention for alcohol misuse in young people: a systematic review." *Addiction*: 2003, 98, p. 397–411.

34 Botvin G.J. *et al*. "Long-term follow-up results of a randomized drug abuse prevention trial in a white middle-class population." *Journal of the American Medical Association*: 1995, 273(14), p. 1106–1112.

35 Stothard B. *et al*. "Education's uncertain saviour." *Drug and Alcohol Findings*: 2000, 3, p. 4–7, 16–20.

36 Schinke S.P. *et al*. "Preventing substance use among Native American youth: three-year results." *Addictive Behaviours*: 2000, 25, 387–397.

37 Foxcroft D.R. *Alcohol misuse prevention for young people: psychosocial and educational interventions.* Alcohol Concern, 2003.

38 Personal communication from Sarah Lindfield, Project Leader – Parenting and Youth Justice, Trust for the Study of Adolescence, December 2003.

39 Trust for the Study of Adolescence. *Parenting and Youth Justice Team. Involving Young People in Parenting Programmes*. Project description.

40 Marsh M. *et al*. "Chat back." *Young Minds Magazine*: 2003, 66, p. 26–27.

41 Personal communication from Megan Marsh, November 2003.