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Literature Review:
Resilience in Children and Young People

June 2007

1. Introduction

Traditionally, research and practice concerning child welfare and outcomes for children has focused on the investigation of risk factors and the design of interventions and services to reduce the impact of such factors. However, risk factors are not the only predictor of outcomes for children. The observation made over thirty years ago, that not all children succumb to the effects of risks, led to the investigation of protective factors and resilience. More recently attention has been focused on how we can develop knowledge in this area to devise interventions that reflect the promotion of resilience as a means of achieving positive outcomes for children. In this report we discuss the definition of resilience, what research tells us about the nature of resilience, and the implications for provision of services to improve outcomes for children and young people.

2. Definitions

Resilience concerns the ability to 'bounce back'. It involves doing well against the odds, coping, and recovering (Rutter, 1985; Stein, 2005). Masten et al (1990) define resilience as "the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances".
As a concept it appears to be cross-culturally recognised (Hunter, 2001). Discussions of resilience are typically framed with reference to risk, vulnerability and protective factors. It is the complex interplay of these factors over time that determines children's outcomes. The following definitions of these factors have been offered by Newman (2004) in a review of what works in building resilience:

> Risk: any factor or combination of factors that increases the chance of an undesirable outcome affecting a person.

> Vulnerability: a feature that renders a person more susceptible to a threat.

> Protective factors: the circumstances that moderate the effects of risk.

> Resilience: positive adaptation in the face of severe adversities.

Who then, are resilient children and how does resilience show itself? Masten et al (1990) have identified three kinds of resilience among groups of children. These are:

> Children who do not succumb to adversities, despite their high-risk status, for example babies of low birth-weight.

> Children who develop coping strategies in situations of chronic stress, for example the children of drug-using or alcoholic parents.

> Children who have suffered extreme trauma, for example through disasters, sudden loss of a close relative, or abuse, and who have recovered and prospered.

Resilient children, therefore, are those who resist adversity, manage to cope with uncertainly and are able to recover successfully from trauma (Newman, 2004).

3. Resilience factors and processes

The particular factors that have been shown to be associated with resilience are listed below in relation to child, family and community domains, and in relation to school-age children (Box 1) and adolescent children (Box 2) (Daniel and Wassell, 2002).

Box 1.
Summary of factors associated with resilience during school years

Individual factors associated with resilience
> Female
> Sense of competence and self-efficacy
> Internal locus of control
> Empathy with others
> Problem-solving skills
> Communication skills
> Sociable
> Independent
> Reflective, not impulsive
> Ability to concentrate on schoolwork
> Autonomy (girls)
> Emotional expressiveness (boys)
> Sense of humour
> Hobbies
> Willingness and capacity to plan

Family factors associated with resilience
> Close bond with at least one person
> Nurturance and trust
> Lack of separations
> Lack of parental mental health or addiction problems
> Required helpfulness
> Encouragement for autonomy (girls)
> Encouragement for expression of feelings (boys)
> Close grandparents
> Sibling attachment
> Four or fewer children
> Sufficient financial and material resources

Wider community factors associated with resilience
> Neighbour and other non-kin support
> Peer contact
> Good school experiences
> Positive adult role models

Box 2.
Summary of factors associated with resilience during adolescent years

Individual factors associated with resilience
      Male
      Responsibility
      Empathy with others
      Internal locus of control
      Social maturity
      Positive self-concept
      Achievement orientation
      Gentleness, nurturance
      Social perceptiveness
      Preference for structure
      A set of values
      Intelligence
      Willingness and capacity to plan

Family factors associated with resilience
      A close bond with at least one person
      Nurturance and trust
      Lack of separations
      Lack of parental mental health or addiction problems
      Required helpfulness
      Encouragement of autonomy (girls)
      Encouragement of expression of feelings (boys)
      Close grandparents
      Family harmony
      Sibling attachment
      Four or fewer children
      Sufficient financial and material resources

Wider community factors associated with resilience
      Neighbour and other non-kin support
      Peer contact
      Good school experiences
      Positive adult role models

Some of the resilience factors are the reverse of a risk factor, such as family harmony versus family disharmony. Other resilience factors do not necessarily reflect positive and negative aspects of the same system, e.g. having a sense of humour. Some may be amenable to change, and others not.

More recent trends in resilience research aim to understand *how* these factors may lead to positive outcomes and what mechanisms are involved. Hence the current emphasis is on understanding resilience as a *process* rather than a particular character trait (Luthar et al, 2003). This dynamic view of resilience suggests that individual adaptation results from interactive processes among the resilience factors located within the child, family and community (Yates and Masten, 2003). Promoting resilience may enable better long-term outcomes by boosting children's chances of positive adaptation in future, even if optimal environmental conditions for growth are not possible (Newman, 2004). Hence the importance of resilience factors for outcomes lies not only in their impact on safeguarding a child but also on enabling growth and future development, despite adverse circumstances.

Some of the processes that are thought to play a part in promoting resilience include managed exposure to risk, since this can provide an opportunity for coping mechanisms to be acquired; opportunities to exert agency and develop a sense of mastery; strong relationships with supportive parents or cares, or external mentors and other social networks; positive school experiences and extra-curricular activities; and capacity to 'reframe' adversities (Newman, 2004).

4. Approaches to promoting resilience

One of the difficulties that has been put forward in defining approaches to promoting resilience is understanding what distinguishes such approaches from those that aim to promote more generic positive child development (Tarter and Vanyukov, 1999). This lack of clarity is also reflected in the relative lack of assessment measures specifically focusing on resilience as a discrete concept. This also impacts on ability to gauge the effectiveness of a resilience-promoting intervention, since distinct indicators of impact need to be defined.

It has been suggested that we need to understand resilience outcomes from a developmental perspective (Yates and Masten, 2004). Expectations and indicators of good outcomes change with age. Hence intervention strategies need to be built around appropriate expectations and developmental needs, and to understand the changing nature of them. Resilience promoting interventions need to define their outcomes in relation to positive age-appropriate development (such as positive peer relationships), resources and adaptive capabilities, and not just rely on the absence of symptoms or risks. The presence of certain assets rather the mere absence of risk is once way in which resilience may be conferred (Yates and Masten, 2004).

As risk levels increase, so resilience levels need to increase to counter their effect. We know that is it not just risk per se, but the *accumulation of risk factors* that posses a significant threat to children's mental and physical well-being and long-term outcomes. Paralleling this, it has been suggested that it is the *accumulation of resilience factors* that may be significant for positive outcomes. In their discussion of improving outcomes for children by supporting parents, Garbarino et al (2002) remind us that risks to parenting arise not only from direct threats but from 'the absence of normal, expectable opportunities'. They suggest we re-think child welfare research, policy and practice in terms of 'accumulated opportunities' instead of 'accumulated risk'. This model implies that risk factors may be neutralised or partially offset by introducing opportunities into other realms of the child's (or parent's) life, even when risks are believed to be impervious to change. Hence interventions that target the development of multiple opportunities, resources and strengths in children, families and communities show the best outcomes. However, it is also important to note that no child, no matter how resilient, will be impervious to the effects of extreme and prolonged risk (Chicchetti and Rogosch, 1997). Hence interventions to promote resilience cannot completely eradicate negative outcomes when risks are severe.

In terms of the types of approaches that are believed to be effective, focusing on strengthening protective factors without attending to risk exposure has been described as 'an incomplete strategy' (Pollard et al, 1999). It is the balance of these factors and their interaction that will determine positive or negative child outcomes.

Three types of approach to intervention have been identified in relation to the promotion of resilience (Yates and Masten, 2004):

> Risk-focused methods. These aim to reduce or prevent risks such as premature births or teenage pregnancy. When the avoidance of risk is not possible, or the risk is not amenable to change, other approaches may be needed.

> Asset-focused approaches. These emphasise resources that enable adaptive functioning to counteract adversity, such as improved access to healthcare, additional tutoring, provision of parent education, job training opportunities for parents, etc. These approaches are particularly useful when risk factors are intractable and on-going.

> Process-focused approaches. These aim to protect, activate or restore fundamental adaptational systems to support positive development, such as strengthening positive, long-term relationships.

The most effective intervention programmes are those that involve the use of all, or a combination of, the three types of strategies described above. Multi-systemic interventions involving a mixture of risk, asset and process-focused targets located at the child, family, and community level hold the most promise. Some examples are provided in Appendix I.

The process-focused approaches represent the most recent development in interventions. Focusing on adaptational systems that mediate developmental change is seen as a particularly important: this approach may boost an individual's ability to negotiate future challenges and enable enduring positive developmental change, and hence improve outcomes in the long-term (Yates and Masten, 2004). An example of such an approach is intervention approaches based on attachment. Attachment theory (Bowlby, 1969) stresses the importance of early relationships and quality of care for laying the foundations for healthy relationships and self-esteem in adulthood. Interventions based around attachment theory help to develop parental responsiveness and sensitivity to the child. Sensitive, available and consistent child care practices protect children by establishing positive expectations about future relationships and a positive view of self, which influence adaptive coping in later years (Sroufe et al, 1990).

In addition to understanding intervention strategies in terms of their risk, asset and process orientation, interventions can also be described in terms of the domain o n which they focus. A useful framework for describing this is provided by Daniel and Wassell (2002). They describe resilience in terms of intrinsic and extrinsic factors. The intrinsic factors are seen as three building blocks that are necessary for resilience:

> A secure base – the child feels a sense of belonging and security
>
> Good self-esteem – an internal sense of worth and competence
>
> A sense of self-efficacy – a sense of mastery and control, along with an accurate understanding of personal strengths and limitations.

The extrinsic factors are described as:

> at least one secure attachment relationship
>
> access to wider supports such as extended family and friends
>
> positive nursery, school and or community experiences

This framework provides a useful basis for informing assessment of children, and the design and implementation of potential interventions to promote resilience by targeting key building blocks.

5. Specific intervention strategies

In terms of specific strategies for promoting resilience, Newman (2004) has reviewed resilience research and developed the following list of strategies that hold the most promise, applicable to (1) early years, (2) middle childhood, and (3) adolescence and teenage years:

(1) Effective strategies for the early years (antenatal to 4 years):

In the antenatal period:

> adequate maternal nutrition throughout pregnancy
>
> avoidance of maternal and passive smoking
>
> moderate maternal alcohol consumption

social support to mothers from partners, family and external networks

good access to antenatal care

Interventions to prevent domestic violence.

During infancy:

adequate parental income

social support for mothers, to moderate perinatal stress

good-quality housing

parent education

safe play areas and provision of learning materials

breastfeeding to three months

support from male partners

continuous home-based input from health and social care services, lay or professional.

During the pre-school period:

high-quality pre-school day care

preparatory work with parents on home–school links

pairing with resilient peers

availability of alternative caregivers

food supplements

links with other parents, local community networks and faith groups

community regeneration initiatives.

(2) Effective strategies for middle childhood (5 to 13 years)

Reception classes that are sufficiently flexible to accommodate a range of cultural and community-specific behaviours.

Creation and maintenance of home–school links for at-risk children and their families, which can promote parental confidence and engagement.

Positive school experiences: academic, sporting or friendship-related.

Good and mutually trusting relationships with teachers.

The development of skills, opportunities for independence and mastery of tasks.

Structured routines, and a perception by the child that praise and sanctions are being administered fairly.

In abusive settings, the opportunity to maintain or develop attachments to the non-abusive parent, other family member or, otherwise, a reliable unrelated adult; maintenance of family routines and rituals.

Manageable contributions to the household that promote competencies, self-esteem and problem-solving coping.

In situations of marital discord, attachment to one parent, moderation of parental disharmony and opportunities to play a positive role in the family.

Help with resolving minor but chronic stresses as well as acute adversities.

Provision of breakfast and after-school clubs.

(3) Effective strategies for adolescence and early adulthood (13 to 19 years)

Strong social support networks.

The presence of a least one unconditionally supportive parent or parent substitute.

A committed mentor or other person from outside the family.

Positive school experiences.

A sense of mastery and a belief and one's own efforts can make a difference.

Participation in a range of extra-curricular activities.

The capacity to re-frame adversities so that the beneficial as well as the damaging effects are recognised.

The ability – or opportunity – to 'make a difference' by helping others or through part-time work.

Not to be excessively sheltered from challenging situations that provide opportunities to develop coping skills.

When the above factors are collapsed across age groups, a general list of factors emerges that are relevant across all phases of a child's life (Newman, 2004):

Factors promoting resilience in all phases of the lifecycle:

Strong social support networks.

The presence of at least one unconditionally supportive parent or parent substitute.

A committed mentor or other person from outside the family.

Positive school experiences.

A sense of mastery and a belief that one's own efforts can make a difference.

Participation in a range of extra-curricular activities.

The capacity to re-frame adversities so that the beneficial as well as the damaging effects are recognised.

The ability – or –opportunity – to 'make a difference' by helping others through part-time work.

Not to be excessively sheltered from challenging situations that provide opportunities to develop coping skills.

When children themselves have been asked to identify the factors that have helped them to cope with difficult circumstances, the resource that they mention the most is help from sources of informal support such as members of the extended family, peers, neighbours, informal mentors or role models (Schaeffer et al, 2001). Having such a support figure has been associated with reducing risk of poor mental health outcomes in adulthood following neglectful or abusive experience in childhood (Bifuclo and Moran, 1998). Hence when professionals become involved in children's lives, they need to be sensitive to existing informal support mechanisms, and enable or develop them (Newton, 2004).

6. Examples of specific interventions

The above list of resilience promoting factors points to the significance of particular contexts for locating interventions and target groups. It is clear, for example, that early experience with caregivers is critical to the development of resilience. Hence support and education for parents of infants and pre-school children (and parents to be) is a key area for intervention. Interventions that focus on building supportive relationships with the immediate (and extended) family hold the most promise in early years (Luthar and Zelazo, 2003).

In later years, school becomes another significant arena for intervention. There are a number of school-based programmes that aim to promote resilience through the development of emotional literacy and competence, emotional regulation, empathy, and positive thinking and problem solving. These interventions can operate at the whole-school level, or as more targeted interventions for specific groups. Evidence has begun to gather in support of some of these programmes, but predominantly based on US studies. UK-based interventions have adopted some of the principles of these interventions, but their effect on resilience outcomes remains largely unknown due to a lack of appropriate trails to test them. Mentoring programmes (either with peers or adults) have also been put forward as a means of promoting resilience. A recent review of evidence in this area concludes that mentoring has a modest impact on reducing high-risk behaviours and improving educational and career outcomes, based on evaluation of scheme in the US. Their impact in the UK has not been sufficiently well evaluated to provide conclusive evidence of effectiveness. Several of the above approaches have been combined in broad-based community initiatives such as Communities that Care, with mixed results. They aim to reduce risks and promote resilience by working with families, schools and partner organisations providing support services and resources to families.

Appendix I provides examples of specific interventions that have shown evidence of effectiveness, which are more often than not from the US or Australia. In order to reflect UK-based resilience-promoting interventions, we have also included some descriptions of UK services and initiatives that appear promising, but where 'hard evidence' of effectiveness is currently inconclusive. Most of these interventions tackle both risk and resilience

promoting factors, and some focus on resilience processes such as attachment.

Overall, examples of well-researched, effective interventions that promote resilience are few and far between, since translation of 'academic' knowledge of resilience into practical applications has been slow to develop. To date we know far more about what works in tackling risk than we do about what works in promoting resilience.

7. Conclusions

Most intervention work focuses predominantly on repairing deficits rather than on recognising and developing strengths and assets. The extent to which focusing on strengths might deliver just as good if not better long-term outcomes for children and young people is still being investigated. While there is a strong evidence base identifying the types of factors that denote resilience, rather less is known about resilience processes and the ways in which we can intervene to influence them (Rutter 1993).

Evidence so far suggests that in order to develop resilience we need: multi-faceted programmes that consider factors across child, family and community arenas; programmes that address risks, assets and resilience processes; and targets that include the development of secure relationships and wider supportive relationships, self-esteem and mastery, and provision of positive nursery and school or community experiences.

Appendix 1: Examples of specific interventions promoting resilience

The following interventions are listed in relation to the age of the child that that they aim to benefit: (1) Antenatal and preschool (0-4 years); (2) Middle school (age 5-13 years); and (3) Adolescent and older teenage (13-18 years).

(1) Antenatal and preschool (0-4 years)

Prenatal/Early Infancy Project (PEIP)
The US Elmira Prenatal/Early Infancy Project (PEIP, Olds 1998), also known as the Nurse-Family Partnership, provides parent education and enhanced family support and access to services via an intensive programme of home visits from a trained nurse for the first two years of the child's life. It is aimed at first time mothers from low-income homes, and sets out to prevent early parenting problems that are likely to contribute to emotional harm including anti-social behaviour among children. The programme begins as soon as possible after the beginning of pregnancy, and visits are structured around the changing developmental needs of the child. Mothers are encouraged to reduce potentially harmful health-related behaviours during pregnancy, such as smoking and drinking alcohol; are encouraged to build supportive relationships and friendships; and use other support services and keep appointments for children's health care checks. While the programme has been found to have positive results, the originators of the programme stress the importance of programme fidelity in bringing about successful outcomes and that 'watering down' the intervention will reduce the chances of success.

Perry Preschool Project
The US Perry Preschool Project targets low-income families with pre-school aged children at risk of school failure. It takes the form of a structured classroom-based programme that focuses on language, literacy and numeracy and social development, with the aim of promoting school readiness in high-risk populations. The programme runs for a minimum of twelve-and-a-half hours per week, and relies on a 'plan-do-review' routine which encourages child-initiated learning activities. Active learning is promoted by providing children with a supportive adult, who prompts and guides child learning activities, and a materials-rich environment. Teachers use as a framework a set of active learning 'key experiences' drawn from child development theory to encourage children to engage in play activities that facilitate decision-making and problem-solving, or otherwise stimulate intellectual, social and physical development. Teachers also offer weekly one-and-a-half hour home-visits to parents, providing an opportunity for discussion and modelling of child activities in the classroom to support child development at home. In addition, the intervention includes monthly parent group meetings.

A randomised controlled trial assessing the long-term effectiveness of the Perry Preschool Project demonstrated enhanced school readiness at age seven years; significantly higher achievement scores on reading, language and mathematics test at age fourteen years; better literacy skills at age nineteen years; and higher education and earnings, and fewer arrests at age

twenty-seven years when compared to the no-intervention control group (Schweinhart et al., 1993). Another longitudinal study with follow-ups at ages fourteen to fifteen, nineteen and twenty-seven years produced similar results. The intervention group had significantly higher monthly earnings, higher percentages of home ownerships, higher levels of schooling, lower percentages of social services intervention, fewer arrests, and higher I.Q. and achievement scores than the non-intervention control group (Schweinhart et al., 1993).

(2) Middle school (age 5-13 years)

Social and emotional aspects of learning (SEAL)
SEAL is a UK-based, whole-school approach for promoting the social and emotional aspects of learning, involving self-awareness, managing feelings, motivation, empathy and social skills. It is a curriculum resource that aims to develop the qualities and skills that help promote positive behaviour and effective learning. It can be used with primary and secondary school children. Primary SEAL is organised into seven themes which can be covered within a school year: New Beginnings, Getting on and falling out, Say no to bullying, Going for goals. Good to be me, Relationships and Changes. Each theme is designed for a whole-school approach and includes a whole school assembly and suggested follow-up activities in all areas of the curriculum. The materials aim to develop children as effective learners and are relevant to schools without significant behaviour problems as well as to those with behaviour or attendance issues. The programme for secondary schools involves: a whole-school approach to create the conditions for promoting skills for effective learning, direct and focused learning opportunities for whole classes (during tutor time, across the curriculum and outside formal lessons) and as part of focus group work; learning and teaching approaches that support pupils to acquire social and emotional skills and consolidate those already learnt; and continuing professional development for the whole staff of a school. SEAL is supported by information and materials provided by the Department for Education and Skills, and is currently the focus of an evaluation due to report in August 2007. It appears to be acceptable to pupils and teachers, but its effectiveness in promoting resilience is not yet known.

Penn Resiliency Programme
The US-based Penn Resiliency Programme is a school-based intervention curriculum designed to build resilience, promote adaptive coping skills, and teach effective problem-solving. A main focus of the programme is the promotion of optimistic thinking to help children and adolescents cope with the daily challenges and problems encountered during the school years. The skills taught in the program can be applied to many contexts of life, including relationships with peers and family members as well as achievement in academics or other activities. It is a manual-based intervention comprising twelve 90-minute group sessions. The curriculum teaches cognitive-behavioural and social problem-solving skills. Participants are encouraged to identify and challenge negative beliefs, use evidence to make more accurate appraisals of situations and events, and to use effective coping mechanisms

when faced with adversity. Additionally, students learn techniques for assertiveness, negotiation, decision-making, and relaxation. The program has been found to be effective in helping buffer children against the effects of stress, including more serious levels of stress such as anxiety and depression (Seligman, 1998)

(3) Adolescent and older teenage (13-18 years)

FRIENDS
FRIENDS is a universal prevention and early intervention project that can be used by schools and in clinical settings, and originates in Australia, where it has been widely tested. It aims to build emotional resilience in order to prevent common mental health problems such as anxiety and depression in children by teaching them to cope and manage anxiety now and in the future. The programme involves 10 structured sessions plus two booster sessions, and is based on Cognitive Behaviour Therapy. The programme promotes self-esteem, problem-solving, psychological resilience, self-expression, and building positive relationships with peers and adults. In schools it is typically used to target a single year group, either 10 to 12 year olds, or else 15-16 year olds. There have been several evaluations of the programme in which it has demonstrated effectiveness in promoting resilience by reducing anxiety and increasing self-esteem and optimism, and these effects have been assessed up to six years post intervention (e.g. Barrett et al, 2003; Stollard et al, 2005).

PATHS Curriculum
PATHS is underpinned by the premise that a child's behaviour and internal regulation is a function of their emotional awareness, affective-cognitive control, and social-cognitive understanding. Emotional literacy and competence are factors that are thought to relate to resilience. The intervention is delivered 3 times per week for a period of 20–30 minutes over three terms, using didactic instruction, role-play, class discussion, modelling by teachers and peers, social and self-reinforcement, worksheets and generalisation techniques. Teachers receive a three-day training workshop in conjunction with weekly consultation and observation from project staff. After one year, positive changes for children included: number of positive and negative feelings words, ability to identify three emotional states in others, better level of reasoning as regards general questions about feelings, and a significantly improved ability to provide appropriate personal examples of their own emotional experiences (Greenberg et al, 1995).

Big Brothers and Big Sisters
The US-based Big Brothers and Big Sisters programme is a mentoring scheme in which adult volunteers are matched to children and young people, either within school or other community based settings. Mentors provide support and encouragement and share activities with the young person. An evaluation of the scheme reported that after 18 months, young people were: 46% less likely to begin using illegal drugs, 27% less likely to begin using

alcohol, 52% less likely to skip school, 37% less likely to skip a class, more confident of their performance in schoolwork, one-third less likely to hit someone, and getting along better with their families (Grossman and Tierney, 1998). However, the scientific robustness of this study has been questioned (Hall, 2003), suggesting that at present this approach remains promising until further evaluation has taken place.

Promoting Prevention
Promoting Prevention is an initiative being carried out in Swansea, Wales, and involves a range of corporate and strategic interventions addressing factors known to place young people at risk of offending (for example, school exclusion, truancy and pupil disaffection, lack of training and employment opportunities, drug and alcohol misuse, social exclusion), as well as a range of interventions based in equal measure on restorative justice and social inclusion. It uses a range of measures targeting multiple risk factors within the main domains of the child's life (i.e. family, school, peers, neighbourhood/community). The initiative is incorporated into an evidence-based, problem-solving local authority strategy (that is Safer Swansea), building upon existing local resources, including informal support networks. The ethos and methods of programme aim to create a local climate of change that values the ideals of 'community' and 'citizenship' within an integrated working model.

The most prominent and well-developed aspect of Promoting Prevention is the Promoting Positive Behaviour (PPB) in schools initiative, which consists of a series of joined-up initiatives and resources, deployed in local secondary schools with the objectives of: increasing participation in education, training and employment, reducing exclusions, and increasing pupil motivation. This is achieved via a three-part process of:

   1) in-school strategies and policies (including whole school behaviour codes, family group conferencing (FGC), action planning, mentoring)

   2) management of exclusions

   3) planning alternative provision (for example, alternative curriculum and vocational training).

Although there have been recent reports (Case and Haines, 2004; Haines and Case, 2005) describing the process of this intervention and analysis of the risk and protective factors it targets, its impact on outcomes has not yet been reported.

Communities that Care (CtC)
The UK based Communities that Care (CtC) programme was modelled on a programme of the same name which had been developed in the USA. It aims to reduce risk and increase protection amongst vulnerable families in order to reduce anti-social behaviour and offending by young people. CtC involves the creation of working partnerships between residents and the organizations and agencies in their community, and have been described more as a 'process' than a programme (Crow et al, 2004). It is based on model of tackling risk factors and building resilience factors and resilience processes, including

school opportunities for pro-social involvement, school rewards for pro-social involvement, family attachment, family opportunities for pro-social involvement, and family rewards for pro-social involvement. In order to build resilience, participating partners identify existing resources that should be targeting their prioritized risk, identify any adjustments that may need to be made to improve their success in tackling those risks, and identify any gaps in provision that may need new initiatives/interventions within the area. A description of the implementation process is provided by Fairnington (2004). To date its evaluation of impact shows some mixed but promising results, with some evidence of a decrease in escalation of risk factors for some children (Crow et al, 2004).

Creating Lasting Connections (CLC)
The US programme involves a number of components aimed at reducing the likelihood of substance misuse among high-risk youths by increasing family resilience. Participants (parents and children) are encouraged to improve their personal growth through increasing self-awareness, self-esteem, expression of feelings, interpersonal communication, and self-disclosure. Social and refusal skills are taught to provide a strong defence against environmental risk factors. Participants get opportunities to practice skills in a safe group setting. Social support is also developed. These strategies are used through training modules, early intervention services for adults (parents or guardians) and youths, and follow-up case management services for families. A randomised control trial evaluation of the programme found that there were improvements in father-child, mother-child and sibling bonding, reduced drug and alcohol use, and increased knowledge of the effects of excessive drug and alcohol use up to a year after the programme ended (Johnson et al, 1998).