

Promoting Resilience:

A Review of Effective Strategies for Child Care Services

Prepared for the
Centre for Evidence-Based Social Services,
University of Exeter

By
Tony Newman



Barnardo's

GIVING CHILDREN BACK THEIR FUTURE

Foreword

We, at the Centre for Evidence-Based Social Services spend much of our time reviewing existing evidence and acting upon the advice of the medical research pioneer, Archie Cochrane, regarding the proper starting point for study, viz: 'somebody's probably already done it'. Then comes the task of screening it for methodological quality, and then, considering how best to disseminate the results and their implications. Along the way in this work we have formed an opinion on the present problems of applied social research (that is research intended not just to inform, but to make a tangible difference to the clients of social services departments). Firstly, the chaff/wheat ratio in such studies is still worryingly high. We have so many papers based on small, convenience samples and far too little comparison research looking at who gets what and what difference it makes to their lives. Methodological laid-backness and a tendency to go beyond what the data will support are usually excused by the use of the word 'qualitative' meaning 'just different', and often a statistics-free zone. Conversely, we occasionally encounter quantitative research studies which we are sometimes forced to regard as exercises in 'statistical dressage'. Ears pricked, hooves up, but very little to do with getting across rough country point-to-point. The issue here is that whether research is largely qualitative, or quantitative, this excuses neither forms from the tests of bias-reduction, representativeness, and relevance to the day-to-day challenges of effective service-provision.

Therefore, it is with great pleasure that I commend to you this excellent review by Dr. Tony Newman on the effectiveness of interventions to promote resilience in children and young people in adverse circumstances, including child carers. For it passes all the tests discussed above; it consists of a systematic review of what research of good quality has been undertaken and what we can learn from it; it gives a voice at a qualitative level to child carers and their families regarding what it is like to be in this position; what the burdens are, and behind the review lies the author's own original study of a large sample of not very well-off people, for whom child caring is an issue. It contains an excellent analysis of both qualitative and quantitative data; it presents clear recommendations for the improvement of services, and, all too rarely in our field, it examines the *strengths* and the *assets* of families, as well as their problems. Moreover, it is written up in a clear and accessible style. What more could one wish for?

We at the Centre for Evidence-Based Social Services are very pleased to have been associated with this work, and intend to include the data from it in future dissemination work – of which activity Dr. Newman is a sterling supporter.

To sum up, this accessible study is of very considerable importance to practitioners, managers, service-users, and elected members. I strongly recommend it to you.

Professor Brian Sheldon

Director

Centre for Evidence-Based Social Services
Peninsula Medical School
University of Exeter

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By Tony Newman

Dr Tony Newman is Principal Officer, Research & Development at Barnardo's.

Address for correspondence:

Tony Newman,
Principal Officer Research & Development
Policy, Research and Influencing Unit
Barnardo's,
46 Marlborough Road,
Roath,
Cardiff,
CF23 5BX
Tel: 029 2048 5866
email: tony.newman@barnados.org.uk

Subject to availability, further copies of this report can be obtained at £5.95 from:

Centre for Evidence Based Social Services

University of Exeter
St Lukes Campus
Heavitree Road
Exeter
Devon
EX1 2LU

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Executive Summary

A. There is a broad consensus that factors which can promote childhood resilience are located in the following domains:

- the physical and emotional attributes of the child
- the child's family
- the immediate environment in which the child lives

The Child	The Family	The Environment
An easy temperament, active and good-natured.	Warm, supportive parents	Supportive extended family
Female prior to, and male during adolescence	Good parent-child relationships	Successful school experiences
Age - younger or older depending on the adversity	Parental harmony	Valued social role such as a job, volunteering or helping neighbours
A higher IQ, or an aptitude for a particular skill	A valued social role in household, such as helping siblings or doing household chores	A close relationship with unrelated mentor
Good social skills with peers and adults	Where parental disharmony is present, a close relationship with either mother or father	Membership of religious or faith community
Personal awareness of strengths and limitations		Extra-curricular activities
Feelings of empathy for others		
Internal locus of control - a belief that one's efforts can make a difference		
A sense of humour		
Attractiveness to others		

(sources: Emery and Forehand 1994:81; Gilligan 1997:15; Palmer 1997:203; Buchanan 2000:15)

B. All protective strategies operate through one or more of the following processes:

- by altering the child's perceptions of or exposure to risk
- by reducing the chain reaction that takes place when risk factors compound each other and multiply
- by helping the child improve self-esteem and self-efficacy
- by creating opportunities for change

Protective process	Example of intervention to promote resilience
Alter or reduce the child's exposure to risk	Children may arrive at school with no breakfast and return to homes where there is no space for, or encouragement to do homework. The provision of breakfast and after-school homework clubs may moderate the impact of these risk factors, and provide learning opportunities not otherwise available.
Interrupt the chain reaction of negative events	The presence of one risk factor increases the likelihood that others will be present. Where parents have had poor educational experiences themselves, they may not be able to give their child a good start in school. Poor educational performance may result, followed by attachment to an anti-learning sub-culture, and vulnerability to delinquency. Active programmes to establish home-school links during the pre-school period may interrupt this chain of events.
Establish and maintain self-efficacy and self-esteem	Young disabled people may be very vulnerable to social exclusion. Some correctable attributes make social exclusion more likely - no waged work, an unattractive appearance and a lack of social skills. The opportunity to pursue socially valued activities in settings used by ordinary people can start a positive, rather than a negative chain reaction, where the development of one attribute - for example, new clothes or hairstyle - will make the development of others more likely, by changing the both the person's perception of themselves and the way others perceive them.
Create opportunities for change	Care leavers often lack the kinds of social networks that can help and support young people find homes, jobs and friends. The development of positive social networks provides opportunities for the development of inter-personal skills, as well as enabling young people to acquire skills and confidence. Part-time work in service industries can help teach reliability, establish informal contacts and accumulate potential sources of references, which may be activated at a later date when the young person is ready for full time or higher status work.

(source: Rutter 1987; 1993)

C. There are a number of key resilience promoting interventions which will, if successfully implemented, result in a wide range of benefits for children.

- being challenged
- contact with stable and reliable adults
- networks of people who can provide activities or opportunities
- being able to succeed in socially valued tasks
- experiences that contradict previous negative events
- help to find work or enter further education
- learning skills and coping strategies

These are:

Intervention	Benefit to Child
If children have opportunities to take part in demanding and challenging activities then....	..they will become less sensitive to risk and more able to cope with physical and emotional demands.
Where children are in situations of conflict at home, contact with a reliable and supportive other willreduce exposure to and impact of parental conflict.
Facilitating contacts with helpful others or networks who can provide activities or opportunities for work willhelp break the sequence of negative 'chain effects' that occur where children are in highly vulnerable situations
If children are exposed to manageable demands and opportunities to succeed in valued tasks, thenthey will develop more competencies and their competencies and self-esteem will grow.
Exposure to people or events that contradict risk effects will compensate for previous bad experiences andhelp counter the belief that risk is always present.
Opportunities for careers or further education will...	...result in a greater likelihood of adult stability and increased income.
Teaching coping strategies and skills and being helped to view negative experiences positively will result in the child having...	...a capacity to re-frame experiences and be an active rather than a passive influence on their own future.

(from Rutter 1997)

Introduction

Key Points

- Resilience is a quality that helps individuals or communities resist and recover from adversities.
- Over the past few decades, children's psycho-social health has declined in all developed countries.
- Child welfare services have become more pre-occupied with risk factors than with factors which keep children healthy and safe.
- At present, our understanding of the processes that promote resilience is more extensive than our range of practical applications.

This report was commissioned by the Centre for Evidence-Based Social Services at the University of Exeter. The purpose of the report is to review strategies, interventions and approaches that can help promote resilience in children and young people. The report addresses the following questions:

- What is resilience and why is it important to child welfare services?
- Why do some children and young people resist and overcome stressful episodes while others suffer long term damage?
- How can child welfare services promote resilience?

Why is the subject of resilience important to children and to child welfare services? It has been argued that, compared

with earlier generations, children are less able to cope with stressors and obstacles, partly because of their being sheltered from challenging opportunities (Mental Health Foundation 1999). Recent trends in health and social care services have tended to emphasise factors that pose risks for children, rather than those which provide opportunities for growth and adaptation (Early and GlenMaye 2000). For example, the percentage of MEDLINE abstracts - the world's largest data base of health care research - containing both the words 'child' and 'risk', has increased from under 1% in the years 1996-70, to almost 16% in 1996-2000 (search conducted 18/01/02 www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=PubMed).

There is no doubt that the identification of potential risk factors has led to substantial improvements in many areas of children's physical health. However, it has not always led to similar improvements in many aspects of children's emotional and psychological well-being. On the contrary, a substantial increase in psycho-social disorders of children has taken place in most developed countries over the past half century, including suicide and para-suicide, self-injurious behaviour, conduct and eating disorders and depression. (Smith and Rutter 1995; Slap 2001). Even countries with such widely admired social welfare systems as Sweden have not escaped these trends (Nordberg 1994, cited in Werner and Johnson 1999). The dilemma for child care services can be illustrated by the recent rise in the numbers of accidental drownings of children, a trend that has been associated with the over-protection of children by parents, and the corresponding failure of children to be offered sufficient opportunities to learn the management of risk. Over-protection may reduce morbidity, but a hidden price may be paid by children in industrialised countries 'whose lives and childhoods are being newly circumscribed by unprecedented levels of parental concern' (UNICEF 2001:21). Children themselves have also reported increases in poor health. For example, in the UK between 1975 - 1998, the proportion of children aged 5-15 years reporting a longstanding illness doubled (Office for National Statistics 2000). The importance of identifying protective as well as risk factors is recognised in the Department of Health Framework for the Assessment of Children in Need and their Families (2000), which contains a very helpful summary of key resilience promoting factors and their implications for the assessment process (paragraphs 1.14 to 1.18, available on line at www.wales.gov.uk/subchildren/content/practiceguide/section1-14-e.htm).

We thus have a worrying situation where children are

seemingly being affected by an absolute increase in many serious problem areas, accompanied by an apparent weakening in their capacity for natural resistance. The promotion of resilience may be an important strategy in attempting to reverse this trend, through placing more emphasis on factors that promote well-being, and not just on the identification and elimination of risk (Rayner and Montague 2000).

Report structure

The definitions of resilience used, search strategy, inclusion and exclusion criteria and method of synthesising the literature are described in this section.

The theories underpinning the concept of resilience, their empirical base, and their relevance to child welfare services are summarised in chapter 3.

Chapters 4-6 describe interventions and strategies that show promise in terms of promoting resilience. In order to forge clear links with current national child care strategies the chapters address, respectively, the objectives associated with:

Sure Start (www.surestart.gov.uk) - birth to four years.

The Children's Fund

(www.cypu.gov.uk/corporate/childrensfund)

- five to 13 years.

Connexions (www.connexions.gov.uk) - 13 years upwards.

Chapter 7 provides some concluding remarks, and assesses the strengths and weaknesses of resilience theory. A comprehensive bibliography is provided, plus a list of websites where additional information and links can be located. Hyperlinks can be made from the on-line version of this report to these and other sites, which can be found at www.ex.ac.uk/cebss. Adobe Acrobat reader will be necessary to download material from many of these sites (obtainable free from the CEBSS website). Access to all website addresses given in this report was checked on 25.03.02.

At the beginning of each section, key points contained within the chapter are summarised in **blue highlight**. Within each chapter, key studies are summarised in **grey highlight**.

Definitions of resilience

Resilience is broadly understood as positive adaptation in circumstances where difficulties - personal, familial or environmental - are so extreme that we would expect a

person's cognitive or functional abilities to be impaired (Rutter 1985; Garmezy 1985; 1983; 1991; Masten and Coatsworth 1998). Some precise if rather unattractive definitions of resilience are 'the maintenance of competent functioning despite an interfering emotionality' (Garmezy 1991:466), or 'a dynamic process encompassing positive adaptation within the context of significant adversity' (Luthar et al. 2000). Resilience, as a concept, appears to cross national and cultural boundaries (Hunter 2001). Cross-culturally, the concept appears to be understood as the capacity to resist or "bounce back" from adversities. The International Resilience Project, which surveyed almost 600 children aged 11 years, described the most commonly mentioned adversities reported by children. In order of frequency, these were death of parents and grandparents, divorce, parental separation, illness of parents or siblings, poverty, moving home, accidents, abuse, abandonment, suicide, remarriage and homelessness (Grotberg 1997). This project, which collected data from 30 countries, described resilience as 'a universal capacity which allows a person, group or community to prevent, minimize or overcome the damaging effects of adversity' (Grotberg 1997:7). While definitions of resilience are clearly helpful, we also need to know what qualities we might expect to find in a child who has been described as "resilient". The following is suggested as a more accessible definition:

A resilient child can resist adversity, cope with uncertainty and recover more successfully from traumatic events or episodes.

Three kinds of resilience tend to be described (Masten et al. 1990). The first type is represented by children who do not succumb to adversities, in spite of their high risk status, for example low birth weight babies. The second type concerns children who develop coping strategies in situations of chronic stress, such as children of drug using or alcoholic parents. Thirdly, children who have suffered extreme trauma, for example through disasters, sudden loss of a close relative or abuse, and who have recovered and prospered may be described as resilient (Gibson 1998).

It is important to stress at the outset that no child is, or can be rendered, invulnerable to emotional or physiological stress. Where adversities are continuous and extreme, and not moderated by factors external to the child, resilience will be very rare (Cicchetti and Rogosch 1997; Runyan et al. 1998).

Search strategy

The literature search was conducted almost entirely through on-line databases, namely PSYCHLIT, MEDLINE, ERIC and CAREDATA. A small number of recent publications, not yet indexed on databases, were also examined. This enabled the literature on resilience in psychology, health, education and social care to be located and reviewed. Searches were conducted using truncated versions of children and resilience (CHILD AND RESILIEN#) on PSYCHLIT and MEDLINE. ERIC was searched using the keywords 'children' and 'resilience', and CAREDATA with the single term 'resilience'. Search engines were also used (www.google.com; www.hotbot.com; www.lycos.com) to locate web based resources, also using the single term 'resilience'.

As this review will discuss, a great deal is known about the processes through which resilience emerges. However, rather less is known about the ways in which we can influence these processes (Rutter 1993), and discussion on how resilience theory can be applied in practice has only recently begun (Rayner and Montague 2000). In order to find practical applications for resilience theory, our actions must be able to affect the way in which children cope with adversities. Simply noting child, family or environmental issues that appear associated with resilience, but are insensitive to manipulation, may be of theoretical interest but will have limited utility for health, education and social care services. This review thus focuses on strategies which have some promise for practical application.

Resilience - principles and applications

Key Points

- Risk factors are cumulative - the presence of one increases the likelihood that more will emerge.
- Transition points in children's lives are both threats and opportunities.
- Where the cumulative chain of adversities can be broken, most children are able to recover from even severe exposure to adversities in early life.
- Managed exposure to risk is essential if children are to learn coping mechanisms.
- Key resilience promoting factors are support from family, good educational experiences, opportunities to exert agency and valued social roles.
- Acute episodes of stress are less likely to have long term effects on children's development than chronic adversities.
- High self-esteem may often be a protective factor, but it is not the root of every child and adolescent problem nor necessarily an appropriate outcome of all interventions.
- The promotion of resilience involves trade-offs - the goal is effective adult adjustment not eliminating the legacy of all childhood trauma.

Protecting children The study of resilience has been better developed in the fields of education and psychology than in social and health

care services (Smith and Carlson 1997). Much of this material originates in the USA. However, an increasing number of studies and reviews addressing resilience in different areas of child care practice have appeared in UK social work and allied journals in the past few years, including parenting (Kraemer 1999); child placement and children in need (Gilligan 1997; 2000), children with emotional and behavioural problems (Buchanan 1999; Lewis 1999), looked after children (Jackson and Martin 1998), family therapy (Rutter 1999), adoption (Daniel et al. 1999; Clarke and Clarke 2001), social exclusion (Bynner 2001), family placement (Schofield 2001) and as a general conceptual framework for social work practice (Saleebey 1996; Fraser et al. 1999; Turner 2001). While discussing different issues, these studies draw on a wide range of clinical and epidemiological studies that have explored how risk and resilience factors emerge, and which can help us identify points of intervention and effective strategies.

Opportunities for change may often occur during transition points in a child's life. Transitional periods bring both threats and opportunities. As well as heightening risk, they may also function as positive turning points (Clausen 1995), such as a transition from one school to another, to an adult education programme, to work or a new job, to marriage, parenthood or to religious faith (Werner and Smith 1993). While this may happen without external intention, positive turning points may also be encouraged through understanding how protective factors work

Risk and resilience factors

The promotion of resilience is not simply a matter of eliminating risk factors, as the successful management of risk is a resilience promoting factor in itself (Rutter 1994). A crucial lesson from resilience research is that risk factors accumulate. Children may often be able to overcome and even learn from single or moderate risks, but when risk factors multiply, children's capacity to survive rapidly weakens (Fergusson and Lynskey 1996). Risk factors are often inter-connected. For example, a child living in a deprived neighbourhood may experience a poorer education, as a result be drawn into dangerous peer-group activities, limited job aspirations may follow. Risk factors will be intensified when the child lives in an environment where poverty, racism and low social capital are endemic.

Resistance and recovery

Studies of resilience present an optimistic view of the potential for human resistance and recovery. Although adverse life events contribute to psychiatric disorders in some children, others, faced with the same precipitating factors, appear to emerge relatively unaffected (Kaufman et

al. 1977; Bleuler 1978; Garmezy and Rutter 1983; Anthony and Cohler 1987; Dugan and Coles 1989; Hauser et al. 1985; Gore and Eckenrode 1994; Katz 1997). Only around one third of vulnerable children experience serious distal outcomes. Where adversities are short-term, or where powerful protective factors are present, around two thirds of children appear to survive without serious developmental harm (Furman 1998; Rutter, 1985; Wolin and Wolin 1995; Buchanan and Ten Brinke, 1998; Kirby and Fraser 1998).

While it may often be a difficult proposition for those concerned with the welfare of children to accept, meeting and overcoming challenges is necessary for healthy adaptation. Michael Rutter, noting the way in which all organisms adapt to both social and biological threats, observed that 'resistance to infection comes from the experience of coping successfully with lesser doses ... of the pathogen' (1993:627). There is, however, no simple association between stress and gain. Some stressors may trigger resilient assets in children, others may compound chronic difficulties (Quinton and Rutter 1976). For example, siblings may react differently to the illness of a parent (Beardsall and Dunn 1992). Classroom discussions aimed at helping children cope with parental separation may be protective for some children and cause unnecessary anxieties for others (Gilleard 2001). While exposure to some adversities may result in enhanced competencies, a multiplicity of risk factors is unlikely to leave a child's health and development unaffected (Garmezy and Masten 1994).

Cohort studies

Our most robust source of information on the relationship between environmental influences and resilience are cohort studies. Early studies of resilience were retrospective accounts (for example, Khan 1964; Sobel 1973; Krystal 1975). Retrospective studies, which consist of accounts by adults of childhood events, usually find higher levels of morbidity and propose much clearer relationships between early trauma and later outcomes than are located by prospective studies (Macfarlane et al. 1954; Garmezy 1974; Sameroff and Chandler 1975; Murphy and Moriarty 1976; O'Grady and Metz 1987). Cohort studies are longitudinal studies which track the same group of people over a period of time, and are more reliable in assessing cause and effect. What can cohort studies tell us about factors associated with the emergence of resilience?

The power of valued social roles - Glen Elder's studies of the impact of the Great Depression in the USA illustrate how valued social roles for adolescents in periods of family stress could be protective (Elder 1974; Elder and Caspi 1987).

Elder noted that many children in households which had suffered severe income loss during the depression appeared to do better, as adults, than children whose households had avoided such loss. As long as tasks were within the developmental capacity of children - an important point as Elder's findings did not apply to much younger children - participation in household tasks and part-time work appeared to result in more long term benefits for children by encouraging motivation, confidence and competence, compared to children who had no such opportunities (Bronfenbrenner 1979).

Kinship networks - Werner and Smith (1982; 1992), who followed the progress, over 40 years, of a group of children growing into adulthood on Kauai, an island of the Hawaiian chain, suggested that factors promoting resilience tend to re-occur in longitudinal studies of children, regardless of their ethnic, cultural or socio-economic backgrounds. Of particular importance were strong bonds between child and primary care giver in the early years of life, encouragement for children to be active, robust and socially active, the availability of alternative caregiving from other family members, especially grandparents and elder siblings, the forging of strong inter-generational bonds by girls with other female family members, the availability of male role models for boys and environments with kin and community networks, sharing similar cultural beliefs. Non-resilient youth lacked these factors and attributed negative life events to bad luck, fate or other factors beyond their control. In their 1982 study, a third of the children who were predicted to be at severe risk developed into well-adjusted young people at age 18. A decade later, a follow-up study found that two thirds of the vulnerable young people had become competent adults.

Work - Meaningful work has been identified as a protective factor for adolescents (Engel 1967; Thiede Call 1996), providing opportunities for adolescents to develop confidence and competencies (Finch et al. 1991; Mortimer and Finch 1996). The New York Longitudinal Study, begun in 1956 (n=133), noted an association with work patterns and later adjustment (Chess, 1989).

Extra-curricular activities - As well as part-time work, the value to children of developing competencies in leisure and cultural pursuits, or through volunteering has been highlighted (Gilligan 2000). These diverse activities, whether paid work, domestic responsibilities, helping others through volunteering, sports, or cultural pursuits, share a common feature - the promotion of self-efficacy and self-esteem through enabling children to exert agency over their

environment. Extra-curricular activities in general, by connecting children - especially those at-risk - with external networks appear to have a protective function (Masten and Coatsworth 1998; Gilligan 2001a).

Early responsibilities - Unlike many longitudinal studies which explore the destinations of children coping with severe adversities, Murphy and Moriarty (1976) followed the largely secure and supportive childhood of 128 children from infancy to late adolescence, beginning in 1952, in the town of Topeka, Kansas. Murphy and Moriarty located the ability of their cohort to develop mastery of emotional, cognitive and motor competencies in the ecology of their environment and family structure. From an early age children were expected to undertake chores - tidying rooms, washing dishes, helping in the garden and looking after younger siblings. Child monitors as young as nine controlled traffic at intersections near their schools, stopping cars when school children wished to cross. Older children were allowed to roam freely and advertise their availability for labour such as baby-sitting and lawn-mowing in local newspapers.

Family support - The UK National Child and Development Study (NCDS) follows all children born in England, Wales and Scotland during one week in March 1958. Pilling (1990) examined a sample of 386 children at age 27 who were socially disadvantaged at ages 11 or 16 (or both). The children from the disadvantaged group who appeared to be least affected shared similar personal attributes and environmental circumstances. Personal qualities included gender, flexibility, an unwillingness to give up and valuing achievement. Their environment contained many highly supportive features, but even so, the escapees contained proportionately fewer children who had grown up in lone parent families, in families where there was chronic maternal illness or the father was unemployed. Important factors noted by Pilling were the critical role played by parents, and particularly the fathers of the escapees, shared religious practice by the family and encouragement at home for the child's educational pursuits. Achievers themselves saw determination and hard work as critical factors in their success.

Positive peer relationships - Slightly different conclusions were reached by the Christchurch Health and Development Study in New Zealand, which followed a birth cohort of children (n=940) to age 16 years. Unlike many other similar studies, family cohesion was found to be less important as a resilience promoting factor. Apart from higher IQ - a finding common to all studies - lower novelty seeking behaviour and

fewer affiliations with delinquent peers were most strongly associated with higher resilience.

We can see from this brief summary of some of the more important cohort studies that resilience promoting factors remain fairly consistent, with supportive families, positive peer relationships, external networks and the opportunity to develop self-esteem and efficacy through valued social roles or activities being of particular importance. These factors, of course, are more likely to be present in safe communities strong in social capital. In terms of promoting overall health and well-being, the experience of being able to exert a measure of power and control over one's environment appears as important for children as for adults (Prilleltensky et al. 2001).

Protective factors The differing abilities of individuals to cope with stressful situations can be attributed to a variety of factors. These include personal characteristics inherited or acquired in the early years of life, the timing, duration, sequence and frequency of stressful events and the reliability and availability of peer, family and community support. Protective factors may be related to the individual or to the situational context. Factors that are associated with the former (Masten et al. 1990) are problem-solving abilities, attractiveness to adults and peers, perceived competence and efficacy, identification with valued role models, and a desire and capacity to exert control over the immediate environment. The ability to sustain intimate friendships, and the availability of support networks of friends, siblings and other important social ties have been associated with resilience, both in childhood and later life (Beardslee et al. 1987). The capacity of some children to forge supportive links with adults is noted by Werner (1982), who observed that resilient children were particularly skilled at recruiting surrogate parents, including teachers, parent's friends and relatives. Compared to a control group of non-affected children, children of parents with bipolar disorders were more likely to be resilient when they possessed a stable temperament, had a constructive role to play in the family, networks of friends and a strong locus of self control (Pellegrini et al. 1986). Even parental psychosis may not be an insurmountable obstacle for children, as long as the parent retains the capacity to express warmth towards the child, and to maintain both family and external contacts (Kauffman et al. 1977; Musick et al. 1984).

A key protective factor for children who have experienced severe adversities is the ability to recognise any benefits that may have accrued, rather than focusing solely on negative

effects, and using these insights as a platform for affirmation and growth. While this process has been studied more in relation to acute, rather than chronic challenges, a positive approach to adversities is crucial in developing an approach to life that is active and optimistic (McMillen 1999).

Acute and chronic adversities

The impact of adversities on children are primarily associated with the accumulation of events over time, their proximity to each other and how long the episodes last (Sameroff et al. 1993; Garmezy and Masten 1994). Multiple risk factors appear to inflate each other's strength rather than just having a cumulative effect (Dohrenwend and Dohrenwend 1974; Johnson and Sarason 1978). We can learn more, it has been suggested, about how children resist and overcome adversities by focusing on "hassles" rather than events that are greater in magnitude but much rarer in frequency (Lazarus 1980; 1984). Hassles are more likely to be closely related to key elements in a person's life and more strongly associated with outcomes than major life events (De Longis et al. 1982). This insight has particular relevance to the study of stress and coping in children. Early attempts to measure the relative importance of life events relied on judgements made by adults (Coddington 1972). The highest ranked life events - death of parents, acquisition of a visible deformity, unwanted pregnancy - were acute rather than chronic episodes. More recent studies, using children rather than adults as informants, have highlighted significant differences between the views of children and adults on the relative significance of adversities. Adults tend to identify acute and major life events as stressful, whereas children emphasise the importance of daily hassles, for example bullying, parental arguments and problems with friends, or transitional events such as changing schools (Compas 1987; Wertlieb 1991). While acute life events may damage children, the available evidence suggests that relatively minor, but distressing and long-lasting adversities are more strongly associated with risk (Sandberg et al. 1993; Rutter 1994). The evidence suggesting that serious parental conflict and separation is - generally - a more damaging event in the lives of children compared to parental death (Graham 1994) is an illustration of the dominance of chronicity over acuity.

Children who show strong continuities in conduct and psychological disorders into adulthood are likely to have been exposed, not just to episodic periods of distressing events, but to continually adverse circumstances. However, parental conduct, rather than economic status, appears to be more closely related to child related outcomes (Quinton et al. 1990). While risks derive mainly from adverse events that are chronic in nature, resilience is located not just in sources

external to the child but the extent to which the child is - or is enabled to - interact with their environment in a way that reduces helplessness and promotes control.

Live now, pay later? Do children pay a price in later life for effective adaptation? Enough evidence exists to warn us not to draw simplistic conclusions about the simultaneous development of behavioural and emotional competencies (Pound 1996). In a wide variety of stress-inducing situations affecting children, for example war zones (Saylor 1993), domestic abuse (Farber and Egeland 1987) and malnutrition (Engle et al. 1996) behavioural competencies were not always complemented by emotional health. Similarly cautious conclusions have been reached in studies of adolescents, where the high levels of adjustment on behavioural measures of competence found in resilient youths was not matched by emotional strength (Luthar 1991; Luthar and Zigler 1991; Luthar et al. 1993; Kotchick et al. 1997). Statistically comparable levels of depression and anxiety were found among the children labelled resilient and those at the lower extreme of social competence, suggesting that these apparently "stress-resistant" children were by no means untroubled. In relation to child maltreatment, surprisingly high levels of age related competencies have been found in sexually abused children. These children however, often exhibit high levels of anxiety or depression, indicating that competencies and absence of emotional distress do not always accompany each other (Kinard 1998; Spaccarelli and Kim 1995; Chambers and Belicki 1998).

While acknowledging these points, the tendency to identify the "price" paid for acquiring resilience to specific long term outcomes has been challenged. Adult adjustment results from a trade-off of factors - the main requirement is an effective balance rather than eliminating all the negative consequences of early trauma (Rutter 1993). Resilient people may often retain some baggage of sadness and unhappiness (Garmezy 1991:466), but will also have the capacity to cope with their emotional burdens.

Stress and coping Children are not passive actors, but can play an important part in shaping their own responses to family stress (Wolin and Wolin 1993; Drotar 1994). A key quality needed to trigger resilience and recovery is the capacity to re-frame adversities through developing positive coping styles. Coping styles can be of two kinds, problem solving and emotion focused (Folkman and Lazarus 1980; Lazarus and Folkman 1984). Problem solving coping, which involves developing skills, suppressing irrelevant activities, seeking information and planning, is thought to be more effective in that it

involves the affected person in taking active control of the situation. Emotion focused coping reduces emotional stress and has a supportive function, but is less adaptive in that it fails to address long term issues, though it may be inevitable in situations where the individual has no control over their circumstances. Both coping styles depend on accommodating stress in a positive way.

Salutogenesis

It has been suggested that we need to question our belief that stressors are inevitably damaging. Instead, we might consider what keeps people healthy, rather than what makes them sick, a process that has been described as salutogenesis (Antonovsky 1979; 1987). The salutogenic model in health care research has paralleled the development of resilience theory in the social sciences and has two key components; first, the internal and external resources that comprise the arsenal of a person's emotional and material defences; and second, an ability to render the world understandable and manageable (Lindstrom 2001). Resilience develops through the positive use of stress to improve competencies (Frydenberg 1997). Expectations appear particularly important in promoting resilience. Competence, confidence and self-esteem go hand in hand; children develop immune mechanisms when the child grows in an environment which is not less protective, but one that is less anxious and more willing to place demands on the child which taxes their immaturity (Anthony 1974:541). An excessive focus on what services do, rather than an understanding of the source of protective influences that lies within individuals, families or communities, may diminish naturally occurring buffers against childhood risk (Werner 1995).

The promotion of resilience may, however, present problems to child welfare services. Experiences which improve a child's ability to deal with stress, or teach useful competencies, are not always pleasant (Rutter 1985) - though they may often simply involve hard work. Child welfare services are under increasing pressure to avoid exposing children to any manifestation of risk. This may result in an unfortunate contradiction in that the consequences of providing support to children encountering adversities may also be the insulation of children from the competency enhancing experiences associated with exposure to risk.

Promoting cultural resilience

Ethnic minorities, because of factors connected to institutional racism, economic activity or migration patterns, often face considerable difficulty maintaining their cultural integrity. These stressors may express themselves in a range of outcomes, including high rates of school exclusion

among African-Caribbean children (Okitikpi 1999), suicide and para-suicides of gay and lesbian young people (Bird and Faulkner 2000; Trotter 2000) or unemployment in Bangladeshi youth (Jones 1996). Racial discrimination is an important mediator of both illness status and access to health services (Smaje 1995). Where the cultural assets of minority groups go unrecognised or under-valued by the wider community in which they live, active support for children in learning about their heritage and creating links with other members of their cultural or social group is essential. This is likely to be particularly important in areas where the prevalence of minorities is relatively low. Children from migrant cultures may experience a conflict between their own cultural capital and that of the dominant white population, resulting in frustration, anxiety and feelings of inferiority which may show up in school (Spencer 1996). Resilient children tend to encounter environments which emphasise ethnic pride and provide opportunities to develop the adaptive skills necessary to overcome the difficulties associated with institutional racism (Harrison et al. 1990). The promotion of resilience in black communities is a significant feature of the American literature, with a wide range of studies discussing the importance of strategies that develop cultural confidence and enhance problem solving capacities (Spencer 1986; Barbarin 1993; Connell et al. 1994; Elsass 1995; Myers and Taylor 1998; Reynolds 1998). An excellent discussion of why cultural resilience is important to devalued communities (HeavyRunner and Morris 1999) may be accessed at:

www.education.umn.edu/CAREI/Reports/Rpractice/Spring97/traditional.htm

Conclusion Resilience is a challenging concept for child welfare services. Stressing children's vulnerability, the risks they encounter, the danger of long term harm, and the need for extensive interventions is the most common approach adopted by activists who wish to draw attention to a specific child care issue (Best 2001). In many cases this may be entirely justified. However, resilient responses by children may often arise naturally, and may not always need to be stimulated by professional interventions even, for example, in situations of parental bereavement (Harrington and Harrison 1999; Curtis and Newman 2001), or of acute and serious illness. A person does not have to become nice, or experience pleasant encounters in order to acquire resilient characteristics. Those, in fact, most resistant to stress often have a socio-pathic aspect to their personalities (Rutter 1985; Rew et al. 2001). If children possess adequate coping skills, are in environments that protect against excessive demands, but

also have opportunities to learn and adapt through being exposed to reasonable levels of risk, then a successful response to episodes of crisis is likely. However, if neither coping skills are present, nor an environment that is likely to promote them, then crisis episodes or periods of transition may result in developmental damage.

Any review of literature inevitably tends to focus on the strategies that are or could be adopted by professionals. However, when children themselves are asked what helped them "succeed against the odds", the most frequently mentioned factors are help from members of their extended families, peers, neighbours or informal mentors, rather than the activities of paid professionals (Werner 1990; Werner and Smith 1993; Werner and Johnson 1999; Schaeffer et al. 2001). The transient involvement of professionals is unlikely to be a good exchange for a lifetime commitment from family, friends or kinfolk.

In developing conscious strategies to promote children's resilience, we must be careful not to undervalue these non-professional sources, and more importantly, ensure that our actions do not result in such naturally occurring sources of support being weakened.

Effective strategies - the early years

Key Points

- Factors promoting resilience in the early years

In the ante-natal period:

- Adequate maternal nutrition throughout pregnancy
- Avoidance of maternal and passive smoking
- Moderate maternal alcohol consumption
- Maternal MMR vaccination
- Social support to mothers from partners, family and external networks
- Good access to ante-natal care
- Interventions to prevent domestic violence

During infancy:

- Adequate parental income
- Social support to moderate peri-natal stress
- Good quality housing
- Parent education
- Safe play areas and provision of learning materials
- Breast feeding 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

This section discusses resilience promoting interventions which are applicable to pre-school children and infants, including protective strategies in the ante-natal period. Given the huge diversity of risks - and combinations of risks - that children may encounter, no review can cover every eventuality. However, the most common threats to early childhood development are addressed, some of which are relevant to all children, and others to more specific populations. This chronological period covers the population targeted by the national Sure Start programme.

SURE START [www.surestart.gov.uk]

Sure Start is part of the Government's strategy to reduce child poverty and social exclusion, to improve the health and well-being of families and children from the ante-natal period to school entry, and to ensure children are ready to flourish when they enter school. It is particularly targeted on disadvantaged families and communities. Its objectives are:

- to improve children's social and emotional development
- to improve children's health
- to improve children's ability to learn
- to strengthen families and communities

Despite strong evidence to the contrary, it is still widely believed that success or failure in early child development is of crucial importance to later adjustment. While not underestimating the influence of early experience, the capacity for recovery by children is considerable (Tizard and Varma 1992). While early childhood events are indeed important, evidence suggests that no one stage of childhood is necessarily predominant, and that children's life paths can be diverted at any stage (Clarke and Clarke 2000; Bynner 2001).

**KEY STUDY: Recovery from early trauma
Quality of life following early adversity
- a 30 year follow-up (Ventegodt 1999)**

In 1993, a quality of life questionnaire was sent to 7222 members of the Prospective Paediatric Cohort, comprising of persons born in the State University Hospital in Copenhagen between 1959-1961, who were then aged 31-33 years. Response rate was 64% (n=4626). Issues explored were mother's attitudes towards her pregnancy, whether the child was placed in a children's home, mother's mental health, and if the child was adopted in the first year of life. Only very weak connections with later quality life were detected. The study concluded that traumatic events have much less impact on later life than is often predicted, and that it is possible to

compensate almost completely for any single, short-lived early trauma with continuing care and attention.

The ante-natal period

It may seem curious to discuss resilience promoting factors that affect children before they are born. However, there is compelling evidence to suggest that a range of preventable factors that occur in utero may pre-dispose neonates to poorer childhood and adult outcomes, notably vulnerability to chronic illness, impairment, and poor maternal physical and emotional health. Some metabolic processes can be programmed in the fetal stage, increasing the likelihood of subsequent illnesses (Elford et al. 1991; Barker 1995). It is believed that the risk for a range of illnesses, including diabetes, bronchitis, heart disease and some cancers can be heightened by the in utero experience (British Medical Association 1999). The health of expectant mothers is thus intimately tied to the health of their children (Svanberg 1998). Preventive action in the ante-natal period will improve maternal health and result in more resilient neonates.

A consequence of maternal under-nourishment can be arrested fetal growth. While better nutrition in the final trimester may enable the foetus to achieve normal birth weight, damage may be caused to some body organs, especially the liver. Good maternal nutrition is thus important throughout pregnancy, though for the large majority of well-nourished women in developed countries, nutrition during pregnancy will only have a marginal impact on infant size (Mathews et al. 1999). While birth weight is not strongly associated with maternal body weight, there is an increased risk of diabetes and coronary heart disease (CHD) for children of mothers who are excessively over or under weight (British Medical Association 1999). The risks associated with pre-term birth and low birth weight are well known (Petrou et al. 2001). The largest single risk factor for low birth weight is poverty. Data from twin studies (Wilson 1985a; Wilson 1985b) and longitudinal studies (Werner and Smith 1982; 1992) have illustrated the importance of peri-natal stress on subsequent development, indicating that interventions are more productively directed to low socio-economic status (SES) families. The role of non-medical and lay support to isolated mothers from disadvantaged communities, during both pregnancy and the peri-natal period, is of crucial importance in promoting the emotional and physical health of both mother and child (Blair and Ramey 1997).

**KEY STUDY: Maternal care during pregnancy
Risk and resilience in early development (Wilson 1985a)**

Twin studies provide some of the most robust evidence on cause and effect in child development, by isolating the respective influence of genetic processes and environmental factors. This study calculated IQ scores at age 6 years for monozygotic (identical) and dizygotic (non-identical) twins (n=450 pairs). At-risk twins - defined as those small for gestational age (SGA) and low birth weight twins - those falling below 1750 grams birthweight - both had depressed IQ scores at age 6 years. However, the deficit for the SGA children was very small. Where only one monozygotic twin was of low birth weight, the same IQ score as their normal weight sibling was achieved by age 6 years, indicating powerful genetic rectifying tendencies. Overall, recovery patterns were significantly greater in children of high socio-economic status (SES) than low SES mothers. Despite this, even children of low SES mothers made significant gains, indicating that resilience is a primary feature of mental functioning.

Reduction in exposure to alcohol, drugs and smoking

While moderate consumption patterns may not elevate risk significantly, and sudden abstinence may constitute a risk factor in itself, each of these factors is associated with elevated levels of risk for fetal health. Maternal and passive smoking in pregnancy can programme the fetal respiratory system, resulting in a predisposition to respiratory illnesses such as bronchitis and asthma (Spencer and Logan 1998). Maternal smoking can affect birth weight, may increase the risk of Sudden Infant Death Syndrome (SIDS) (Blair et al. 1996), affect the development of motor skills and possibly contribute to attention deficit disorders (Landgren et al. 1998). While the social class incline of smoking has declined slightly in recent years, twice as high a proportion of women in low SES households compared to professional women smoke in pregnancy (Action on Smoking and Health 1993). Excessive maternal consumption of alcohol during pregnancy increases the risk of miscarriage and fetal abnormalities (Royal College of Physicians 1995). Heavy alcohol use is often associated with both smoking and illicit drug use which result in increased vulnerability to low birth weight (Nathanielsz 1996).

KEY STUDY: Reduction in exposure to alcohol, drugs and smoking

Smoking and the sudden infant death syndrome: results from the 1993-5 case-control study for confidential inquiry into stillbirths and deaths in infancy (Blair et al. 1996)

This study compared each child fatality (n=195) with four matched controls (n=780) in three English regions with a total population of 17 million people. More index mothers

smoked during pregnancy (63% v. 25%) and paternal smoking had an additional risk effects after controlling for other factors. The risk of death rose with postnatal exposure to tobacco smoke. While alcohol use was higher among index than control mothers, it was strongly correlated with smoking and was not found to have any independent effect. Illegal drug use was higher among index mothers, and paternal drug use was found to be significant. The study concluded that sudden infant death syndrome is associated with maternal smoking during pregnancy, with parental drug misuse compounding the risk factor. The population attributable risk of smoking in pregnancy was over 61%, suggesting that almost two thirds of such deaths may be associated with the effects of exposure to tobacco smoke before and after birth.

More details: The abstract and full text of this paper can be found at www.bmj.com

Maternal health

The population most at risk from psychological illnesses, especially depressive and affective illnesses and psychoneurotic disorders, are females with young children, living in poverty, and lacking adequate social support, especially supportive partners (Brown and Harris, 1978). Extreme disadvantage renders children more vulnerable to stressors that may only have a transient effect on children in more secure environments. For example, premature birth is unlikely to compromise a child's developmental progress when adequate personal resources and support systems are available to parents (Belsky, 1984). Inadequate levels of social support during maternity increase the likelihood of depressive illnesses, and render the mother more vulnerable to risk behaviours, including dependence on alcohol, cigarettes and narcotics, which increase the level of fetal risk. Social and emotional support can protect against maternal depressive illness (Stewart-Brown 1998) and may protect maternal health more broadly. The protective effect of social support on maternal health seems equally powerful, whether this support comes from professional staff (Oakley 1992) or experienced mothers (Johnson et al. 1993). As well as strategies to prevent physical and psychological morbidity, the importance of screening for domestic violence has been highlighted, as apart from harm being inflicted on the mother, fetal injuries may result in premature birth and low birth weight (British Medical Association 1998).

KEY STUDY: Maternal Health

Social Support and Motherhood:

the natural history of a research project (Oakley 1992)

Five hundred mothers with histories of low birthweight babies

received either routine care during pregnancy, or a more intensive programme of regular visits from midwives, and access to a 24 hour telephone advice line. Mothers in the routine care group were more likely to suffer depressive episodes, have ante-natal hospital admissions, non-spontaneous deliveries, and reported less helpful partners. Compared to the routine care group at one year follow-up, fewer mothers who had received the enhanced intervention were depressed (5% v 10%), more reported better health (42% v 37%), fewer smoked (39% v 49%) and they were less likely to report health problems with their children (32% v 41%).

Infancy Where low birthweight (lbw) babies are born into conditions of extreme disadvantage, a variety of protective factors are required. In a study of lbw babies (n=243) from poor families, Bradley and colleagues (1994a; 1994b) identified six resilience promoting factors in the child's environment; household density, safe play areas, acceptance, variety, presence of learning materials and responsiveness. Resilient children had three or more of these factors present at three years of age. Resilience was absent where the child's environment possessed two of these factors or fewer. Even the presence of other factors, such as high maternal intelligence or good child health could not compensate for the effect of multiple stressors. The best guarantee of a resilience promoting environment is high parental income, lack of over-crowding and maternal educational qualifications. While not all resilience promoting factors can be simultaneously addressed, fewer poverty-related adversities in the first year of life will substantially decrease the cumulative risks. Lay support may be as powerful, if not more so than professional help.

KEY STUDY: Infancy

The community mothers programme: randomised controlled trial of a non-professional intervention in parenting (Johnson and Malloy 1995)

Based in Dublin, this programme recruited and trained experienced mothers to support disadvantaged first-time mothers. Each community mother supported five to 15 women. Visits were made at least monthly for the first year of life. Only 10% of women dropped out of the programme. A control group received standard nursing support. Compared to the control group, the children in families visited by the community mothers were read to more frequently, had better diets, played more games with their mothers and were more likely to have had essential immunisations. Mothers in the intervention group were less depressed and had better social networks.

Home support

There is compelling evidence for the effectiveness of well structured and responsive home based support for mothers, especially first time mothers with inadequate social networks (Macdonald and Roberts 1995; Hodnett and Roberts 1997)). One study of an early years intervention project suggested that programme costs were paid back over four years through reduced use of health and social care services (Olds 1988; 1997). Interventions at home often prove more convenient for young mothers than clinic visits and can be particularly helpful in cases of post-natal depression (Holden et al. 1989). Where the model of intervention is family-centre rather than home-based, difficulties have been noted with women failing to attend, or only attending for limited periods (Oakley 1995).

KEY STUDIES: Home support

1. Improving the life-course development of socially disadvantaged mothers: a randomized controlled trial of nurse home visitation (Olds et al. 1988) 2. The prenatal/early infancy project: fifteen years later (Olds 1997)

This programme, based in the USA, is one of the best evaluated early interventions. Four hundred low income mothers were randomly selected, half received home visits from nurses who delivered parenting advice, social support and health advice from pregnancy until the child was two years old. The children in the intervention group had fewer visits to emergency departments, better IQ scores and were less likely to be abused or neglected than children in a control group. A 15 year follow-up indicated that children in the intervention group were less likely to have been subject to reports of abuse and neglect, their mothers had fewer convictions, claimed fewer welfare benefits, had fewer births and were less dependent on alcohol or drugs.

Breast feeding

Resilience is associated with IQ. There is strong evidence that babies who are breast fed to 3-4 months have an increased chance, compared to non-breast fed babies, of a higher IQ up to age 10 years (Morrow-Tlucak et al.1988; Lucas et al. 1992). They also have less chance of needing treatment for a variety of illnesses, including diarrhoea (Howie et al. 1990), respiratory infections (Wright et al. 1989), urinary tract infections (Pisacane et al. 1992) and of developing diabetes mellitus (Mayer et al. 1988). The single biggest variable affecting the mother's decision whether or not to breast feed is the attitude of the male partner. Women with partners who are supportive are more likely to breastfeed (Giugliani et al. 1994a; 1994b; Littman et al. 1994).

KEY STUDY: Breast-feeding**Effects of breastfeeding support from different sources on mothers' decision to breastfeed (Giugliani et al. 1994a)**

A cross sectional study compared 100 breast feeding and 100 non-breast feeding mothers to investigate the relationship between whether mothers chose to breast feed or not and sources of lay and professional support. The study controlled for socio-demographic influences. A favourable attitude by the male partner towards breastfeeding was the most powerful single factor in influencing women's choice. Prenatal class attendance and support from lay people increased the odds for breastfeeding by a multiple of three. Advice by doctors, nurses and nutritionists did not affect maternal decisions. The results indicated the need to revise the content of pre-natal interventions to include educational programmes aimed at fathers.

Adoption In cases of extreme and irresolvable adversities during infancy, the best chance of restructuring all non-genetic factors is through adoption (Clarke and Clarke 2001). However, though the positive benefits of adoption in accelerating physical development and cognitive gains is well supported, there may be a ceiling on gains where early trauma has been particularly severe and continuous. (O'Connor et al. 2000). While children seem to be able to recover from even severe early traumas remarkably well, the continuing presence of risk factors appears to have a cumulative effect, which may only be countered by a similarly broad range of resilience promoting strategies (O'Grady and Metz 1987).

KEY STUDY: Adoption**The effects of global severe privation on cognitive competence: extension and longitudinal follow-up (O'Connor et al. 2000).**

The profile of adopted children has changed greatly in the past 25 years. The percentage of children adopted from local authority care has increased from 7% to almost 50%, half of all adoptions are now by step-parents, and the proportion of adopted children who have experienced severely abusive or neglectful environments has substantially increased. The resilience promoting effects of early adoption are being confirmed in this longitudinal study of 165 highly deprived Romanian adoptees, and 52 non-deprived UK adoptees all placed in UK homes before 24 months of age. Data is currently available at 4 and 6 years. There has been considerable "catch-up" in terms of cognitive ability and developmental impairment among late placed Romanian children, but the group still exhibited lower scores than children adopted earlier. Also, while attainment at age 4 was

maintained, late adopted children gained no further ground on early adoptees. While this study reinforces the evidence that children can effect a strong recovery from severe early adversity, it also suggests that such recovery is limited if the intervention is delayed, and that a measure of disadvantage may continue to linger.

The pre-school years

A key target of the Sure Start programme is the reduction of social exclusion. Young children become vulnerable to social exclusion due to the social exclusion of their parents. Early risk factors associated with social exclusion are environmental threats to physical and emotional development, poverty, parental capacity and aspirations, and pre-school experiences. Of these factors, families play the most crucial role, in terms of creating the conditions where social exclusion becomes more or less likely (Bynner 2001). Some of the strongest evidence we have for the promotion of resilience can be found in pre-school educational interventions. Disadvantaged children are liable to benefit the most (Oliver and Smith 2000). Programmes, however, need to be of high quality for gains to be achieved and maintained, with key features being a developmentally appropriate curriculum, small class sizes, skilled and well-supported staff, attention to children's non-educational needs, and outreach work to increase parental engagement (Weissberg and Greenberg 1997). Progress for disadvantaged children will not be maintained unless high quality compensatory provision continues (Clarke and Clarke 2000).

KEY STUDY: The pre-school years

A summary of significant benefits: the High/Scope Perry Preschool study through age 27 (Schweinhart and Weikart 1993)

This study examined the careers of 123 African-American children born in highly deprived situations and at risk of failing in school. At ages three and four, the children were randomly allocated to an intervention group which received a high quality pre-school learning programme and a no-programme group. A follow up was conducted at age 27, when 95% of the group were contacted. Compared to the no-programme group, fewer programme group members had been arrested five or more times (7% v. 35%), only as third as many had been arrested for drug dealing (7% v. 25%), more earned above \$2000 per month (29% v. 7%), owned their own homes (36% v. 13%) and had a second car (30% v. 13%). Fewer programme group members had received welfare benefits in adult life (59% v. 80%) and more graduated from high school (71% v. 54%). Mean time married for males was greater in the programme group (6.2

v. 3.3 years and fewer females had children out of wedlock (57% v. 83%). A cost benefit analysis of the programme estimated that for every one dollar invested in the programme \$7.16 dollars was returned to the public.

Day care Well-structured, targeted and content appropriate pre-school programmes are claimed to lead to improved adult outcomes in education, income and social capital including reduced involvement with criminal activity and a higher commitment to relationships, claims that are supported by an influential longitudinal study (Weikart 1996) and by a systematic review of randomised controlled trials (RCTs) in day care (Zoritch et al. 1998). A 12 year longitudinal study of over 1500 children in Chicago, who entered a pre-school programme and received support to age 9 years, concluded that children who were exposed to the programme for four years did better in terms of academic achievement than a non-intervention comparison group (Reynolds 1994). Effective pre-school education is reported to pay for itself by its input costs being outweighed by savings in remedial welfare (Sylva and Moss 1992).

KEY STUDY: Day care

The health and welfare effects of day care for pre-school children: a systematic review of randomised controlled trials (Zoritch et al. 1998)

The study sought to quantify the effects of out of home day care for children on educational, health and social welfare outcomes for children and families. Studies were included if they were randomised or quasi-randomised controlled trials of non-parental day care for children under 5 years. Eight trials were located that met the criteria. The aggregated results indicated that day care increases children's IQ, benefits behavioural development, and promotes school achievement. Long term follow up demonstrates increased employment, higher income, lower levels of criminal behaviour and fewer early pregnancies. Positive effects were noted on mothers' education, employment and relationships with children. No data was available on any paternal impacts. Most of the trials combined day care with some form of parental (mostly maternal) training, making it difficult to disentangle the effects of each intervention. The trials were carried out in disadvantaged US populations, hence the level of generalisability to other cultures and income groups is as yet unevaluated.

Alternative sources of support Early childhood abuse places children at heightened risk for neurological, cognitive and psychological problems. In terms of academic achievement, neglect appears to place children

at greater risk of poor performance than any other kind of abuse (Kurtz et al. 1993). Alternative care givers, whether permanent, temporary or supplementary, can promote resilience through:

- affectionate and attentive care
- addressing painful memories
- the provision and retention of predictable routines
- acceptance and attachment to a family, social or faith based group. (Lowenthal 1998)

**KEY STUDY: Alternative sources of support
Resilient peer mentoring (Fantuzzo and Atkins 1995;
Fantuzzo et al. 1996)**

One of the few randomised controlled trials deliberately designed to promote resilience was focused on maltreated and withdrawn pre-school children (mean age 4.5 years). Pairing the children with resilient peers in classrooms (maximum of two pairs per class), under the supervision of a parent teacher, the children were encouraged to share play and creative activities using humour, which is a constantly noted feature of resilient children. Significant improvements were noted by teachers - who were blind to the children's status - which were maintained in a 2 month follow-up. No such improvements were noted of the children in a control group.

The importance of continuing support

The promotion of resilience in primary care may often be a matter of simple common sense, such as helping isolated mothers to make contact with others in a similar situation, finding nursery schools or after-school activities for vulnerable children and encouraging parent-child communication (Spender et al. 2001). Food supplements have a particularly strong effect on children living in poverty, appearing not just to improve physical health but also cognition and improved academic performance (Engle et al. 1996). However, pre-school support alone may not be sufficient to ensure resilience continues to protect the child through the lifespan. Where continuous adversities persist, even children who show resilient features in the pre-school years are likely to regress unless prophylactic measures continue for both mother and child (Luthar and Zigler 1991).

**KEY STUDY: Importance of continuing support
Resilience in children at high risk for psychological
disorder (O'Grady and Metz 1987)**

The power of on-going social support for children facing

multiple adversities is illustrated by this longitudinal study on infants who were assessed at aged 4 weeks and followed up at age 6 (n=109). The study confirmed the power of multiple adversities to potentiate each other, rather than simply being additive. Data were collected from parents, teachers and the children themselves. Outcome measures were school problems, social competence, behaviour problems and emotional adjustment. The study reinforced evidence that single risk indicators at birth have weak predictive value in terms of later adjustment, and that multiple adversities are necessary to affect cognitive and behavioural adjustment. High-risk infants in this cohort who most successfully overcame early adversities were those who had received the strongest social support from families and external sources.

Social capital Social capital describes the benefits that accrue from networks of supportive personal relationships, within both families and communities, and from affiliations with formal and informal social, political, educational or faith based institutions. Social capital includes adequate parental support, extended or extra-familial support or other social networks, neighbourhood ties and membership of community groups such as churches (Abbott-Chapman 2001). Families that contribute to, as well as are supported by such resources and networks are said to be strong in social capital. Where levels of social capital in families of pre-school children are higher, children show similarly higher levels of positive emotional and behavioural development. Mutual support and strong neighbour ties are health promoting factors, even under unfavourable conditions (Acheson 1998). Where social capital is high, the probability of children in even unfavourable environments developing resilient characteristics is significantly increased.

KEY STUDY: Social capital

Children who prosper in unfavourable environments: the relationship to social capital (Runyan et al. 1998)

This study examined the extent to which social capital is associated with positive outcomes for pre-school children. A total of 667 2-5 year old children and their mothers who were part of an existing longitudinal study into child abuse and neglect were recruited. All the children were identified as being at high risk due to unfavourable economic or social circumstances. Children who were 'doing well' were matched with those not doing well. Social capital was measured by five indices - presence of two parents or carers; maternal social support; two children or fewer in family; neighbourhood support and church attendance. A range of psychometric instruments were used to measure children's emotional and behavioural status. Only 13% of the children

were doing well. The most protective variables were perceptions of personal and neighbourhood support and church attendance. The presence of any single indicator increased the odds of doing well by 29%, the presence of two by 66%. The study indicates that strengthening communities, as well as strengthening interpersonal relationships, has a positive impact on children's wellbeing at an individual level.

Conclusion The main lessons that resilience research teaches us about the early years are that:

- Strategies to promote children's resilience must begin in the antenatal stage.
- Children possess self-rectifying tendencies, and that given adequate compensatory interventions, most will be able to recover from even severe early trauma.
- Multiple adversities are not just additive, they intensify the toxic strength of each risk factor.
- Social support to disadvantaged and isolated mothers is probably the single most effective protective strategy.
- Where adversities are continuous, compensatory help must be long term.
- Effective pre-school programmes appear to have positive effects that last into adult life.
- Improving the quality of social networks, both of kinship and in the broader community, will result in environments richer in resilience promoting features.

Effective strategies - middle childhood

KEY POINTS:

Factors promoting resilience in the middle 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, sports 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 failing these, a reliable unrelated adult; maintenance of family routines and rituals.
- Manageable contributions to the household which 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 to resolve minor but chronic stressors as well as acute adversities.
- Provision of breakfast and after-school clubs.
- Stable accommodation.

This section describes factors and interventions associated with the promotion of resilience in the period from first school entry, to early adolescence and entry to secondary education. This chronological period is that covered by the Children's Fund initiative, which is, at the time of writing, developing rapidly following its initial pilot phase.

CHILDREN'S FUND

[www.cypu.gov.uk/corporate/childrensfund]

The Children's Fund is managed by the Children and Young Person's Unit at the Department for Education and Skills (DfES). It is primarily a preventive strategy, which aims to ensure that vulnerable young people aged 5-13 years have a good start in life, build on their early years experience, do well in secondary school and remain in further education or training after 16 years. The objectives of the Children's Fund are:

- to promote school attendance
- to improve academic performance
- to reduce the numbers of young people involved in crime and who become victims of crime
- to reduce child health inequalities
- to build social capital

The Home Office 'On-Track' programme, which addresses the third objective, was launched by the Home Office in 1999, and has now been absorbed into the Children's Fund. On-Track projects are based in high crime, high deprivation communities. In each area an enhanced range of evidence-based preventive services for children aged between 4 – 12 is being developed. Intensive inter-agency co-operation will mean that children at risk of offending are identified early and they and their families provided with consistent services through the period of the child's development. The programme is building on and linking together existing services and initiatives for children and families. The effectiveness and cost-effectiveness of the arrangements will be intensively evaluated. The aim is to foster areas of excellence, which deliver both real reductions in 'anti-social behaviour' in high crime communities and answers to pressing questions about what works best in terms of early prevention. More information: www.homeoffice.gov.uk/cpd/fmpu/ontrack.htm

During the pre-adolescent period, children appear more negatively affected by what to adults may be relatively undramatic events, such as changing or entering schools, or

daily "hassles" with friends, siblings or parents (Smith and Carlson 1997). Entry to the formal education system may be perceived by the child as the first major transitional period in their life. Where children have been adequately prepared for school entry, as described in the previous section, they will be better equipped to negotiate any difficulties that may arise. If children have begun to develop mastery orientated coping styles - that is are able to consider alternative solutions to problems, remain focused on information relevant to the task and use problem solving strategies - they will be better placed to play an active role in shaping their environment (Compas 1987). Coping styles and strategies are associated with content and style of parent-child relationships.

KEY STUDY:

Coping with adversities in the middle childhood

Resilient children: a longitudinal study of high achieving socially disadvantaged children (Osborn 1990)

This study examined data from the 10 year follow-up (n=14,906) of the Child Health and Education Study (CHES), which has followed the progress of all children born during the week 5-11 April, 1970 in England, Scotland and Wales. Vulnerability was defined in terms of the family's socio-economic status when the child was five years. A Competency Index was administered at age 10, which explored educational attainment and behavioural adjustment and identified which of the 'at-risk' children could be described as resilient. The most powerful factor identified was the attitude and behaviour of parents. Non-authoritarian and child-centred parenting, along with positive attitudes to the child's education outweighed the effects of all other variables combined. However, such positive parenting was only likely to occur where the impact of poverty was moderated by good marital relationships, supportive family and friends, or other positive factors.

School entry

Personal attributes of children at school entry may function as risk or protective factors. The pre-school experiences of some children may have equipped them with characteristics that challenge school entry, especially when their styles of communication or behaviour do not fit with classroom expectations. By aged 4-5 years, children will have internalised the styles of behaviour that are normative within their homes and cultures. Rigid and culture-specific expectations may devalue adaptive skills which children have developed in response to difficult circumstances. This may result in children, particularly from some ethnic minorities, being labelled as difficult, a label which may follow them

through their school career. School entry strategies can inadvertently function as risk-enhancing rather than protective, where children are prematurely classified as a result of their inability to meet the requirements of a classroom culture that may be initially alien to them. Valuing help-seeking behaviour, rather than independent learning and the use of peer-learning groups have been identified as effective protective mechanisms, leading to improved skills in inter-personal relationships with both adults and other children (Winfield 2001). Promoting home-school links are of particular importance.

KEY STUDY: School entry

School Start Evaluation Report (Seal 1997)

Primary schools in Wiltshire identified an increasing number of children who were presenting behavioural and other adjustment problems at entry level. This was associated with a range of problems, including lack of parental involvement with their preparation for school. Twelve infant schools were recruited for a School Start project. Educational Support Assistants (ESAs), mostly mothers who lived locally, were recruited, some to work with a single school and some between several smaller village schools. Their aim was to help prepare children for school entry, increase parental support with their children's education and improve inter-agency co-operation. Teaching programmes took place at both at home and in the classroom. Particular attention was paid to making schools less intimidating to less-confident and isolated parents. The outcomes sought were fewer behavioural problems in the first year of primary school and more engagement of parents with the schools. Over a two year period, almost all the children referred to the scheme were accepted and entered the programme (n=142). Less than 3% of parents declined the service. An evaluation of the service, while having no control group, reported both parental and teacher satisfaction with higher levels of parent engagement, fewer behaviour problems, and better preparation for children and parents for school entry.

School attainment

School performance is a key protective factor and strongly associated with the development of resilience. Effective teaching techniques thus have a crucial contribution to make. For example, there is strong evidence that, despite effects fading over time, the most disadvantaged children continued to benefit from the long term effects of the Reading Recovery approach, with these children maintaining long term gains. The substantially greater expense of the model compared to conventional methods was asserted by the authors of the study to be no more expensive - and more effective - than educating any child with reading difficulties (Hurry and Sylva

1997). In middle childhood, gender differences are already evident. Girls appear more likely to be distracted by shocks to their learning curve, such as having poorer marks than expected in maths or reading, indicating - in this context - lower levels of resilience, possibly arising from cultural expectations (Kowaleski-Jones and Duncan 1999).

KEY STUDY: School performance

The construct of resilience: a critical evaluation and guidelines for future work (Luthar et al. 2000)

Examining the main studies to date, this review concluded that positive experiences inside school, whether academic, sports, or friendship related, will have a proportionally greater resilience promoting effect on children facing multiple adversities (Luthar et al. 2000). Similar findings have been noted when identifying the antecedents of resilient behaviour in maltreated and non-maltreated children, where positive adult relationships were found to have greater predictive power for maltreated children, probably due to the relative absence of such relationships in their lives outside school. Good school experiences, and corresponding positive relationships with supportive adults, will thus possess much greater corrective power for seriously disadvantaged youth than for other children.

Comprehensive approaches

While attempts to implement broadly based strategies, based on the principles of resilience are rare, a number of attempts have been made, the most ambitious being a school based initiative in the USA. Since 1994, the Minneapolis public school system, building on work done over many years at the University of Minnesota, has trained the majority of its teachers in resilience strategies using a manual titled *'Moving beyond risk to resilience'* (CTARS 1991). Based on the work of Emmy Werner, five specific resilience enhancing strategies are promoted for children who need extra support.

Offering the opportunity to develop positive attachment relationships, including

- the opportunity to develop supportive relationships with a caring adult
- mentoring programmes in schools consisting of a one-to-one relationships with a school staff member
- building support systems for people on whom the children rely, particularly parents, which may involve parent education workshops, involving parents in school, positive feedback to parents on children's work, or simply additional supportive contact by letter, personal contact, or phone.

- the scheduling of teaching sessions to extend contact with one teacher rather than constantly changing classes
- the use of peer helpers and cross age teaching to link young and vulnerable children with older and more resilient pupils.

Increasing children's sense of mastery in their lives, including:

- student recognition activities, certificates of achievement and the celebration of important developmental milestones.
- Teaching strategies that recognise different learning styles and alternative grading systems.

Building social competence as well as academic skills, including:

- peer groups and social skills development programmes
- linking curricula with events and people in the community to illustrate the application of school-based learning to real life.

The reduction of unnecessary stressors, including:

- pastoral support for children with emotional problems.
- group rather than individual decision making for younger children.

The mobilisation of resources outside the community, including:

- familiarising teachers with local resources and getting to know important and influential local people.
- Involving people from the wider community, including former pupils, in school-based programmes.
- locating supportive social welfare services within schools, both for all children and for specific cultural groups.

More information on this initiative can be found at:

www.ncrel.org/sdrs/cityschl/city1_1b.htm

A valuable discussion on the importance of a strategic approach to promoting resilience and of the key factors that are necessary (Benard and Marshall 1999) is also available at:

www.education.umn.edu/CAREI/Reports/Rpractice/Spring97/framework.htm

Comprehensive initiatives address wider issues than resilience promoting factors in the child's immediate setting. They recognise that a broader approach, encompassing dimensions associated with community regeneration are required to fully address environmental risk factors.

KEY STUDY: Comprehensive approaches

CTC - the story so far: an interim evaluation of Communities that Care (France and Crow 2001)

Building on a US programme specifically designed to prevent delinquency and anti-social behaviour, the Joseph Rowntree Foundation funded three demonstration projects in the UK, known as Communities that Care (CTC), which are now part of a wider programme of 23 projects across the UK. CTC builds on a US wide network of programmes designed to prevent delinquency and anti-social behaviour, which has been adapted for a UK context. It is based on two important assumptions; first that risk factors associated with delinquent behaviour can be identified; second that children need committed leadership from adults in terms of what is and is not acceptable behaviour, and be able to bond socially with adults who are clear about these standards. Working in partnership, professionals and local people together identify risk factors that threaten communities, designing and then implementing interventions based on evidence of effective practice. An interim evaluation of this programme has been conducted. Main findings to date are:

- A good balance should be created at the outset between local people and key professionals.
- While extensive consultation over community audits is essential, excessive delays in completion can jeopardise the implementation element of the programme.
- Successful mobilisation depends on existing community structures being in place, preferably within areas already having a sense of homogeneity.
- Programmes need to take account of, and work to, important cyclical events such as school terms and local and central authority funding patterns.
- Both the skills involved in data collection and analysis should not be underestimated - local people may be

better involved as consultants rather than data collectors unless extensive training can be provided.

A number of problems have occurred to a differing extent within each of the pilots, notably over-lengthy data collection periods, staff turnover, failure to engage socially excluded families, ethnic minorities, other local agencies and especially young people, and lack of research and evaluation capacity. A final evaluation of the programme will be published in 2003.

Summary available at:

www.jrf.org.uk/knowledge/findings/socialpolicy/671.asp

Severe adversities

Where children have encountered abuse, notably sexual abuse, strong and trusting relationships with the non-abusing parent, or where this is not possible, a close and long term relationship with an unrelated adult have resilience promoting properties (Mrazek and Mrazek 1987). Even in families that maltreat children, the maintenance of structure, clear rules and consistent problem solving approaches have resilience promoting qualities (Sagy and Dotan 2001). The strength of the parent-child bond was the most powerful factor associated with resilience in a sample of children aged 6-11 with mothers affected by AIDS (Dutra et al. 2000). When combined with help to perform better in school, developing other talents such as sporting or musical abilities and an attribution style that enables the child to take credit for good events and reject responsibility for bad ones, the promotion of resilience is addressed across a range of important variables (Heller et al. 1999; Spaccarelli and Kim 1995). Enabling children to exert control over their lives by promoting both self-efficacy and self-esteem is also an effective strategy in situations where the hurt cannot be "undone". Refugee children face some of the most extreme adversities. Forty per cent of refugees in the UK are under 18 years. Many have been exposed to highly distressing events and are likely to be vulnerable to mental health problems (Jones and Gill 1998).

KEY STUDY: Severe adversities

Psychologically distressed refugee children in the United Kingdom (Hodes 2000)

At least 50,000 young refugees live in the UK, the large majority in the greater London area. Many may have suffered - or have close family who have suffered - a variety of severe traumatic episodes, including dispossession, sudden loss of social status, family disintegration and separation, homelessness and torture. While there is some dispute concerning the applicability of European and North American diagnostic classifications of mental disorder (ICD-10; DSM-IV) to other cultures, there is general agreement

that post traumatic stress disorder (PTSD) is a cross-cultural phenomenon. The majority of refugee children, despite having often been exposed to highly distressing circumstances, are remarkably resilient, especially where support is available from extended family and kinship networks, a factor not encouraged by policies of dispersion. A range of studies, from the second world war to date, indicate that vulnerability to or recovery from PTSD is most likely where children are supported by their families, and where they are able to perceive that their immediate carers are able to exert agency over their circumstances. In addition to supportive families, those who appear best placed to maintain positive mental health are able to identify with a community and the aims of that community, and have the opportunity to take part in meaningful social rituals which affirm their cultural values.

Bereavement

In cases of bereavement, a conscious attempt to build resilience is likely to be more effective when designed as an educational process aimed at improving confidence and competence, rather than as a primarily therapeutic tool (Barnard et al. 1999). In such cases, support groups, where children are able to share their experiences with others in the same situations, can lead to new and more effective ways of coping, and not just as a means of helping to deal with feelings about an unchangeable past (Black 1998). As where disruption occurs to familiar routines through loss, divorce or illness, the maintenance of familiar and valued routines is an important protective factor (Velleman and Orford 1999).

KEY STUDY: Bereavement

Do community-based support services benefit bereaved children? A review of empirical evidence (Curtis and Newman 2001)

This review examined empirically based quantitative evaluations of community-based interventions for bereaved children, community-based interventions being understood as those taking place outside a clinical setting. The criterion for inclusion was that studies use a control group or pre- and post-test measurements using a standardised instrument. Nine relevant studies were identified. Empirical evidence of positive outcomes for children was limited, and compromised by methodological weaknesses in the design of studies. Small sample sizes, irregular attendance, high levels of attrition, short time scales between pre- and post-testing, and difficulty in developing appropriate instrumentation - including assessment of adherence to the agreed intervention programme - all created problems. The review concluded that while clear benefits could result for children in some circumstances, the case for the universal inclusion of all

bereaved children in such support programmes remains unproven and should be resisted until further investigation of long-term and/or unwanted effects has taken place.

School exclusion

In situations where primary school children are at risk of exclusion from school or developing anti-social behavioural patterns, there is some encouraging evidence from the evaluation of a mentoring service that high quality staff can be recruited and retained (Roberts and Singh 1999).

KEY STUDIES: School exclusion

Using mentors to change problem behaviour in primary school children (Roberts and Singh 2001)

This study evaluated CHANCE, a community-based development project in London, which offers early intervention for young children at risk of long term behaviour problems, school exclusion or criminality. Its main activity is the recruitment of trained mentors for vulnerable children aged 5 - 11 years. The evaluation concluded that the project had been successfully able to recruit and retain mentors, had built excellent relationships with schools, targeted its referrals accurately, and created good and trusting relationships between children and mentors, and according to reports by mothers, teachers and mentors, have had some success in improving children's behaviours. Standardised measures of behaviour indicated that children had transferred gains from home to the school environment, but similar gains were noted in a non-intervention comparison group, indicating that these gains may have resulted from maturation, not necessarily the intervention. The unit cost of the project was more expensive than anticipated, as fewer children than planned completed the programme. The study concluded that the twelve month programme may need to be extended in order to achieve significant generalised behavioural change, be accompanied by additional support, and to focus more on the solution focused stage of the work. The full text of this study can be found at:

www.homeoffice.gov.uk/rds/pdfs/hors233.pdf

Meeting need and challenging crime in partnership with schools (Vulliamy and Webb 1999)

A project run by the Home Office Programme Development Unit in Yorkshire uses social work trained staff to work in schools, supporting children and young people (aged 10 – 14 years) who are at risk of exclusion. It targets support at children who display challenging behaviour. It has two aims, to reduce school exclusions, and to promote a cohesive local authority response. Some key findings are that:

- Home-school support workers are helping to bring about a reduction in permanent exclusions and a considerable reduction in fixed-term exclusions

- There have been reductions in truancy due to increased home-school communication and direct intervention.

Problems are addressed in a variety of ways, including: befriending, ongoing counselling and support, individual approaches or group work to address particular issues such as anger management, advocacy and mediation, identification of, and participation in, out-of-school leisure activities, personal, social and health advice, and referral to other agencies.

More details of this study at: www.homeoffice.gov.uk/rds/pdfs/r96.pdf

Parental separation

Divorce or parental separation, too, may affect children at any age. Pre-adolescent children, however, are most at risk (Wallerstein et al. 1988), and boys appear more vulnerable than girls (Block et al. 1986). While both the process and outcome of divorce on the health of children is less well explored in minority ethnic communities, a wide range of studies concur that the family environment with fewest risks for unsuccessful child development is an intact, harmonious, two parent family (Buchanan 1999). The loss of a parent through divorce may be a source of greater long term difficulty for children than parental death (Kendler et al. 1992). Despite positive effects on parental health being noted through mediation and counselling, few interventions, for example, school based peer-groups, have been found to help children directly, and where positive effects have been found, they have been very moderate (Roosa et al. 1997). Children's capacity to resist and recover from the trauma of parental separation seems most closely associated with the capacity of the parents to maintain, or to be helped to maintain, non-conflictual relationships, and especially where the child is able to maintain a close relationship with one parent. For risk factors to be neutralised, it appears necessary for the protective element to be present in the same domain; for example the impact of marital discord will be moderated by a good relationship with one parent, but not necessarily by good relationships with peers (Rutter 1999). Despite the high risk posed by parental separation to children however, marital transitions can - and are - survived by the majority of children, and risk factors can be further lowered by direct attempts to resolve or reduce parental conflict. Where children are able to take on a manageable level of valued household responsibilities for which they receive praise, improved self esteem and improved locus of control often follows (Hetherington 1989).

KEY STUDY: Parental separation***The adjustment of children with divorced parents: a risk and resiliency perspective (Hetherington and Stanley-Hagan 1999)***

The family environment presenting the fewest risks for unsuccessful child socialisation and the greatest chance of positive adult adjustment is a non-conflicted two parent family. The well-being of children is strongly associated with the well-being of their parents, and the quality of their mutual relationship. Psychotherapeutic interventions with children themselves aimed at preventing or moderating the effects of divorce on emotional health seem of limited effectiveness, though there is more evidence of a positive effect on parents. However, few differences between children in divorced or non-divorced families are detectable where there is an absence of conflict with the non-resident parent and where a single parent is able to provide a positive and nurturing home environment. Children generally do better in a harmonious single parent household than in an acrimonious two parent one. No evidence exists to support the belief that children will prosper more in a conflicted household than where divorce results in diminished conflict and authoritative parenting styles can be maintained by both parents. Where separation occurs, the most powerful resilience promoting factor is the extent to which parents minimize conflict. Low conflict separations are far more likely to result in higher levels of post-separation child contact by the non-custodial parent, a factor particularly beneficial to boys, and greater compliance with financial settlements. However, few differences between children in divorced or non-divorced families are detectable where there is an absence of conflict with the non-resident parent and where a single parent is able to provide a positive and nurturing home environment.

Depressive disorders

Children may learn to respond to stressors and challenges with helplessness - "I can't influence events, what will happen will happen" or optimism - "what I do will make a difference, I can affect the world around me". Longitudinal studies suggest that learned helplessness can persist throughout childhood and manifests itself in poor school achievement, depression, conduct disorders and interpersonal problems (Nolen-Hoeksema et al. 1995). Programmes that help children "learn" optimism promote both problem-focused and emotion-focused coping; that is, children become able to actively influence their environment through their deeds, and to affect the way they interpret and respond to events through their emotional state (Seligman 1975). The development of positive thinking in children is an important factor in protecting children against depressive

disorders. There is considerable evidence that children's latent resilience can be stimulated by interventions aimed at promoting learned optimism through the medium of cognitive restructuring (Seligman, 1998). While these initiatives are not necessarily unique taken separately, their explicit association with the promotion of resilience through close attention to the research base is less likely to be encountered in the UK. Also less familiar is the conscious interrogation by staff of the environmental architecture to assess the resilience promoting potential of both attitudinal and structural variables affecting the child, based on an explicit search for salutogenic factors (Benard, 1995). This is particularly important in the case of young people whose circumstances may render them vulnerable to pessimistic cognitive styles of thinking, resulting in lowered levels of self-esteem.

KEY STUDY: Depressive disorders

Learned Optimism: The Penn Prevention Programme (Seligman 1998)

The changing of children's patterns of thinking from negative to positive through the medium of cognitive behavioural therapy has been implemented with some success in the school-based Penn Prevention Programme, delivered to a general not a clinical population. Strategies involved the use of comic strip characters ("Hopeful Howard", "Gloomy Greg", "Pessimistic Penny", "Say-it-Straight Samantha"), role playing, games, discussions and videos, in a 12 week programme. A 50% drop in levels of depression was noted in the intervention group and no change in the control, where both groups had similar baseline profiles.

Conclusion

As noted previously, while early years experiences are vital, resilience can emerge, given the necessary encouragement, at any period in the life cycle. During the middle years, particularly important factors are:

- Maintenance of low levels of conflict where parental separation is unavoidable. This is likely to have a far more protective impact on the children's emotional well-being than remedial psychotherapeutic help.
- Encouragement to develop or adopt positive cognitive styles of thinking.
- Community based initiatives that help to build social capital.
- Good home - school liaison arrangements, and where necessary ongoing home-school links, where parents

lack confidence in their parenting ability or are disengaged from the educational process.

- Valuing and tolerating different cultural characteristics during the school entry period.
- Active support from external sources, including mentors, where children are at risk of developing patterns of anti-social or criminal behaviour.

Effective strategies - adolescence and early adulthood

KEY POINTS:

Factors promoting resilience in adolescence and early adulthood

- Continuity of teacher-child and peer relationships.
- Programmes that encourage emotional literacy.
- Inclusive philosophies that promote positive motivational styles, problem solving coping and discourage 'learned helplessness'.
- Opportunities to develop valued skills through broad based curricula.
- Programmes which encourage peer co-operation and collaboration.
- Avoidance of unnecessary labelling, a role for young people in negotiating family rules, and support of external role models or mentors.
- Social support for parents and enhancement of children's problem solving capacity.
- Connections with cultural or faith communities.
- Where parental separation occurs, opportunity to maintain familiar social rituals.
- Reduction of moves in care.
- Emphasis in schools on educational achievement for vulnerable children.
- Positive peer relationships.
- Opportunities for young people to influence their environments.
- Improve locus of control through valued household tasks or roles, part-time work outside the home, or volunteering.

- Where low levels of social capital are present, early engagement with post-school options and active exposure to the full range of post-school opportunities.
- Supportive social networks, prevention of social isolation, and registration with GP and dentist when living away from home for first time.
- Opportunities to enter and be supported in the job market, and help to consider alternative options.
- Where family support is weak, the involvement of supportive adults or mentors throughout and beyond the transitional period.

Connexions is the national initiative which brings together a range of educational, vocational and social care initiatives for older children and young adults.

CONNEXIONS [www.connexions.gov.uk]

Connexions is the Government's support service to young people. It has been set up to provide an integrated information, guidance and advice service for all 13-19 year olds in England. With a strong base in schools, the goal of Connexions is to promote success through learning and enable young people to make a successful transition to adulthood and working life. Absorbing the role of the careers service, the initiative will be phased in from 2001-3, bringing together partners from education, health, youth justice, employment and the voluntary and private sectors. The full text of guidance documents on joint working in social services, teenage pregnancy, youth justice and youth homelessness are available from the Connexions website.

Moving from junior to secondary school is a crucial transition point in a child's developmental trajectory, and is particularly crucial to children who are at risk of exclusion through academic difficulties, or vulnerability to delinquent peer groups. Where this transition is managed effectively, with special attention paid to continuity of relationships between children, their peers and teachers, the outcomes are likely to be better exam results, less absenteeism, higher self-esteem and a more positive attitude towards school (Felner et al. 1982). "Resilience education" has been defined as a curriculum that promotes decision making capacities in the context of a democratic learning community, rather than an environment that is concerned with the management of risk through regulation (Brown et al. 2000). Such curricula, it is argued, result in young people with stronger internal loci of control, more concern for others, and better conflict resolution skills (Watson et al. 1997). A wide ranging curriculum, which includes opportunities for sport,

encourages parental and wider community involvement, and provides learning opportunities, will lead to more pro-social behaviour, and increase the likelihood that most children will be able to excel in at least one dimension of their adolescence (Winfield 2001). There is some evidence, albeit limited, that extra-curricular activities in general appear to provide a range of benefits, including lower school drop out rates and higher levels of engagement in school, especially where such activities offer the opportunity for meaningful participation (Masten and Coatsworth 1998).

KEY STUDY: Succeeding in School

School effectiveness (Reynolds 1997)

This review of school effectiveness studies from 1967-97 identified a number of factors that have proved consistently effective in promoting good outcomes for children.

- Strong leadership by headteachers, with leaders having sense of direction, clear goals and a willingness to involve staff in planning and some decision making.
- High expectations of what pupils can achieve, maximisation of learning time, entering a high proportion of children for exams and constructive use of homework.
- Promoting high levels of parental involvement.
- Pupil involvement within a firm and organised structure.
- Staff cohesion, characterised by a good flow of information and methods of involving staff in procedures.
- Consistent experiences for pupils across lessons in the same subjects, across different subjects in the same year and across different years in the learning experiences on offer.

The role of the school in promoting resilience

Schools are one of the key arenas for the promotion of resilience (Wang and Gordon 1994; Wang and Haertel 1995). Children who face particular obstacles, notably those with emotional and behavioural problems, need additional help to achieve mastery of tasks, rather than directing their energy towards the subversion of achievement and the reinforcement of learned helplessness (Lewis 1999). Schools which appear to be successful despite apparent disadvantages appear to have similar features, notably an optimistic philosophy that all children can succeed despite the odds (Maden and Hillman 1996). During a period that has seen a steep decline in children's emotional health and their capacity to cope with stressors (Mental Health Foundation 1999), increasing links are being highlighted between social

and emotional competence (Sharp and Cowie 1998).

The positive effect of school based programmes which encourage emotional literacy and competence has some empirical support (Greenberg et al. 1995). Many factors associated with emotional literacy are associated with resilience, notably a strong locus of control, good emotional regulation and ability to empathise with others. While questioning the common proposition that high IQ and resilience is positively correlated, a study of 144 15 year olds found a strong relationship between resilience and children who were able to master challenging situations, and who possessed good inter-personal skills (Luthar 1991). These are both qualities that can be affected by classroom based interventions promoting problem focused coping (Seligman 1998), or school based personal development programmes (Raphael 1993). Social work-led interventions in schools with a resilience focused approach - the reduction of risk and promotion of protective factors - enjoy some empirical support. In a recent review of 21 controlled trials directed at improving the mental health of at-risk children in school settings, a wide range of positive outcomes were noted, including reduced bullying, increases in self-esteem, reduced exclusions and improved adult-child relationships (Early and Vonk 2001). This review included one UK study, which reported reduced thefts, truancy and drug use in the intervention group, though in this study group assignment was non-randomised (Bagley and Pritchard 1998).

KEY STUDY:

The role of the school in promoting resilience

Tribes: a new way of learning and being together (Gibbs 1995)

The promotion of resilience using community based approaches has been extensively pioneered in the USA, primarily through the educational system. Consciously drawing on research into factors that promote resilience, programmes have been developed that work on the principle of "fixing environments, not fixing children". The Tribes Learning Community approach is widely used in North America, Canada and Australia. Its mission is 'to assure the healthy development of every child so that each has the knowledge, skills and resiliency to be successful in a rapidly changing world.' Developed 25 years ago to mitigate problems of delinquency by involving young adults in positive peer groups, it aims to equip children with the knowledge and skills required to cope with a changing social environment. Based on small, long-term learning collectives ('tribes') of 4-6 members, the model ensures that children remain included by delegating responsibility for both learning

and the welfare of students to peer groups. Tribes is a process rather than a curriculum. Lessons have two objectives; the learning of academic content and collaborative skills. The size of the groups is designed to reduce the likelihood that someone will be left out, to make it easier for young people to ask questions, and help young people who have less developed social skills learn from, and be supported by their peers. Teachers in classrooms where the Tribes system has been adopted have reported substantial decreases in problem behaviours. More information from: www.education.umn.edu/CAREI/Reports/Rpractice/Fall98/tribes.htm

Gender Gender differences are pertinent to the promotion of resilience both in the adolescent period and for younger children. Resilience in girls tends to be promoted by parenting styles which emphasise reasonable risk taking and independence. For boys, the presence of male role models, support for expressing emotions and higher levels of supervision appear important in the promotion of resilience (Werner 1990). Fathers have a particularly important role to play. Boys with a strong locus of control and high self esteem are twice as likely to have fathers who take an interest in their school work and spend time with them (Katz 2000). Gender and sex are not interchangeable terms. Masculinity and femininity are generally acknowledged to be socially constructed phenomena that may be reinforced or subverted according to external contexts. For example, health service usage is greater by people of both sexes who score higher on stereotypical 'feminine' traits, such as openness, sensitivity and compassion. (Moynihan 1998). These qualities are highly valued in social care services, as is the healing power of expressiveness following trauma. However, it is not necessarily the case that the promotion of resilience in young men is best facilitated by emotional openness, nor that non-verbal coping strategies are always an indication of dysfunctionality.

KEY STUDY: Gender

Evaluation of adjuvant psychological therapy in patients with testicular cancer: randomised controlled trial (Moynihan et al. 1998)

This study examined the efficacy of psychological therapy for young men newly diagnosed with testicular cancer. Of 184 eligible patients, 73 (40%) agreed to be randomised to an intervention or standard care group. Thirty patients refused any contact with the researchers, and the remaining 81 declined to participate but agreed to complete further assessments. Self assessment questionnaires were

completed at baseline, and at 2, 4 and 12 months. The treatment seemed to offer little benefit to the patients, in fact at 12 months the change from baseline slightly favoured the control group. There was no evidence that non-participants were suffering from higher levels of morbidity, that is were 'in denial'. This group in fact had fewer indications of dysfunctionality. The study concluded that for many men - though certainly not all - embracing stereotypical male stoicism in the face of personal grief may be a more effective coping mechanism than sharing painful feelings, which may result in magnifying rather than minimising the loss of control and autonomy associated with serious illness. Treating an inability or unwillingness to share feelings as a sign of morbidity may be just as damaging to self-esteem as an assumption that such support is unnecessary.

Drug and alcohol misuse

Adolescent drug use has increased substantially in recent decades, with a large majority of children reporting alcohol, tobacco or illicit drug use by age 18. Preventive programmes, despite enormous investment in both Europe and North America, have yielded only moderate impacts; few educational programmes have shown such an inverse relationship between cost and gain (Ennett et al. 1994). While group work in promoting resilience in stressed inner-city young people has received some support from a randomised controlled trial (Cowen et al. 1995), "knowledge-only" programmes must be complemented by the acquisition of competencies to achieve any lasting effects (Gropper et al. 1995).

KEY STUDY: Drug and alcohol misuse

Youth, drugs and resilience education (Brown 2001)

Drug education programmes have been primarily based on "no-use" risk perspectives, where children's critical decision making skills are likely to be inhibited. A resilience promoting approach, on the other hand, seeks to build on young people's decision making abilities through broader educational programmes and to strengthen the most powerful resilience promoting factor in mid-adolescence - positive relationships with competent adults. "No-use" programmes, apart from inhibiting decision making skills, have also proved largely ineffective. Informed decision making on drug use - the "just say no" approach - recognises that, regardless of adult wishes, the majority of young people will use, to varying extents, illicit drugs during their adolescence and early adulthood. Educational programmes that are willing to draw on a variety of sources, including young people's subjective experiences of both the positive and negative consequences of drug use, are more likely to result in informed choices and corresponding patterns of drug use that are less injurious to health.

Parental illness and disability

Where parental impairment is present, successful child adaptation is most strongly related to parenting performance rather than the nature of the illness or disability (Tebes et al. 2001). The promotion of emotion focused coping is valuable, but needs to be complemented by programmes that enhance problem solving. Where groupwork is undertaken, programmes appear to be most effective where peers have a common stress experience which, through sharing, is able to promote adaptive functioning (Greening, 1992; Walsh-Burke, 1992, Sandler et al. 1997). Several randomised controlled trials aimed at increasing the resilience of children of affectively ill parents have concluded that therapeutic help is successful at preventing depressive disorders (Beardslee et al., 1992; 1997a; 1997b; Focht and Beardslee, 1996), especially where children are helped to understand and articulate the effects of their parent's behaviours (Focht-Birkerts and Beardslee 2000). While calls have been made to identify all children affected by parental illness and disability (Dearden and Becker 1997), care should be taken that this does not become a risk rather than a protective factor. Evidence from work with the children of alcoholics suggests that that negative stereotyping and false attributions by professionals and peers is a common result of being given an unwanted label (Burk and Sher 1990). Where children live with chronically ill or disabled siblings, the positive benefits that may accrue from undertaking helpful and valued social roles within the household should be considered (McHale and Harris 1992; Burton and Parks 1994), and factors that enable children to cope successfully, rather than just those which act as a threat, should be explored (Leonard 1991). Where children themselves are ill, a positive family environment where independence, self-sufficiency and open expression of feelings are encouraged has been found to be strongly associated with the presence of resilience (Hauser et al. 1985).

KEY STUDIES: Parental illness and disability

Examination of children's responses to two preventive intervention strategies over time (Beardslee et al. 1997b)

The study examined a preventive intervention in families where parents were suffering from an affective disorder. Families with ill parents (n=36) with non-depressed children aged 8 - 15 years were randomly assigned to a lecture discussion or clinician facilitated group. The purpose of the intervention was to protect children against the possible future emergence of psychosocial disorders arising from their parents' illness. Both parents and children were assessed prior to intervention, after intervention, and followed up 1.5 years later. The assessments included standard diagnostic

interviews, measures of child and family functioning and interviews with parents and children about the effect of family illness. While both interventions recorded positive change, the clinician facilitated group made more progress, with children in this group reporting greater understanding of the parental illness, better adjustment on both self-reports and parent reports, and showed greater adaptive functioning. The study concluded that linking cognitive information to family life experience and involving children directly supported the value of a future oriented and resiliency based approach.

Looked after children Children within the care system face particular challenges, and may often have many of the key resilience promoting factors weakened, notably capacity to exert agency, parental support and positive educational experiences (Gilligan 1997; Schofield 2001). A resource guide on promoting resilience in looked after children (Gilligan 2001b) stresses the importance of multiple roles for young people, for example a part time job, where they may be able to excel and different aspects of their personality can grow and be appreciated, a secure base where they can be assured of unconditional emotional and physical support and maintaining links with family, with whom care leavers will frequently re-establish relationships even after a lengthy period of estrangement.

The difficulties in translating the theory of resilience into concrete strategies should not be underestimated, especially where children are facing severe adversities or unpredictable life paths. A staff training project which explored ways of promoting the resilience of looked after children reached a broad consensus that while the concept was sound, it simply validated what staff were trying to do anyway (Daniel et al. 1999). Staff were concerned that the wide range of potential resilience promoting interventions discussed was too large an agenda for social workers to address in isolation, indicating the importance of a wider network of people with a similar understanding of, and commitment to, identifying children's strengths and potential areas where change can occur (Benard and Marshall 1999).

KEY STUDY: Looked after children

Surviving the care system: education and resilience (Jackson and Martin 1998)

Moves in care, lack of staff continuity, absence of private space in which to do homework, and more generally, an environment in which education as a route to positive adult outcomes is undervalued are typical barriers to educational success which looked after children encounter. Despite a variety of initiatives, the outcomes for children in care,

compared to children in the general population, remain poor. This study located a group of "high achievers" (n=38) and matched them with a group of young people who had done less well. The pre-care circumstances of the two groups were similar, as were many dimensions of their in-care experiences. However, educationally successful children usually had a special relationship with at least one person who was able to offer them support and advice, few had significant periods of time outside school, most had been supported in learning to read early and had peer groups who were positive about the value of education.

The study concluded that support for looked after children's educational careers remains a far lower priority compared to other perceived needs in both residential and foster care settings. Given the crucial contribution of educational success to adult outcomes, looked after children continue to face unnecessarily difficult obstacles in their educational careers.

Maltreated children

Resilient maltreated children tend to exhibit a variety of behaviours and dispositions in residential, adoptive or foster care settings which, while challenging to their carers, may be a result of effective adaptation to abuse. These include loyalty to parents, a capacity to normalise the abusive environment (while professionals tend to regard the abused child's belief that their circumstances are "normal" as pathological, for many children this normalising attribution is a protective behaviour, designed to make their lives more predictable and manageable), a capacity for invisibility, a belief that there is a power outside the abusing environment stronger than the abuser, and a positive vision of the future (Henry 1999). Behaviours resulting from these themes need to be understood and treated as positive adaptations, rather than as negative attributes.

KEY STUDY: Maltreatment

Factors protecting against the development of adjustment problems in young adults exposed to child sexual abuse (Lynskey and Fergusson 1997)

This study examined self reports of child sexual abuse (CSA) in a birth cohort (n=1025) of New Zealand at age 18 years. Just over 10% (n=107) of the cohort reported CSA, with over half the cases (57%) being reported in the early adolescent period (11-16 years). In 15% of cases, the abuser was a parent or sibling. One third of the total number of reports involved attempted or completed penetration. Extensive interviews were carried out with the young people who reported abuse. A clear relationship was found between difficulties in adult adjustment and the intensity of the

abusive experience. Not all informants met criteria for adjustment problems, however with almost a quarter exhibiting no symptomatology, within the range reported by other studies. No gender difference was detected. The two most significant protective factors identified were presence of positive, non-delinquent peer relationships in adolescence and strong, supportive bonds with parents, especially fathers. The results indicated that preventive and remedial interventions should take place in the broader sphere of family and social context, and not just be confined to the abuse experience itself.

Homelessness Homelessness can affect children at any age. Homelessness is widely accepted as meaning fragile or insecure accommodation, not just the absence of shelter. It includes children whose families are in unstable accommodation, threatened with eviction or are highly mobile (Stephens 2002). Some children are particularly vulnerable, notably asylum seekers and refugees. Enrolment in pre-school programmes provides a context of continuity and security, and an opportunity to develop both emotional and behavioural coping mechanisms. Where early childhood programmes are combined with secure accommodation, formerly homeless children appear to recover quickly, achieving similar levels of developmental progress to matched peers living in their own homes (Douglass 1996).

KEY STUDY: Homelessness

Correlates of resilience in homeless adolescents (Rew et al. 2001)

This study examined the experience of homeless adolescents (n=59) who sought help from a community based outreach project. Almost half the sample reported a history of sexual abuse and over a third a homo- or bi-sexual orientation. Drug and alcohol misuse was endemic in the group, and had been the trigger, in one third of cases, for their leaving home. Many young people in the group had exhibited life threatening behaviours, including attempted suicide. Young people were assessed through a variety of psychometric instruments, including the Resilience Scale (Wagnild and Young 1993). Lack of resilience was not connected to gender or sexual orientation, but to hopelessness, loneliness and - surprisingly - connectedness. Findings from most vulnerable groups tend to find a strong correlation between social connectedness - with friends, family or community - and resilience. For this group of young people, resilience was associated with the capacity to survive alone. In an environment where social connectedness was so weak and unreliable, resilience was less a protective factor promoting health and development but an adaptive strategy or defence against loneliness and hopelessness.

Resilience in homeless adolescents has been found - contrary to other situations - to be negatively correlated with social connectedness (Rew et al. 2001), indicating that extreme self-reliance may be a necessary, albeit sad, adaptive strategy for young people with no reliable social networks.

Parental alcoholism

Many of the adaptive skills developed by maltreated children are noted in children affected by parental alcoholism. A recent review of parental alcoholism and its impact on children highlighted the key protective factors of a stable relationship with non-drinking parent, support from extended family and external networks, positive influences at school and the development of both emotion and practical coping skills (Tunnard 2002). Where alcoholic parents manage to maintain the routine of family meals and other shared rituals, their children are less vulnerable to problems with alcohol in later life themselves (Wolin et al. 1980; Bennett et al. 1987; Velleman and Orford 1999). Actual stability may be insufficient as a protective mechanism; the insecure child must believe in the security of their social ties (Sandler et al. 1989). Where the child may have reason to fear a loss of security, familiar family rituals and other means of reassurance become correspondingly more necessary. A key coping strategy is seeking activities and confidants outside the immediate family (Laybourn et al. 1996). Pride in survival, rather than developing the identity of a victim has been constantly identified with resilient, rather than non-resilient children of alcoholics (Boyd 1999).

KEY STUDY: Parental alcoholism

Preventing and reducing alcohol and other drug use among high risk youths by increasing family resilience (Johnson et al. 1998)

One of the few intervention studies aimed at promoting resilience which has used an experimental design found positive outcomes for children in the intervention group on measures of father/child, mother/child and sibling bonding, reduction in drug and alcohol use and increased knowledge of the effects of excessive drug and alcohol use. The key intervention strategies were aimed at improving family communication and enabling children to play a greater part in setting family "rules", with the strategies themselves adapted from already well validated programmes.

Health

Older adolescents begin taking responsibility for their own health, this may happen at an earlier age for some young people such as care leavers. All adult transitions are stressful periods, with changes often taking place in locations, peer networks, family contacts and financial circumstances. Where young people are in unsupported accommodation or

living away from home for the first time, registration with a local GP and dentist should be encouraged. The association between emotional and physical health, while not entirely clear, is increasingly well-attested (Stewart-Brown 1998). Within limits, better emotional health will lead to better physical health. A risk factor for poor health is chronic stress, which is often associated with weak and unsupportive social networks

KEY STUDIES: Health

1. Social ties and susceptibility to the common cold (Cohen et al. 1997) 2. Types of stressors that increase susceptibility to the common cold in healthy adults (Cohen et al. 1998)

Both these studies describe an experiment where a group of volunteers (n=276) aged 18-55 years completed an extensive questionnaire describing their social ties, then were given nasal drops containing a cold virus. Those volunteers with more types of social ties were less susceptible to common colds. Susceptibility increased as volume of social ties decreased. This conclusion was unaltered by possible confounding factors including pre-experimental anti-body levels, race, gender, age, body-mass index or level of education. While short term reported stress (less than one month) was not a contributory factor, reported chronic stress of more than one month was associated with a substantially greater risk of disease development.

Self-esteem Self esteem has, in recent years, been promoted as a panacea for a wide range of child and adult problems. The promotion of resilience has also been closely associated with gains in self-esteem (Gilligan 2001a). However, while high self-esteem will often be a desirable outcome, in some cases it may constitute a risk factor, for example where it results from "successful" delinquent behaviour (Hughes et al. 1997). It has been argued for some time that self-esteem can only result from developing and testing competencies in real-life situations, and not just from praise and confidence building (Seligman 1975; 1998). These findings indicate the need for a more cautious and critical approach to the promotion of self-esteem than is often recommended or assumed.

KEY STUDY: Self-esteem

The costs and causes of low self-esteem (Emler 2001)

Low self-esteem is one of the most frequently offered explanations for dysfunctional behaviour of every kind and has penetrated the professional, lay and media worlds to a similar degree. Strategies to improve self-esteem drive a vast number of therapeutic approaches in relation to everything from depression, through drug abuse to business

failures. High self-esteem affects social policy in that educational approaches are increasingly geared to improving, and not degrading, levels of self-esteem. However, the actual evidence that low self-esteem is associated with such a wide range of social ills is limited, as is the evidence that strategies to raise self-esteem are justified. Low-esteem actually appears to be quite rare, the differences are more notable between middling and high self-esteem. Following on from genetic influences, which appear to be the single biggest explanation of variations between individuals, the most important factor determining levels of self-esteem is parenting style, the most damaging event is sexual abuse, especially where a close and trusted relative is involved. Despite some disagreements about the nature of self-esteem, it is generally agreed that it can be reliably and easily measured. This recent major review concluded that self-esteem is not, contrary to popular belief, a risk factor for delinquency, low educational attainment or adolescent drug/alcohol abuse, though it does constitute a risk factor for suicide and para-suicide, depression and teenage pregnancy.

Spirituality and faith

As with other support networks, faith networks also appear to have a significant protective function. While most of the research in this area derives from the USA - where religious affiliation is much higher than in the UK - participation in religious communities has been associated with increased empowerment, ability to cope, self-esteem and a sense of belonging, all factors associated with the growth of resilience (Pilling 1990; Vanistendael 1995; Haight 1998; Hodge 2001; Spender et al. 2001). In the UK, while information about most community services is made widely available to vulnerable young people, it is less common for information about church, temple, mosque or synagogue services and pastoral support to be publicised in drop-in and community centres, or other public information outlets. Where children are affected by serious chronic illnesses, association with a religious or spiritual framework of beliefs, and acknowledgement of its importance by lay or professional carers, is an important source of coping strategies (Pendleton et al. 2002)

KEY STUDY: Spirituality and faith

Spiritual coping strategies: a review of the nursing research literature (Baldacchino and Draper 2001)

The authors reviewed studies from 1975 onwards on the MEDLINE and CINAHL databases which discussed spiritual coping strategies in cases of severe illness. The large majority of studies were anecdotal, with the role of faith rarely being the central focus of the investigation. Only five studies directly explored the role of faith or spiritual coping

strategies in cases of severe illness, with only one of these studies being undertaken in the UK. The impact of severe illness often triggered an awareness in sufferers of their lack of power and control over the illness process, and coping strategies which involved a conscious exploration of their relationships with numinous or transcendental beliefs resulted in a growth of resilience, empowerment and an enhanced ability to cope. While studies have usually focused on subjects with an existing faith affiliation, the review suggested that the resilience promoting impact of spirituality during periods of extreme stress is relevant to both believers and non-believers. The potentially substantial contribution that spirituality can make to emotional well-being during times of extreme stress, and its effectiveness as a coping strategy, suggests that this is a considerably under-researched area.

Mentors The involvement of a reliable and committed person from outside the immediate family is widely reported as a factor associated with resilience. Some evidence exists for the effectiveness of mentoring schemes, notably in relation to developing new skills, reducing the risk of social exclusion and improving the ability to make relationships with adults (Alexander 2000; Todis et al 2001). In the UK, mentoring has been discussed in relation to adults supporting children in the public care system (Cleaver 1997; Gilligan 1999; 2001b), and as a means of meeting the support needs of black students (Bhatti-Sinclair 1995; Meghani-Wise and Macdonald 1995).

KEY STUDY: Mentoring

Does mentoring work? An impact study of the Big Brothers and Big Sisters programme (Grossman and Tierney 1998)

A national (US) randomised control trial (RCT) of the Big Brothers/Big Sisters mentoring scheme has yielded some positive results. After 18 months of mentoring the young people, who were aged 10 – 16 years were, compared to a control group, 46% less likely to have started using drugs, 27% less likely to have begun using alcohol and 52% less likely to have truanted from school.

The study identified the keys to successful mentoring as:

- volunteer screening
- matching procedures that take into account preferences of the young person, his/her family and volunteers
- close supervision and support of each match

- training that includes communication and limit-setting skills, tips on relationship building and ways to interact with young people

Work roles

Valued social roles are a protective factor. This may include a wide range of activities which involve taking a measure of responsibility, and being rewarded for it, including a manageable level of care for a younger sibling (Spender et al. 2001) or other responsible roles within the household (Zimrin 1986). A positive adolescent work history is a good predictor of psychological adjustment in adulthood (Valliant and Valliant 1981). Children benefit from appropriately demanding but rewarding social roles which are valued, and environments which are able to promote such roles offer some of the ingredients of a resilient personality (Weiss 1979; Pound 1982; Simeonsson and Thomas 1994). While entry to the job market presents problems for many unqualified young people, disabled youths often face particular difficulties, as their educational routes may not have considered open or supported employment as a realistic option.

KEY STUDIES: Work roles

Helping people with severe mental illness obtain work: a systematic review (Crowther et al. 2001)

There is strong evidence that placing disabled people directly in a work setting and supporting them is more likely to result in long term employment than a setting that provides training only with the intention of the young people "moving on" at a later date. This systematic review compared outcomes - defined as success in finding competitive employment - from prevocational training and supported employment. Eleven trials met the inclusion criteria. Subjects in supported employment were more likely than those in prevocational training to be in competitive employment at 18 months (31% v. 12%). Subjects in supported employment earned more and worked more hours per week than those who had received prevocational training.

The effects of work intensity on adolescent mental health, achievement and behavioural adjustment: new evidence from a prospective study (Mortimer et al. 1996).

This study examined the effect of early work activity on a range of important emotional and behavioural factors by collecting questionnaire data from 1000 randomly selected 14-15 year olds. In common with other studies, high intensity involvement in work was associated with more alcohol intake. However, no negative effects were noted on measurements of mental health or academic achievement. Young people who worked more moderate numbers of hours

achieved higher grades than both non-workers and students who worked at a greater level of intensity. A key factor noted by the study was the quality of the work experience. Activities that provided the opportunity for mastery or the development of important developmental or vocational assets promoted resilience. A depressive effect however, was noted in this and several associated studies when work roles failed to provide such opportunities where no such factors were present. The study concluded that whether adolescent work has positive or negative effects depends on the quality of the work and its relevance to the assets needed for a successful educational or vocational career.

Transition to adulthood

Many young people who live in families with prior experience of further education will have easy access to advice, information and resources about educational options. However, young people with low levels of social capital - from fragmented or re-constituted families, in care, with parents uninterested in their educational futures, or in communities where the culture militates against continued learning - will face greater barriers. For these students, engagement with post-school options in the mid-school period and encouragement to engage in post-school planning, contact with colleges, linking with mentors and counselling programmes are necessary to compensate for the protective factors that they may not otherwise encounter (Winfield 2001). For some young men - and increasingly young women - joining the armed forces may provide a stable and disciplined environment, greater maturity, opportunities for further education, vocational training and broadening of horizons, although, as with all potential turning points, negative outcomes may also occur (Rayner and Montague 2000). Long term benefits to self-esteem and hardiness of personality have been associated with deployment in stress inducing situations, where the nature of the work is perceived as being meaningful and rewarding (Britt et al. 2001).

KEY STUDY: Transition to adulthood

Partnership for Youth (Wrangham and Crowley 2001)

Partnership for Youth is a voluntary residential activity programme set up in 1996 for young offenders in South Wales, delivered through a collaboration between the local Youth Offending Team (YOT) and Army Cadet Force. Creating a partnership between social services staff and professional soldiers demanded a mutual, re-assessment of stereotypical attitudes. To date, the four day programmes have been experienced by almost 250 young people. Activities include first aid, the Duke of Edinburgh Award scheme, field craft and low level military tactics, with the aim of developing trust and respect for others, a capacity to work within clear rules and

boundaries, self-control, and opportunities for personal achievement. An independent review by NACRO Cymru in 1999 found that, of the first 92 participants, 86% completed the programme, 79% had not re-offended and positive change was reported by social workers in 81% of the participants. While not necessarily appropriate for all young people, the project consciously set out to promote many of the qualities associated with the development of resilience.

Conclusion

As noted above, the promotion of resilience may occur at any point in the child or young person's life cycle. Transitional points - educational, legal, and biological - are especially relevant to the adolescent and young adult years and support strategies, particularly for the most vulnerable children, are crucial during these periods.

- For all young people the development of problem solving abilities, valued competencies, and the opportunity to experience social responsibilities will have a resilience promoting effect.
- For children whose stability is threatened by disruption due to illness, parental separation or family mobility, the maintenance and strengthening of familiar rituals and relationships will have a protective impact.
- For children with few secure assets, such as children in or leaving care, an intense investment in educational programmes, ongoing social support from trusted and reliable sources, access to the job market, or to networks that increase the likelihood of training or employment will enhance young people's capacity to resist adversities.

Conclusion

KEY POINTS

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 or through part time work.
- Not to be excessively sheltered from challenging situations which provide opportunities to develop coping skills.

The literature on resilience, while dealing with a wide range of social problems, also has a relatively narrow range of features. Both literature in the clinical field, despite being often inaccessible to non-professionals, and popular accounts written for lay audiences (for example Fitzgerald 1995, Marsh and Dickens 1997; Wolin and Wolin 1993; Katz 1997) discuss similar constructs of resilience, and suggest similar promotional strategies. It is also widely acknowledged that resilience is most effectively promoted as part of a broader strategy, which is likely to involve a range of agencies and institutions, as well as communities and ordinary individuals.

The difficulties in applying the lessons arising from resilience literature to real life are similarly widely recognised. The personal, family and environmental features that are associated with resilient behaviour in individuals are well explored. Some are absolutely or relatively fixed, such as gender, IQ, or a sense of humour, others may be very hard to influence, for example, parental support, a secure neighbourhood. The literature, taken as a whole, is heavily biased towards isolating and analysing the antecedents of resilience, and the strength of association between different variables. Actual descriptions of strategies that have been consistently successful in promoting resilience, and which have been validated and replicated, are far fewer in number. It has been suggested that many resilience promoting interventions are little different from interventions that simply seek to promote positive child development, and that there are close parallels between resilience and attachment theory. (Tarter and Vanyukov 1999; Schofield 2001). The degree of overlap between resilience theory and other approaches to child development is illustrated by the relatively few instruments that have been validated to measure resilience as a discrete concept. (For an exception, see Wagnild and Young 1993, who have developed and validated a 25 item self report scale with a 7 point Likert scale response format.) Resilience theory has been subject to some recent criticism on the basis that it excessively simplifies the complex responses of different people to different stimuli (Kaplan 1999). Practitioners may recognise the value of promoting resilience, but find it hard to distinguish its implications from strategies they may be already using (Daniel et al. 1999). Is resilience, for example, simply the absence of delinquent and anti-social behaviour? If so, a socially withdrawn non-offending youth could be described as resilient by a youth justice worker while being regarded as emotionally disturbed by a psychiatrist (Rayner and Montague 2000).

Nonetheless, the weight of evidence suggests that incorporating resilience promoting strategies in services to children and young people is an effective approach (Roosa 2000). However, the utility of resilience theory will be judged by the extent to which it can be operationalised to bring concrete and lasting benefits to children. The message from resilience studies is an optimistic one. Well designed, accurately targeted and efficiently delivered social care services can make a real difference to children born into adverse conditions. By attempting to replicate the factors that enable some children to resist or recover from early adversity, we can extend this protection to a wider population of children.

On-line resources

A vast majority of information on children and resilience can now be accessed from non-subscription databases by anyone with access to a PC with a modem. Free text searches which just require the insertion of key words or phrases, and need no technical knowledge of search terms (though such knowledge can save a lot of time!) may be undertaken on MEDLINE, maintained by the US National Library of Medicine [www.pubmed.gov], CAREDATA, now part of the Social Care Institute for Excellence [www.scie.org.uk], ERIC, the world's largest database of educational research and practice information [www.askeric.org] and through full text on-line journals such as the British Medical Journal [www.bmj.com]. Internet search engines - www.google.com is recommended for speed and relevance of returned items - search engines of large publishing houses, for example Blackwell Science [www.blacksci.co.uk] and on-line book sellers such as Amazon [www.amazon.com or www.amazon.co.uk] will also return valuable and relevant material. Material produced by trusts and academic institutions is now increasingly available on-line and can be downloaded, for example from the website of the Joseph Rowntree Foundation [www.jrf.org.uk], the website of the ESRC Evidence Network [www.evidencenetwork.org] or Research Works [www.york.ac.uk/inst/spru/pubs/researchwks.htm], containing summaries of studies conducted by the Social Policy Research Unit at York University. Government websites are extremely useful, containing both summaries and full text research studies and policy papers. Especially helpful are the Home Office website [www.homeoffice.gov.uk], with studies largely on crime diversion and prevention, the Department of Health site on both health and social care [www.doh.gov.uk], and the sites of the Wales Assembly [www.wales.gov.uk] and Scottish Executive [www.scotland.gov.uk].

Overall, by far the largest volume of available on-line abstracts is associated with medicine rather than social care. However, social workers should be advised that a large number of social science journals, including a number highly relevant to social work, are indexed on MEDLINE and its primarily medical orientation should not be a reason to discard it as a potential source of information. Those wishing to develop more sophisticated search skills can consult a number of on-line training resources - an excellent one, designed by librarians at the University of Glasgow, can be found at www.lib.gla.ac.uk/Docs/Guides/searching.html.

With respect to children and resilience, the most accessible material is available from websites in the USA. Hyperlinks in the preceding pages will guide readers to a number of key articles, most of which are specifically written for the widest possible audience. In addition to these links, the following websites are dedicated to the issue of resilience. Some sites are maintained by academic institutions, others by private agencies, and some by charities.

www.education.umn.edu/CAREI/Reports/Rpractice

The Center for Applied Research and Educational Improvement is part of the College of Education and Human Development at the University of Minnesota, and is one of the key US centres for research into resilience. The site focuses largely on educational strategies that can be developed in schools and communities. A wide range of accessible material can be downloaded from this site, including general descriptions of resilience practice (by Benard and Marshall), a description of the TRIBES learning community (by Jeanne Gibbs), details of Project Competence, a longitudinal study following the careers of ordinary school children over a 20 year period (Professor Ann Masten), and lessons on resilience from native American cultures (HeavyRunner and Morris).

www.cyfernet.org/research/resilreview.html

The Children, Youth and Families Education and Resource (CYFERNet) defines resilience as "the family's capacity to cultivate strengths to positively meet the challenges of life". It contains a useful overview of resiliency in individuals, families and communities, prepared by Dr. Ben Silliman.

www.empowerkids.org

Run by Strengths Based Services International in Virginia, the site is concerned with promoting and developing resilience based initiatives in public educational and social welfare policy through advocating for and with children.

www.ncrel.org

The North Central Regional Educational Laboratory website provides a description of the CTARS (Comprehensive Teaming to Assure Resiliency in Students) project, a comprehensive strategy to promote resilience among students in the Minneapolis public school system and a monograph on developing resilience in urban youth by Linda Winfield.

www.nnfr.org

The National Network for Family Resiliency has recently been incorporated into CYFERNet. A number of special interest groups can be accessed, most of which focus on promoting resilience in families.

<http://ohioline.osu.edu/b875/index.html>

Based at Ohio State University, this web site offers a very useful summary (Bulletin 875-99) of resilience promoting strategies, including practical examples, that are particularly relevant to social work with families.

www.projectresilience.com

A private initiative based in Washington DC, and run by Drs. Steven and Sybil Wolin, the site offers general information, resilience based materials, an inter-active discussion group and training resources.

www.tucsonresiliency.org

Located in Arizona, the site focuses on strategies to promote resilience in schools, communities and families.

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ST LUKE'S CAMPUS
HEAVITREE ROAD
EXETER
DEVON EX1 2LU

TELEPHONE: 01392 262865
FAX: 01392 262858
E-MAIL: sue.bosley@pms.ac.uk
WEB SITE: <http://www.ex.ac.uk/cebss>