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Disease Control and Prevention (CDC) has developed the Health-related Quality of Life (HRQOL) set of questions and incorporated it into the nationwide Behavioural Risk Factor Surveillance System. The purpose of the HRQOL is to assess and track «perceived physical and mental health over time» with the inclusion of the concept of perceived mental health (Henessy, Moriarty, *et al.*, 1994). Such measures track whole populations over time, and provide a summary score for positive mental health as well as poor mental health. Despite the considerable success of this single measure, there is a need for more measures similar to the HRQOL that are able to determine the number of individuals in the population who may have elevated levels of depressive symptoms but no depressive disorder;

thereby determining the need for promotion and prevention interventions capable of reducing the number of people who go on to experience depressive episodes.

## The way forward

In recent years the field of mental health promotion and prevention of mental disorders has acquired world-wide recognition. New initiatives are being undertaken and new research is emerging, however, there are many areas that need to be further developed. First, there is a need for greater investment in mental health policies and interventions that are evidence-based and incorporate social and contextual determinants of mental health. Second, it is crucial to ensure that opportunities for addressing mental

health issues and developing effective interventions are equally targeted and supported across low-, medium- and high-income countries. Currently available effective programmes need to be brought to scale, and whenever possible, disseminated, adopted and implemented across countries tailoring to the cultural variation in different social contexts and being adopted according to available resources. These efforts will move the field towards fully achieving the definition of health expressed by the World Health Organization: *A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity* (WHO, 2001b p.1).

**Eva Jané-Llopis, Margaret Barry, Clemens Hosman and Vikram Patel**

# Mental health promotion works: a review

Positive mental health is a value in its own right; it contributes to the individual's well-being and quality of life; and also contributes to society and the economy by increasing social functioning and social capital. Positive mental health refers to human qualities and life skills such as cognitive functioning, positive self-esteem, social and problem solving skills, the ability to manage major changes and stresses in life and to influence the social environment, the ability to work productively and fruitfully and to make contributions to the community, and a

state of emotional, spiritual and mental well-being (Hosman, 1997; WHO, 2001). Mental health is an integral part of overall health and well-being and in a broad sense, reflects the equilibrium between the individual and the environment (Lethinen *et al.*, in press).

Lack of positive mental health, mental health problems, and mental disorders are not exclusive to any special group, and are found in people of all regions, countries and societies (WHO, 2001). The lack of access to education, health care or environmental resources, or even at a more basic level, the lack of food, water or shelter contribute to mental health strain in populations around the world. Not only individuals suffering from mental health problems but also their families, have to bear the negative impact of stigma, discrimination and social exclusion.

Mental health promotion targets the whole population and focuses on enabling and achieving positive mental health. This multidisciplinary area of practice aims to

enhance well-being and quality of life for individuals, communities and society in general. Mental health promotion conceptualises mental health in positive rather than in negative terms and delivers effective programmes designed to reduce health inequalities in an empowering, collaborative and participatory manner. Mental health promotion endorses a competence enhancement perspective and seeks to address the broader determinants of mental health. This is in keeping with the fundamental principles of health promotion as articulated in the Ottawa Charter (WHO, 1986).

There is a growing theoretical base and accumulating body of evidence to inform

## Key words

- mental health promotion
- prevention
- evidence
- review

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the development of mental health promotion practice (Barry, 2001, 2002; WHO 2004a; WHO 2004b; Jané-Llopis and Anderson, in press). Evidence from systematic reviews of mental health promotion and preventive interventions shows long-lasting positive effects on multiple areas of functioning, leading to outcomes such as improving mental health (Durlak and Wells, 1997; WHO, 2004a), reducing risks of mental disorders (Mrazek and Haggerty, 1994; Jané-Llopis *et al.*, 2003; WHO 2004b) and producing social and economic benefits (Hosman and Jané-Llopis, 1999).

The Ottawa Charter for health promotion (WHO, 1986) provides a framework for improving the populations' health in a holistic manner tackling health determinants at different levels. Mental health promotion is based on the fundamental principles of the Ottawa Charter, and this paper aims to review and present some of the evidence of mental health promotion under the five headings of the Charter. This is not a systematic review but an overview presenting some examples that illustrate the efficacy of mental health promotion. The paper draws on different sources of evidence from across a number of levels i.e. from systematic reviews, randomised controlled trials (RCTs), quasi-experimental and process evaluations. Specific efforts have been undertaken to include initiatives or programmes from middle and low-income countries by inviting practitioners to submit descriptions of their work. To continue gathering and disseminating practices from all over the world, professionals in this field are encouraged to contact the first author of this paper if any of their work could be included in a worldwide database of programmes for mental health promotion ([www.imhpa.net](http://www.imhpa.net)).

### **Effective interventions: The Ottawa Charter and mental health promotion**

The evidence of the efficacy of interventions for mental health promotion is presented under the five headings of the Ottawa Charter. In presenting the evidence in the framework of the Ottawa Charter, the authors propose to consider the inclusion of mental health promotion as an integral part of health promotion interventions and policies.

## **1. Building healthy public policy**

Building healthy public policies puts health on the agenda of policy makers in all sectors and at all levels, directing them to be aware of the health consequences of their decisions and to accept responsibilities for health. Such policies include legislation, fiscal measures, taxation, and organisational change. Existing public policies in some health and social domains have also proven to promote mental health, such as policies aiming to increase access to education, housing, nutrition or health care. These are particularly relevant in low income settings, where conditions for health are compromised, as further described by Patel (2005) in this volume.

### **1.1. Nutrition**

Improving nutrition in socio-economically disadvantaged children can lead to healthy cognitive development and improved educational outcomes, especially for those at risk or living in impoverished communities. Effective nutrition intervention models include complementary feeding and growth monitoring (WHO, 2004a; WHO, 2004b). These have combined nutritional interventions (such as food supplementation) with counselling on psychosocial care (e.g. warmth, attentive listening) (WHO, 1999) indicating cost-effective outcomes (WHO, 2002). Iodine, which can be supplemented through iodination of salt or water, is central to preventing mental and physical developmental delay and impairment in learning ability (WHO, 2002). Global efforts supported by UNICEF have led to 70% of the world's households using iodized salt, which protects 91 million newborns from iodine deficiency (UNICEF, 2002 report).

### **1.2. Housing**

Poor housing has been used as an indicator of poverty and as a target to improve public health and reduce inequalities in health. Results from a systematic review indicate that improvement of housing conditions has led to positive impacts on individual health and mental health outcomes. These include improvements in self-reported physical and mental health, perceptions of safety, crime reduction and social and community participation (Thomson, Petticrew and Morrisson, 2001; WHO, 2004a; WHO, 2004b). In this

volume, Moodie and Jenkins (2005) expand on the effects of urban planning for positive mental health.

### **1.3. Access to education**

Low levels of literacy and education are a major social problem in many countries, particularly in South Asia and sub-Saharan Africa, and tend to be more common among women (Patel and Jané-Llopis, in press). Lack of education limits the ability of individuals to reach their full potential in terms of life opportunities, access to work and economic entitlements. While there are impressive gains in improving literacy levels in most countries through better educational programmes targeting children, there is much less effort directed to illiteracy among adults. Ethnographic research in India (Cohen, 2002) suggests that programmes aimed at improving literacy in adults may have tangible benefits in promoting mental health. This research has noted that 'literacy programmes have significant consequences beyond the acquisition of specific skills. By bringing women together in new social forms that provide them with information about and ideas from wider worlds, the classes were potential catalysts for social change....by participating in the campaigns as volunteer teachers, impoverished literate women and girls gained a sense of pride, self-worth and purpose' (Cohen, 2002).

### **1.4. Taxation of addictive substances**

Effective regulatory interventions for addictive substances include taxation, restrictions on availability and total bans on all forms of direct and indirect advertising (Anderson, 1999). One of the most effective interventions has proven to be the taxation of tobacco and alcohol products. Price is one of the largest determinants of alcohol and tobacco use. A tax increase that raises prices by 10% reduces both the prevalence and consumption of tobacco products by about 5% in high income countries and 8% in low-income and middle-income countries (Chaloupka *et al.*, 2000). Similarly for the case of alcohol, although the impact of price varies across countries and beverage categories, a 10% increase in price can reduce the long term consumption of alcohol by about 7% in high income countries, and, although there are very limited data, by about 10% in low income countries (Anderson *et al.*, in press). Direct health

and social outcomes of taxation policies include the reduction of traffic accidents, other intentional and unintentional injuries, such as suicide, family violence, and the associated negative mental health impacts of the consequences attributed to alcohol consumption (Anderson *et al.*, in press).

## 1.5. Regulatory policy at the workplace

Similarly workplace policies have been shown to have positive impacts on mental health. Interventions at the organisational level tend to include legal policies associated with improving job security and job conditions. Effective meso strategies to improve mental health and to prevent the risk of mental disorders include: (1) task and technical interventions (e.g., job enrichment, ergonomic improvements, reduction of noise, lowering the workload); (2) improving role clarity and social relationships (e.g. communication, conflict resolution); and (3) interventions addressing multiple changes directed both at work and employees (Price and Kompier, in press). Notwithstanding the existence of legislation with respect to the psychosocial work environment, these interventions still remain underused (Schaufeli and Kompier, 2001). Policy initiatives such as the EU Framework Directive (89/391/EEC) (1989) recommend a holistic approach towards employees' well-being at work, taking into account psychological well-being and physical health in occupational safety and health policy. The 2001 European Council conclusions on combating stress and depression-related problems (Official Journal of the European Community, 2002/C 6/01) and the Communication on Health and Safety at Work (COM 2002, 118 final, 11 March 2002) emphasise the importance of good working conditions, social relations and the promotion of well-being at work.

## 2. Creating supportive environments

The Ottawa Charter advocates for the creation of supportive environments which puts the emphasis on a socio-ecological approach to health, promoting the change of home, work and community environments with the aims of improving control over the determinants of health. The creation of supportive environments has received increasing attention in mental health

promotion as mental health is mediated by the interaction between the individual, the environment and wider social forces. This perspective moves mental health beyond an individualistic focus to consider the influence of broader social, cultural and economic factors. The socio-ecological perspective underscores the importance of mediating structures such as home, schools, workplaces and community settings as providing key contexts for mental health promotion interventions operating from the micro to the macro levels.

### 2.1. Creating supportive home environments for early development

Intervention research in early life has focused on intervening through home-based strategies focusing on the family environment, as mental health is shown to be strongly linked to a healthy and supportive family life. Most home-based interventions are particularly directed to vulnerable children and families for example, those with socio-cultural, health, psychological and psychosocial vulnerabilities. These types of interventions aim to support parenthood through education on the health and development of the newborns, to enhance responsible and sensitive parenting styles and to facilitate the development of healthy parent/child relationships. Some successful interventions are described below. Tables 1-3 present a sample of other examples of existing programmes across settings.

#### *Home visiting for families at risk*

A classic example of an effective home-based intervention is the Prenatal/Early Infancy Project (Olds *et al.*, 1998, 2002), a two-year home visiting programme designed to serve low-income, at-risk pregnant women bearing their first child. Several evaluations, using a randomised controlled trial design, showed that the programme had health benefits for the newborns including an increase of up to 400 grams in birth weight, a 75% reduction in preterm delivery, more than a two-fold reduction in emergency visits, a lessening of severity for hospitalisations when they occurred and less reports of child maltreatment. The programme showed improved health and social outcomes for the mothers as well, such as an 82% increase in employment rates. Health and social outcomes extended up to age 15, when their

children were 56% less likely to have problems with alcohol or drugs, reported 56% fewer arrests and 81% fewer convictions. Olds and colleagues have argued that home-based programmes are cost-effective because a 'major portion of the cost for home visitation can be offset by avoided foster care placements, hospitalizations, emergency room visits, and child protection service worker time. Even the most expensive programmes pay for themselves by the time the children are 4 years old' (Olds, 2002).

Similarly Home-Start is a family support programme that aims to help families under stress and prevent family crisis and breakdown. The programme aims to increase the confidence and independence of the family and to prevent family crisis and breakdown through supporting and empowering parents and assisting children in their development (McAuley, Knapp, Curry & Sleed, 2004). The project approach is to support the mental health of parents and their children by offering time, friendship and practical help by volunteers. The volunteers visit the families for over one year (Hermanns *et al.* 1997). A large number of countries worldwide have started working with the Home-Start method including Greece, Norway, Hungary, the United Kingdom, Ireland, Canada, Australia, the Netherlands, the Czech Republic, Israel, Russia, Uganda, Kenya, Sri Lanka and South Africa. Each local Home-Start project is grounded within the community it serves and is therefore, focused on meeting identified needs. Local projects base their work on information about the needs of local children, parents, referrers, volunteers and staff. There have been some evaluation studies on Home-Start in the UK, Ireland and the Netherlands although no randomised controlled studies have been undertaken. Evaluation studies have found high levels of reported parent satisfaction with the Home-Start programme and they considered it had made a positive difference to their lives (Van der Eyken, 1982; Gibbons and Thorpe, 1989; Frost *et al.*, 1996, Rajan *et al.*, 1996; Shinman, 1994). However significant long term differences between the group of families who received the Home-Start programme and the comparison group have not yet been clearly identified (Reading, 2005; Hermanns *et al.*, 1997).



### **Home visiting support for mothers with depression**

Interventions targeting the early years of life have also provided outcomes on parental mental health such as reductions in maternal anxiety and depression symptoms and more positive attitudes towards children, both in healthy mothers (Erickson, 1989) and in mothers with depression (Gelfand, 1996; Van Doesum, Hosman and Riksen Walraven, 2005). Especially mothers experiencing depression tend to be less engaged in their interactions with their babies than non-depressed mothers. A pilot study conducted in a deprived peri-urban settlement in South Africa, where the prevalence of postpartum depression is reported to be three times higher than that of developed countries (Cooper *et al.*, 1999), showed preliminary evidence that the quality of mother-infant engagement was significantly more

positive for those mothers who received a mother-infant intervention delivered by unqualified, but trained, community workers (Cooper *et al.*, 2002).

### **Communities supporting early parenthood**

Another example of an effective programme in creating supportive environments is the Community Mothers Programme. This intervention recruits and trains volunteer mothers in disadvantaged areas to give support and encouragement to first-time parents in child-rearing (Johnson, Howell and Molloy, 1993). The programme focuses on health care, nutritional improvement and overall child development. Evaluation showed increased maternal self-esteem, parent-child interaction and improved dietary intake. A 7-year follow-up (Johnson *et al.*, 2000) indicated that benefits had been sustained and extended to subsequent children. Many of the Community Mothers had also become involved in adult education programmes such as literacy, counselling and personal development as a result of their contact with the programme, demonstrating a spin-off from the process of empowerment. This programme has been widely replicated and various models are in operation across Ireland, the Netherlands (Mothers Inform Mothers, Hanrahan, Prinsen and De Graaf, 1997) the UK (The child development programme, Barker, Anderson and Chalmers, 1992), Australia and the USA. Replications include an initiative with the Irish Traveller Community, an indigenous ethnic minority group whose health status is significantly lower than the national average (Fitzpatrick, Molloy and Johnson, 1997). The success of this initiative suggests that the programme has potential for adoption by other low-income communities across the globe.

Similarly, it has been stated that home-visiting programs might be especially useful in low-income countries, because of constraints in access to health care, education on parenting, access to information or illiteracy. In addition, these types of interventions can be delivered by lay persons in the community when resources are scarce for health care providers. An example of such intervention delivered by lay personnel in Jamaica is described in Box 1. The results of the evaluation of the

#### **Box 1**

##### **A Jamaican home visiting programme**

The Jamaican primary health care services provide health and nutritional advice to parents through home-visiting. To improve the development of children and the mother-child interaction, a psychological stimulation component was added to the home visits. The home-visitors received 8 weeks of nutrition and health care training and a further 8 weeks training in child development, teaching techniques and toy making.

The weekly, biweekly or monthly home visits lasted approximately one hour. Home-visitors would play with the children to illustrate positive techniques and encourage mothers to use praise and positive feedback with their children. Each visit included combinations of games, songs, language, and crayon and paper activities. Toys would be left at the home until the next visit.

Every effort was made to ensure that the curriculum was culturally appropriate, including indigenous songs and games, pictures and books depicting local scenes and people.

The results of a randomised controlled evaluation study showed that the benefits to the mental/cognitive development of the children increased as the frequency of visiting increased, both in the degree of improvement and in the number of different areas of development affected. Results showed that children visited weekly scored higher on the developmental quotient, performance, and hearing and speech, compared to the control groups. It showed that at least weekly visiting is necessary to make a substantial impact on child development.

Box 1. A Jamaican Home-Visiting programme (Powell and Grantham-McGregor, 1989)

#### **Box 2**

##### **Videotape modelling**

One approach to parent training is the use of videotape modelling programmes. These programmes have proven to be efficacious on the short and the long-term in changing a broad range of parent-child interactions. The programme is aimed at teaching parents how to reduce their children's behaviour problems, especially aggression and non-compliance, and how to increase their children's prosocial behaviours.

To evaluate the effect of videotape modelling four different interventions were compared: a group discussion videotape modelling training, an individually administered videotape modelling training, a group discussion training (10-12 sessions), and a waiting-list control group.

Results of a randomised controlled evaluation study showed that all three parent training programmes led to reliable and sustained improvements at least up to one year for approximately two thirds of the sample. The group discussion video modelling training was somewhat superior to the other two training groups and was the only intervention that showed sustained and stable improvements over three years.

Box 2. Videotape modelling training (Webster-Stratton, 1982; Webster-Stratton, Kolpacoff and Hollinsworth, 1988; Webster-Stratton, 1990)

Jamaican Home-Visiting Programme show that it is feasible to integrate psychosocial stimulation into primary health care services.

### **2.2. Parenting interventions**

Group-based parent-training programmes can have a positive impact on the behaviour of children between the ages of 3 and 10 years, and are more cost-effective and successful in the long-term than methods that involve working with parents on an individual basis (Barlow, 1999). A range of different group-based formats and techniques have proven effective. For example, Webster-Stratton (Box 2) has pioneered the use of videotape modelling in which parents watch numerous examples of interactions between parents and children, followed by discussion and modelling activities (Webster-Stratton, 1982).

Parenting programmes are also effective in promoting the short-term psychosocial health of mothers (Barlow, Coren and Stewart-Brown, 2001). Depression, anxiety/stress, self-esteem and relationship with spouse/marital adjustment were all significantly improved in a meta-analysis of the results

of 17 parenting programmes, compared with control groups (Barlow and Coren, 2004). Moodie and Jenkins in this volume (Moodie and Jenkins, 2005) provide some case studies on parenting programmes in the UK. The role of parents and family in the early years of life is crucial. Programmes supporting parents contribute to their welfare, which in turn contributes to the quality of raising children, and consequently can lead to improved well-being of their children.

### 2.3. Pre-school interventions

Preparing children for school is a great challenge for families and educators. Children from low socio-economic backgrounds are less likely than their middle or higher socio-economic class peers to enter school ready to learn and to achieve academic success. One of the most convincing controlled studies of the long-term benefits of preschool intervention for children living in poverty is the High/Scope Perry Preschool Project (Schweinhart and Weikart, 1998; Schweinhart, 2000). Targeting at risk 3 to 4 year old African-American children from impoverished backgrounds, the programme combines half a day preschool intervention using a developmentally appropriate curriculum with weekly home visits. On the short term children in the intervention groups showed improved cognitive development, lower levels of learning disability, improved academic achievement, better social adjustment and increased high school completion. When followed up through to age 27, young adults showed increased social competence, a 40% reduction in lifetime arrests, a 40% increase in literacy and employment rates, fewer welfare dependence and improved social responsibility (Schweinhart and Weikart, 1998). The costs of US\$1000 per child were returned by the benefit produced by the programme, which was estimated to be over US\$7000 - US\$8000 per child (Barnett, 1993), due to decreased schooling costs, increased taxes paid on higher earnings, reduced welfare costs, decreased justice system costs, and decreased crime victim costs (Schweinhart and Weikart, 1998). Unfortunately, there are very few cost-effectiveness studies on mental health promotion programmes and although, trials like this one make a strong case for investing in promotion, more efforts

should go to undertaking cost-effectiveness studies in this field.

### 2.4. Schools as a supportive environment to learn and grow

The school setting is central in influencing the behaviour and development of children. Evidence from systematic reviews and intervention trials on mental health promotion in schools highlights that comprehensive programmes that target multiple health outcomes in the context of a co-ordinated whole-school approach are the most consistently effective approach (Durlak and Wells, 1997; Tilford, Delaney and Vogels, 1997; Lister-Sharp *et al.*, 1999; Weare, 2000; Greenberg, Domitrovich and Bumbarger, 2001; Harden *et al.*, 2001; Wells, Barlow and Stewart-Brown, 2001; Patton, Olsson and Toumbourou, 2002; Mental Health, 2003). Interventions have successfully led to increases, for example, in mental well being, competence and social skills as well as decreases in anxiety and depressive symptomatology. Social outcomes have included, among many, reductions in aggression and bullying and increases in school achievement (Greenberg *et al.*, 2001).

Several programmes have successfully targeted students' transition to a new educational environment, by promoting competence, decision-making, participation and social awareness (e.g. Snow *et al.*, 1986; Elias *et al.*, 1991). The School Transitional Environment Project (Felner and Adan, 1988) goes beyond the curriculum by redefining the role of teachers and restructuring schools' physical settings, successfully reducing absenteeism, drop-out rates and internalising symptoms, while improving self-concept and academic performance (Felner *et al.*, 1993).

Other ecological approaches include whole-school programmes which seek to provide a positive school climate, fostering a sense of identity and connectedness for pupils by altering the school environment. The Australian Mind Matters project promotes connectedness recognising the importance of the organisational structures, the social environment, and the individual within this context (Wynn *et al.*, 1999). Many school-based programmes are also supported by involving parents to some degree. For example, the programme

Linking the Interests of Families and Teachers (LIFT) (Reid *et al.*, 1999) offers six sessions for parents on how to create a home environment conducive to the ongoing practice of discipline and supervision. In Project PATHE, Promoting Action Through Holistic Education (Gottfredson, 1990), parents, staff, students and community members work together to design and implement improvement programmes. Fast Track also includes the home environment (Conduct Problems Prevention Research Group, 1992), and is composed by elements such as parent training, home visitation, academic tutoring, social skills training, and the classroom-based PATHS curriculum (Greenberg, Kusche and Mihalic, 1998). Olweus' Bullying Prevention Programme applies this whole-school approach to the reduction and prevention of bully/victim problems. Evaluation has shown significant reductions in reports of bullying and victimization, anti-social behaviour, vandalism, fighting, theft and truancy as

### Box 3

#### The Caregiver Support Program

The Caregiver Support Program was designed to increase social support and participation in work related decision making for caregiver teams in health and mental health care facilities. The programme involved six training sessions of four to five hours long. With groups of approximately ten home managers and ten direct care staff, sessions were focused on: (1) understanding and strengthening existing helping networks within the organizations; (2) increasing worker participation in decision-making and using participatory decision-making; (3) teaching supervisors and direct care workers to develop and lead training activities in their home site; and finally, (4) teaching techniques for maintaining these new skills over the long-term. To ensure effective delivery, social learning principles were employed to engender a strong sense of mastery and to inoculate workers against setbacks.

Results of a large-scale randomised trial indicated that the programme increased the amount of supportive feedback on the job, strengthened participant perceptions of their abilities to handle disagreements and overload at work, and enhanced the work team climate in the group homes. The programme also enhanced mental health and job satisfaction of those who attended at least five of the six training sessions. The Caregiver Support Program also had positive effects on the mental health of those employees most at risk of leaving their jobs.

Box 3. The Caregiver Support Programme (Heaney *et al.*, 1995a; Heaney 1995b)

well as an improved social climate (Olweus, 1989).

### **2.5. Supportive environments in the workplace**

Similarly, interventions at the workplace have been developed to reduce the negative mental health impacts of stressful work. An example of an intervention at the workplace is the Caregiver Support Programme (CSP) a work stress intervention to increase employee coping resources and enhance mental health. The programme led to increases in social support and improved the work team climate (Box 3).

## **3. Strengthening community action**

Based on empowerment principles, strengthening community action emphasizes enabling local communities to actively participate in setting priorities, making decisions, planning strategies and implementing them in order to achieve better health. Effective community interventions focus on the development of building a sense of ownership and social responsibility through the empowerment of community members, and have led to health and social outcomes around the world.

### **3.1. Strengthening community networks**

The Maryborough Mental Health Promotion Project in Australia (VicHealth, 2002) and the Rural Mental Health Project in Ireland (Barry, 2003) are two examples of projects which employ community models in strengthening community capacity through partnerships for mental health promotion. For example, in both cases, membership of the project planning group was drawn from a wide range of community members who were engaged through a process of participation to effect community change through implementing a range of local initiatives.

An efficacious USA community intervention for at-risk youth is the Midwestern Prevention Project (MPP). This comprehensive, multi-faceted community-based programme is designed to prevent adolescent drug abuse (Pentz, Mihalic and Grotspeter, 1998). The programme is implemented through well-coordinated, community-wide strategies introduced in sequence a

school programme with school boosters, a parent education programme, community organisation and training, mass media programming and local policy change regarding tobacco, alcohol, and other drugs. Evaluation showed reductions in gateway drug use, increased parent-child communications about drug use, decreased self-reported prevalence of monthly drinking up to one year after the intervention (although did not differ after 3 years) and effects on monthly intoxication through the end of high school (Pentz *et al.*, 1998).

Another example is the Communities that Care Program, CTC (Hawkins, Catalano and Arthur, 2002). CTC has been implemented across several hundred communities in the USA and is currently being adopted and replicated in the Netherlands, England, Scotland, Wales and Australia. CTC is a strategy to activate communities to implement community violence and aggression prevention systems (Hawkins *et al.*, 2002). Using local data on risk and protective factors, communities develop action, including interventions operating at multiple ecological levels: the community (e.g., mobilisation, media, policy change), the school (e.g., changing school management or teaching practices), the family (e.g., parent training) and the individual (e.g., social competence) (Hawkins, 1997). CTC supports communities in selecting and implementing existing evidence-based programmes that fit the needs of their community. To date CTC has been evaluated in the USA with pre-post designs and comparisons with baseline data involving about 40 communities in each field-test. Outcomes have indicated improvements in, for example, youth cognitive skills, parental skills, community relations, 30% decrease in school problems, 45% decrease in burglary, 29% decrease in drug offences and 27% decrease in assault charges.

### **3.2. Community action against substance dependence**

A community approach to combating alcoholism and promoting mental health in rural India started with participatory research on the burden of alcohol problems and led to the development of promotion actions including education and awareness building, advocacy to politicians to limit the sale and distribution of alcohol in bars and shops,

and mass oaths for abstinence. The programme was implemented through a community movement led by young people and women and village groups for the liberation from liquor. The programme has led to a marked reduction in the number of alcohol outlets in the area and a 60% reduction in alcohol consumption. Social outcomes include larger availability of money for food, clothing, and welfare, and a reduction of domestic violence (Bang and Bang, 1991). A similar multi-faceted intervention in Yunnan, China, to prevent drug abuse among youths, involved multiple sectors and leaders in the community. The programme emphasised community participation and action, education in schools, literacy improvement, and employment opportunities. It led to a reduction in the incidence of drug abuse, and a marked improvement in knowledge and attitudes towards HIV/AIDS and drug use (Wu *et al.*, 2002).

### **3.3. Schools as a gateway for the community**

In Pakistan, a school-based programme succeeded in reducing the stigma surrounding mental ill-health in a rural community (Rahman *et al.*, 1998). School-going children acted as a source of information for their families, friends and neighbours in a cascade approach. The evaluation found that the school mental health programme improved school children's awareness of and attitudes towards mental health problems. There were also positive changes in the attitudes and knowledge of community members. This study has positive implications for adapting such a programme in other communities where levels of formal education and literacy may be low.

### **3.4. Media campaigns**

Challenging stigma and promoting increased awareness of, and positive attitudes towards, mental health issues have been addressed through media campaigns like, You in Mind (Hersey *et al.*, 1984; Barker *et al.*, 1993); the Norwegian Mental Health Campaign (Sogaard and Fonnebo, 1995); "Changing minds" by the Royal College of Psychiatrists in the UK; and the World Psychiatric Association's campaign "Open Doors" (Sartorius, 1997). For example, in Europe, the Norwegian Mental Health Campaign (Sogaard and



Fonnebo, 1995) was a nationwide mass media-based publicity and information strategy over a 6-month period, culminating in a 6-hour television broadcast. The campaign achieved wide penetration, putting mental health issues on the cultural agenda in Norway and changing the knowledge of and attitudes towards mental health problems. In the UK, the 'You In Mind' television series had a positive impact on mental-health-related understanding and behavioural intentions of a large and diverse national audience (Barker *et al.*, 1993).

In the USA, the media-based San Francisco Mood Survey Project, aimed to target depression and depressive symptoms in the population (Muñoz *et al.*, 1982). The intervention was delivered through television being available to all individuals in the community. The programme led to a significant reduction in depressive symptoms in those individuals who initially scored at high levels of depressive symptoms and watched the segments during the intervention's broadcast.

Mass media interventions particularly if they are supported by local community action can have a significant impact on increasing understanding, reducing stigma and increasing knowledge, as well as impacting positively on mental health literacy at the community level. More efforts need to be undertaken to evaluate these types of interventions as they can be highly cost-effective because of their potential reach to large numbers of people.

## 4. Developing personal skills

Developing personal skills supports personal and social development through providing information, education for health and enhancing life skills. This increases the options available to people to exercise more control over their own health and over their environment to make choices conducive to health.

### 4.1. Enhancing resilience and promoting social competence

Cognitive restructuring techniques have been used successfully with a range of age groups. For elementary schools, the projects PATHS – Promoting Alternative Thinking Strategies (Greenberg *et al.*, 1998), and ICPS – I Can Problem Solve / Interpersonal Cognitive Problem Solving

(Shure and Healey, 1993) have proven efficacious in promoting emotional and social competencies in children.

In the Philippines, the Youth Life Enrichment Programme, although not formally evaluated through a controlled trial, has influenced the lives of thousands of teenagers, their families and friends since 1975. Organised by the Philippine Mental Health Association and implemented through student mental health clubs in public schools, the programme has focused on youth as a 'family facilitator' (de Jesus, 2003). Themes include self-awareness, positive relationships with others, leadership skills and effective communication as well as fostering positive attitudes towards mental health and people suffering from mental disorder. The materials have been revised three times during the last decade to meet the changing needs of youth and the general community, and now include modules promoting awareness of social issues pertinent to mental health, commitment to social responsibility, spirituality as a way of life, and prevention of drug abuse. Efforts should be placed in evaluating these types of comprehensive interventions where they are implemented.

### 4.2. Targeting the prevention of depression

The Penn Resiliency Program (PRP) aims to change cognitive distortions and to improve coping skills in children with depressive symptoms (Jaycox, Reivich, Gillham, and Seligman, 1994; Gillham, Reivich, Jaycox, and Seligman, 1995; Gillham and Reivich, 1999; Reivich, Shatté, and Seligman 2000). The programme evaluation has shown reductions in depressive symptoms by half (22% in experimental group versus 44% in controls) at post-treatment, 6-month and 2-year follow-up. Recently, a randomised controlled study of the PRP with Latino and African-American children from low-income families (Cardemil, Reivich and Seligman, 2002), has indicated a sustained effect over six months on the reduction of depressive symptoms for those who were initially symptomatic (Cardemil *et al.*, 2002). The PRP (also called the Pen Optimistic Programme) has been adapted and implemented with success in China (Lei Yu and Seligman, 2002). It reduced levels of depressive symptomatology for up to

six months in children and adolescents at risk. This provides evidence of the programme's effectiveness in diverse cultural settings. Similarly, the Australian Resourceful Adolescent Program, which uses a cognitive approach, successfully reduced depressive symptoms in 12-15 year olds (Shochet *et al.*, 2001).

The targeted 'Coping with Stress Course', a cognitive oriented group programme, has shown to reduce the incidence of depression in adolescents at high risk (Clarke *et al.*, 1995). Participants attend fifteen group sessions, during which they are taught cognitive techniques to identify and challenge negative or irrational thoughts. Outcomes of a randomised controlled trial indicated that programme participants experienced a total incidence of depressive disorder over one year period approaching half that of the control group (14.5% vs. 25.7%). A randomised controlled trial of a similar intervention for children with parents suffering from a mental disorder, also showed a decrease in new and recurrent depressive episodes from 25% in the control group to 8% in the prevention condition over the first year after the intervention, and from 31% to 21% respectively over the second follow-up year (Clarke *et al.*, 2001). The «Coping with Depression Course» for adults has been adopted and implemented to scale in the Netherlands, showing reductions in depressive symptomatology, especially for those who had lower levels of symptoms at the beginning of the intervention (Allart-van Dam *et al.*, 2003).

### 4.3. Addressing the negative impact of unemployment

An example of a work related intervention to develop personal skills is the JOBS programme for the unemployed, firstly developed in the USA (Price, Van Ryn and Vinokur, 1992), successfully disseminated in the USA, China, Korea and Finland (Vuori *et al.*, 2002) and currently being implemented in the Netherlands and Ireland. This programme aims to enhance job search skills, self-esteem and sense of control, self-efficacy and inoculation against setbacks. The intervention was particularly beneficial to participants at high risk of depression. Other benefits included improved confidence, self-efficacy and re-employment (Vinokur, Price and Schul, 1995). In Box 4, the original Winning New Jobs Program



## Box 4

### The Winning New Jobs Program: Promoting Reemployment and Mental Health

The Winning New Jobs Program was developed in the United States to aid unemployed workers to effectively seek reemployment and cope with the multiple challenges of unemployment and job-search (Caplan, Vinokur, Price, & van Ryn, 1989; Price *et al.*, 1992; Price and Vinokur, 1995). The programme is based on theories of active learning process, social modelling, gradual exposure to acquiring skills, practice through role playing, and inoculation against setbacks.

Over a one week period five intensive half-day workshops are held. The workshops focus on identifying effective job-search strategies, improving participant job-search skills, increasing self-esteem, confidence, and the motivation of participants to persist in job-search activities. Two trainers deliver the programme to groups of 12 to 20 people. The intervention is designed to achieve its goals through the creation of supportive environments and relationships between trainers and participants and among participants themselves.

The Winning New Jobs programme has been evaluated in replicated randomised trials involving thousands of unemployed workers and their partners in the USA. Results indicate that this type of intervention is cost-effective (Vinokur *et al.*, 1991) and has shown increased quality of re-employment, increased self-esteem and decreased psychological distress and depressive symptoms, over 2 years, particularly among those with higher risk for depression (Price *et al.*, 1992). In addition, the programme has been shown to inoculate workers against the adverse effects of subsequent job-loss because they gain an enhanced sense of mastery over the challenges of job-search (Price, 2003).

Box 4. The Winning New Jobs Program (Price *et al.*, 1992)

## Box 5

### The Työhön Job Search Program

In Finland, the Winning New Jobs Program, originally developed in the United States, has been adapted, implemented and evaluated nationwide. The Finnish version, called Työhön Job Search Program, is guided by the same principles as the USA programme, which is strongly theory-driven and documented in detail (Curran, 1999). However, the Finnish programme has been adopted to meet cultural differences in unemployment, duration of social and economic security and labour policies regarding the use of labour market programmes. For example, because of longer periods of financial security for unemployed, the Finnish programme does not only aim at those who have been recently unemployed, like in the USA version, but targets also those who have been unemployed for long periods.

Similar intervention methods as in the USA trials have been used in the Finnish evaluation study, including more than one thousand unemployed job seekers. Short-term results after 6-months showed increases in quality of reemployment, strongest for those who were unemployed for a moderate long period and at risk of becoming long-term unemployed, and reductions in levels of distress, strongest for those who were at high risk for depression. It was not until the long-term follow-up, two years after the programme, that decreases in depression symptoms and increases in self-esteem were found. Beneficial effects on the re-employment of participants in the intervention groups were indicated by higher engagement in the labour market, either employed or participating in vocational training. These long-term results are comparable with the results from studies in the USA.

Box 5. The Työhön Job Search Program (Vuori *et al.*, 2002; Vuori and Silvenen, in press)

(Price *et al.*, 1992), and the Finish adaptation, the Työhön Job Search Program (Vuori, *et al.*, 2002), are described.

## 5. Reorienting health services

Reorienting health services emphasises that health is a shared responsibility among individuals, community groups, health professionals, health service institutions and governments. The reorientation of health services includes attention to health research, changes in professional education and training and a change in the organisation of health services including the needs of the individual as a whole person.

### 5.1. Including brief interventions in primary health care

Harmful substance use during pregnancy has important negative impacts on the mental health and development of the foetus, increasing the likelihood of premature deliveries, low birth weight, long-term neurological and cognitive-emotional development of children, and perinatal mortality (e.g. Brown and Sturgeon, in press; Tuthill *et al.* 1999). Being born prematurely, and low birth weight have led to adverse mental health outcomes and psychiatric disorders (Elgen, Sommerfelt and Markestad, 2002). Educational programmes to enable pregnant women to abstain from tobacco, alcohol and other drugs can have long-

term mental health benefits on their children. For instance, Windsor *et al.* (1993) evaluated a 15 minute behavioural intervention for pregnant smokers, showing a 6% increase in smoking cessation. Among those who quit, their babies were 200 grams heavier at birth; cutting down smoking increased birth weight half this amount.

To date there have been relatively few efforts to integrate mental health promotion strategies in primary health care. One example is a collaborative European project that has developed a training manual for health care professionals in primary care to work with families to promote the psychological well being of children and to prevent the development of psychological and social problems (Puura, *et al.*, 2002; Tsiantis *et al.*, 2000). Primary health care providers have been trained in five European countries to conduct health promotion interviews with all mothers one month before and after birth. A counselling model is used with mothers identified at risk to promote children's mental health and try to prevent the onset of child mental health difficulties (Puura *et al.*, 2002). Currently, another European project (Implementing Mental Health Promotion Action, IMPHA), has developed and pilot-tested the first training manual for primary health care professionals on mental health promotion for adults using problem solving skills training ([www.imhpa.net](http://www.imhpa.net)).

### 5.2. Interventions for new mothers

The postpartum period can be a stressful time for new mothers. Recent epidemiological studies in low-income countries have noted increased prevalence of postnatal depression, reduced mental health and a strong relationship between poverty, gender, marital violence and postnatal depression (Patel, Rodrigues and DeSouza, 2002). In India, for example, more than one third of mothers report to be beaten by their husbands (Jejeebhoy, 1998). Although there is contradictory evidence of the effectiveness of antenatal programmes to prevent postpartum depression alone (Brugha *et al.*, 2000; Morrell *et al.*, 2000; Hayes, Muller and Bradley, 2001; Cooper *et al.*, 2002), brief and long antenatal education programmes have led to reductions in depressive symptoms (Elliott *et al.*, 2000;

Zlotnick *et al.*, 2001) and lead to other health outcomes related to the child and the mothers, including, mother-infant engagement, mother sensitivity, and increased birth weight (Olds *et al.*, 1998; Cooper *et al.*, 2002; Olds *et al.*, 1998). This suggests the possible effectiveness of antenatal interventions especially in low-income countries where maternal and infant health policies should be comprehensive and include multiple measures, throughout long term follow ups, of mental, physical health and social outcomes for mothers and neonates.

### 5.3. Hearing aids

An example wherein physical and mental health are closely related, is a study set in primary care clinics to assess whether hearing aids would improve the quality of life of elderly persons with hearing loss (Mulrow *et al.*, 1990). A randomised control study was undertaken with 194 elderly veterans with impaired hearing. At baseline, 82% of the veterans reported adverse effects on quality of life due to hearing impairment, and 24% were depressed. After the intervention those in the intervention group as compared to the control group, showed significant improvements for social, emotional, communication and cognitive functions and depression scores. In this volume, Herrman and Jané-Llopis (2005) explore the implications of the links between mental and physical health and expand on the added value to assess mental health outcomes in existing health promotion initiatives with the aim to increase efficiency.

### 5.4. Early intervention for people with mental disorders

Mental health promotion within the mental health services adopts a more holistic approach towards mental health, taking into account people's mental, physical, spiritual and emotional needs and draws on people's own expertise in living and coping with mental distress. Programmes that promote supported employment strengthen opportunities for creativity and social support and reduce the stigma and discrimination associated with mental health problems have all

shown to be effective in promoting mental health (Friedli, 2000). An example of a specific early intervention programme in first-episode psychosis is the Early Psychosis Prevention and Intervention Centre programme (EPPIC). Edwards and McGorry (2002) highlight some of the potential benefits of this early intervention which include: reduced morbidity; more rapid recovery; better prognosis; preservation of psychosocial skills; preservation of family and social supports and the decreased need for hospitalisation.

## Conclusions

This overview of programmes, although not a systematic review aims to illustrate that, to date, there is a large range of initiatives that can be efficacious in promoting mental health. However, it is crucial to highlight, that there are also non-effective programmes, and meta-analyses have shown a large variation in outcomes of existing mental health promotion and prevention programmes (Durlak and Wells, 1997; Brown *et al.*, 2000; Jané-Llopis *et al.*, 2003; WHO, 2004b). In addition, the evidence for many programmes is still lacking robustness through confirmation by the outcomes of replication studies. This large variation in outcome and in quality of evidence urgently calls for formal evaluations (including cost-effectiveness studies) of existing programmes across countries, including low- and middle-income countries. In spite of the low resources in those countries, individual studies, partnerships between research institutes and practitioners, and seeking the support of international organisations and researchers in high-income countries, have proven to facilitate the so needed evaluations, as Patel (2005) further describes in this volume. When considering adoption and implementation of programmes across cultures, it is essential to have evidence-based knowledge and information on what programmes have proven to be efficacious and why. In this volume, Jané-Llopis and Barry (2005) expand on what ingredients make programmes effective,

and what principles should be taken into account when deciding to adopt a given programme. Barry and colleagues (2005), present in this issue a discussion of the implementation conditions and principles that should be taken into account to ensure improved quality implementation. Patel (2005) underlines some key determinants of mental health in low income countries, identifying key areas for implementation. Moodie and Jenkins (2005) illustrate how the choices for implementation should be relevant for policy making, and Herrman and Jané-Llopis (2005) present the relationship between mental and physical health and suggest strategies for increasing intervention efficiency.

There is enough mental health promotion knowledge to move evidence into practice. However, this translation should be based on what works and should stimulate continuous evaluation and improvement of existing practices. Although the promotion of evidence-based practice and policy is needed worldwide, special attention and support should be provided to those countries where these types of strategies are less developed and needed most.

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**Table 1****Settings : Home****Examples of home based interventions**

Country	Programme name	Target group	Aims and objectives	Risk and protective factors	Type of research	Health impact	Social and economic impact
South Africa	Mother-Infant Intervention Project (Cooper, Landman <i>et al.</i> , 2002)	At risk mothers and their newborn infants, particularly in deprived areas	Promote health, secure attachments between parents/ caregivers and their infants in order to develop healthy emotional cognitive and physical development of children	Secure parent-infant attachment; Parental emotional resources; Social support and information; Parent education and empowerment	Quasi-experimental design (pilot study)	Positive attitudes towards children; Positive mother-infant engagement	Reducing child abuse; Reducing child abuse; In the long run children have less problems later in life
Poland	Program Domowych Detektywów (Ostaszewski <i>et al.</i> , 2000)	Children (pre-adolescents)	Prevent under-age drinking; Facilitate parent-child communication about alcohol and other substance use; Establishing effective family rules regarding under-age drinking	Under-age alcohol use; Intention to use substances; Being informed about alcohol; Parent-child communication; Peer support; Resistance skills	Quasi-experimental design	Reduction in alcohol use and intention to use; Increased knowledge about consequences of alcohol; Increased parent-child communication	Reported lower alcohol consumption
United Kingdom	Child Development Programme (Barker <i>et al.</i> , 1992)	First time parents; Parenting problems	Empower parents	Parenting; Self-esteem; Self-control; Social support	Quasi-experimental design; Experimental matched community	50% lower child abuse rates	41% lower rate in the Child Protection Register
United Kingdom	Home start (Frost, <i>et al.</i> , 1996; McAuley <i>et al.</i> , 2004)	Families with children under five years old	Empower parents; Increase confidence and independence of the family; Promote mental health of children	Social support; Self-esteem; Stress	Quasi-experimental design	Increase in parental self-esteem; Increase in coping ability; Decrease in family dysfunction	Reported positive benefits in parents' lives and family functioning
Finland	An early home-based intervention (Aronen and Kurkela, 1996)	Families with newborns	Improve family interaction; Prevent psychiatric problems on the long term	Family interaction	Quasi-experimental design	Decrease in internalising and externalising problems at adolescent age	Long-term benefits in development of positive mental health; Less use of mental health services

**Table 2**  
**Setting : School**  
**Examples of school based interventions**

Country	Programme	Target Group	Aims and objectives	Risk and Protective Factors	Type of Research	Health Impact	Social and Economic Impact
Philippines	Youth Life Enrichment Programme (de Jesus, 2003)	Youth (12-17 years old)	Promote awareness of social issues related to mental health, commitment to social responsibility, spirituality, and prevention of drug abuse	Coping skills; Self-awareness; Communication skills	Post-intervention survey	Increase in self-reported understanding/knowledge of a range of personal development topics	Nationwide implementation; Government support; Student endorsement
Pakistan	School mental health programme (Rahman <i>et al.</i> , 1998)	Students (12-16 years old)	Reduce the stigma surrounding mental ill-health and improving the understanding of disorders of mental health in the rural community	Knowledge of mental health issues in rural areas	Quasi-experimental controlled design		Improved awareness of and attitudes towards mental health issues amongst schoolchildren, their parents, friends, and neighbours
Norway	Bullying Prevention Programme (Olweus <i>et al.</i> , 1985)	Students (6-15 years old)	Reduce existing bully/victim problems inside and outside the school setting; Prevent development of new bully/victim problems; Improve peer relations; Reduce opportunities and rewards for bullying	School climate; Self-esteem; Adult-student-peer interaction; Attitudes towards bullying; Anxiety; Permissive parenting	Experimental design (RCT); experimental/control group	Reduction (by 50% or more in most comparisons) in reports of bullying and victimization	Reduced antisocial behaviour e.g. vandalism, fighting, theft and truancy; Improved social climate
USA	PATHS - Promoting Alternative Thinking Strategies (Greenberg <i>et al.</i> , 1998)	Students (6-11 years old); including all children, but also specific groups like deaf children or behaviourally at-risk children	Promote social/ emotional competence	Self-control; Social competence; Peer relationships; Interpersonal problem-solving skills; Emotional literacy	Experimental design (RCT); experimental/control group	Decreased symptoms of anxiety and depression; Increased understanding and recognition of emotions; Improvements in social problem solving	Reduction in conduct problems and aggression
Australia	Queensland Early Intervention and Prevention of Anxiety Project (Dadds <i>et al.</i> , 1997; Dadds <i>et al.</i> , 1999)	Children (7-14 years old) at risk for anxiety disorders	Prevention of anxiety symptoms and anxiety disorders	Coping skills; Emotional resilience; Parental coping skills	Experimental design (RCT); experimental/control group	Reduction in anxiety symptoms; Prevention of onset of new anxiety disorders	
USA	SCPP-YA - Social Competence Promotion Program for Young Adolescents (Weissberg <i>et al.</i> , 1997)	Adolescents (in 5 to 8th grade)	Promote social and emotional competence in order to prevent high risk behaviours such as substance use, high-risk sexual behaviour and delinquency	Social competencies; Self-control; Communication skills; Problem solving skills; Stress management skills; Substance use; Antisocial and aggressive behaviour	Experimental design (RCT); experimental/control group	More adaptive stress management strategies; Improved alternative solutions to problems	Less self-reported antisocial and delinquent behaviour; Improved pro-social values; Improved teacher-rated peer relations and behaviour



**Table 3****Setting: Workplace****Examples of interventions at the workplace or for the unemployed**

Country	Programme name	Target group	Aims and objectives	Risk and protective factors	Type of research	Health impact	Social and economic impact
USA	JOBS programme (Price <i>et al.</i> , 1992)	Involuntary recently unemployed adults	Seek effectively reemployment; Cope with the multiple challenges of unemployment and job-search	Coping skills; Job-seeking skills; Self-esteem; Sense of control; Self-efficacy; Helplessness; Social support	Experimental design (RCT); Experimental/control group	More job satisfaction and motivation; Higher self and job seeking confidence; Decreases in depressive symptoms (39%-25%)	Finding jobs more quickly; Better jobs and income; Cost: \$286 per person, Benefits: \$720 per person after 32 months, \$1,649 for the government per person
Finland	The Työhön Job Search Program (Vuori <i>et al.</i> , 2002; Vuori <i>et al.</i> , in press)	Long-term unemployed adults	Seek effectively reemployment; Cope with the multiple challenges of unemployment and job-search	Coping skills; Job-seeking skills; Self-esteem; Sense of control; Self-efficacy; Helplessness; Social support	Experimental design (RCT); Experimental/control group	Higher and better quality of reemployment; Decrease in psychological distress and depressive symptoms; Increase in self self-esteem	Socio-economic benefits from improved employment outcomes
The Netherlands	Stress prevention training (Bekker <i>et al.</i> , 2001)	Recently ill or working employees with work related stress complaints, without any other psychological problems	Improve coping skills in order to build resistance against work stress	Coping skills/capability; Social support	Quasi experimental design	Less psychological and somatic complaints; Less stress; Use of more active coping; Higher capability for managing new situations	Increase social support seeking

**Table 4** Setting : Community  
Examples of interventions in the community

Country	Programme	Target Group	Aims and objectives	Risk and Protective Factors	Type of Research	Health Impact	Social and Economic Impact
United Kingdom	You in Mind (Barker <i>et al.</i> , 1993)	National media audience (adults)	Promote greater understanding of mental health problems; Change coping or help-seeking behaviour	Knowledge about psychological problems; Behavioural intentions towards mental health problems	Pre-post stratified random sample		Improved mental-health-related understanding and behavioural intentions
Norway	Norwegian Mental Health Campaign (Sogaard and Fonnebo, 1995)	National media audience age 14+	Changing knowledge and attitudes about mental health, and willingness to communicate about it	Knowledge about psychological problems; Behaviour towards mental health problems	Pre-post stratified random sample with post-control group		Wide penetration; Improved knowledge about and attitudes towards mental health problems
Ireland United Kingdom	Community Mothers Programme (Johnson <i>et al.</i> , 2000)	Socially disadvantaged first-time mothers	Provide support to first-time parents in rearing their children up to 1 year of age	Mutual support; Empowerment; Social deprivation; Parenting skills; Maternal self-esteem	Experimental design (RCT); experimental/control group	Increased immunisation rates; Better dietary intake; Improved maternal psychological health	Increased rates of mothers reading to their children; More positive maternal feelings; Increased maternal involvement in personal development programmes
Ireland	Rural Mental Health Project (Barry, 2003)	Community members of two rural communities on the border region of the Republic and Northern Ireland		Community engagement and participation Community awareness of depression and suicide; Help-seeking attitudes and supports; Skill development Re-orientation of services	Quasi-experimental design	Improved community awareness concerning suicide and depression; Improved attitudes towards help-seeking; Improved job search skills; Improved awareness of supports, services and help-seeking among young people	Enhanced capacity to engage with local services; Sustainable school-based and employment programmes put in place; Inter-agency and cross-sectoral collaboration established; Cross border collaboration and co-operation in implementing local programmes

## References

- Allart-van Dam, E., Hosman, C., Hoogduin, C., & Schaap, C. (2003). Short term and mediating results of the Coping with Depression course as indicated prevention: a randomized controlled trial. *Behaviour Therapy*, 34, 381-396.
- Anderson, P. (1999). Tobacco, alcohol and illicit drugs. In *The Evidence of Health Promotion Effectiveness: Shaping Public Health in a New Europe*, Chapter 9, 69-79. International Union for Health Promotion and Education, IUHPE, Paris: Jouve Composition & Impression.
- Anderson P, Biglan A, Holder H. (in press). Preventing the harm done by substances. In: Hosman C, Jané-Llopis E, Saxena S. (Eds). *Prevention of Mental Disorders: Effective Strategies and Policy Options*. Oxford: Oxford University Press.
- Aronen, E.T., & Kurkela, S.A. (1996). Long-term effects of an early home-based intervention. *Journal of the American Academy of Child and Adolescent Psychiatry*, 35, 1665-1672.
- Bang, A., & Bang, R. (1991). Community participation in research and action against alcoholism. *World Health Forum*, 12, 104-109.
- Barker, W., Anderson, R., & Chalmers, C. (1992). *Child Protection: The impact of the Child Development Programme*. Bristol: Early Childhood Development Unit.
- Barker, C., Pistrang, N., Shapiro, D.A., Davies, S., & Shaw, I. (1993). 'You in Mind': A preventive mental health television series. *British Journal of Clinical Psychology*, 32, 281-293.
- Barlow, J. (1999). *Systematic review of the effectiveness of parent-training programmes in improving behaviour problems in children aged 3-10 years* (2nd Ed.). Health Services Research Unit, University of Oxford.
- Barlow, J., Coren, E. (2004). Parent-training programmes for improving maternal psychosocial health (Cochrane Review). In *The Cochrane Library*, Issue 3. Chichester, UK: John Wiley.
- Barlow, J., Coren, E., & Stewart-Brown, S. (2001). *Systematic Review of the Effectiveness of Parenting Programmes in Improving Maternal Psychosocial Health*. Health Services Research Unit, University of Oxford.
- Barnett WS. Benefit-cost analysis of preschool education: findings from a 25-year follow-up. *American Journal of Orthopsychiatry* 1993; 63(4): 500-508.
- Barry, M.M. (2001). Promoting positive mental health: Theoretical frameworks for practice. *International Journal of Mental Health Promotion*, 3(1), 25-34.
- Barry, M.M. (2002). Challenges and opportunities in strengthening the evidence base for mental health promotion. *Promotion & Education*, 9(2), 44-48.
- Barry, M.M. (2003). Designing an evaluation framework for community mental health promotion. *Journal of Mental Health Promotion*, 2(4), 26-36.
- Barry, M., Domitrovich, C. & Lara, M.A. (2005). The implementation of mental health promotion programmes. *Promotion & Education*. Suppl. 2, 30-36.
- Bekker, M.H.J., Hens, G., & Nijssen, A. (2001). Werkstress en seks: Een landelijk evaluatie-onderzoek naar de effecten van stress-preventietrainingen bij de RIAGG's. *Gedrag en Gezondheid: Tijdschrift voor Psychologie en Gezondheid*, 29 (4), 241-258.
- Brown, C.H., Berndt, D., Brinales, J., Zong, X., & Bhagwat, D. (2000). Evaluating the evidence of effectiveness for preventive interventions: Using a registry system to influence policy through science. *Addictive Behaviours*, 25, 955-964.
- Brown, J.S.L., & Cochrane, R. (1999). A comparison of people who are referred to a psychology service and those who self-refer to large-scale stress workshops open to the general public. *Journal of Mental Health*, 8(3), 297-306.
- Brown, H., & Strugeon, S. (in press). Chapter 10: Healthy start of life and reducing early risks. In C. Hosman, E. Jané-Llopis, & S. Saxena (Eds). *Prevention of Mental Disorders: Effective Strategies and Policy Options*. Oxford: Oxford University Press.
- Brugha, T.S., Wheatley, S., Taub, N.A., Curverwell, A., Friedman, T., Kirwan, P., Jones, D.R., & Shapiro, D.A. (2000). Pragmatic randomized trial of antenatal intervention to prevent post-natal depression by reducing psychosocial risk factors. *Psychology Medicine*, 30(6), 1273-1281.
- Caplan, R. D., Vinokur, A. D., Price, R. H., & van Ryn, M. (1989). Job seeking, reemployment, and mental health: A randomized field experiment in coping with job loss. *Journal of Applied Psychology*, 74, 5, 759-769.
- Cardemil, E.V., Reivich, K.J., & Seligman, M.E.P. (2002). The prevention of depressive symptoms in low-income middle school students. *Prevention and Treatment*, 5, np.
- Chaloupka, F.J., Hu, T., Warner, K.E., Jacobs, R., & Yurekli, A. (2000). The taxation of tobacco products. In P. Jha & F. Chaloupka (Eds.), *Tobacco control in developing countries* (pp. 237-272). Oxford: Oxford Medical Publications.
- Clarke, G.N., Hawkins, W., Murphy, M., Sheeber, L., Lewinsohn, P.M., & Seeley, J.R. (1995). Targeted prevention of unipolar depressive disorder in an at-risk sample of high-school adolescents: A randomized trial of a group cognitive intervention. *Journal of the American Academy of Child and Adolescent Psychiatry*, 34(3), 312-321.
- Clarke, G.N., Hornbrook, M., Lynch, F., Polen, M., Gale, J., Beardslee, W., O'Conner, E., & Seeley, J. (2001). A randomized trial of a group cognitive intervention for preventing depression in adolescent offspring of depressed parents. *American Medical Association*, 58, 1127-1134.
- Cohen, A. (2002). "Our lives were covered in darkness." The work of the National Literary Mission in Northern India. In A. Cohen, A. Kleinman, & B. Saraceno (Eds.), *World mental health casebook: Social and mental health programs in low-income countries* (pp. 153-190). New York, London, Dordrecht: Kluwer Academic/Plenum Publishers.
- Conduct Problems Prevention Research Group. (1992). A developmental and clinical model for the prevention of conduct disorders: The FAST Track Program. *Development and Psychopathology*, 4, 509-527.
- Cooper, P.J., Tomlinson, M., Swartz, L., Woolgar, M., Murray, L., & Molteno, C. (1999). Post-partum depression and the mother-infant relationship in a South African peri-urban settlement. *British Journal of Psychiatry*, 175, 554-558.
- Cooper, P.J., Landman, M., Tomlinson, M., Molteno, C., Swartz, L., & Murray, L. (2002). Impact of a mother-infant intervention in an indigent peri-urban South African context: Pilot study. *British Journal of Psychiatry*, 180, 76-81.
- Curran, J., Wishart, P., & Gingrich, J. (1999). *JOBS: A Manual for Teaching People Successful Job Search Strategies*. Michigan Prevention Research Center, Institute for Social Research, University of Michigan, Ann Arbor, MI.
- Dadds, M.R., Spence, S.H., Holland, D.E., Barrett, P.M., & Laurens, K.R. (1997). Prevention and early intervention for anxiety disorders: A controlled trial. *Journal of Consulting and Clinical Psychology*, 65, 627-635.
- Dadds, M.R., Holland, D., Barrett, P.M., & Laurens, K., & Spence, S. (1999). Early intervention and prevention of anxiety disorders in children: Results at 2-year follow-up. *Journal of Consulting and Clinical Psychology*, 67, 145-150.
- De Jesus, R. (2003). Youth Life Enrichment Program Basic Seminar: Evaluation Results. Carried out by the Philippine Mental Health Association, Education Information Service. Personal Communication, August 2003.
- Durlak, J.A., & Wells, A.M. (1997). Primary prevention mental health programs for children and adolescents: A meta-analytic review. *American Journal of Community Psychology*, 25(2), 115-151.
- Edwards J, McGorry PD. 2002. *Implementing Early Intervention in Psychosis: A guide to establishing early psychosis services*. London: Martin Dunitz
- Elgen, I., Sommerfelt, K., & Markestad, T. (2002). Population based, controlled study of behavioural problems and psychiatric disorders in low birthweight children at 11 years of age. *Archives of Disease in Childhood. Fetal and Neonatal Edition*, 87(2), 128-132.
- Elias, M.J., Gara, M.A., Schuyler, T.F., Branden-Muller, L.R., & Sayette, M.A. (1991). The promotion of social competence: Longitudinal study of a preventive school-based program. *American Journal of Orthopsychiatry*, 61, 409-417.
- Elliott, S.A., Leverton, T.J., Sanjack, M., Turner, H., Cowmeadow, P., Hopkins, J., & Bushnell, D. (2000). Promoting mental health after childbirth: A controlled trial of primary prevention of postnatal depression. *British Journal of Clinical Psychology*, 39(3), 223-241.
- Erickson, M.F. (1989). The STEEP Programme: Helping young families rise above at-risk. *Family Resource Coalition Report*, 3, 14-15.

## References

- Felner, R.D., & Adan, A.M. (1988). The school transitional project: An ecological intervention and evaluation. In R.H. Price, E.L. Cowen, R.P. Lorion & J. Ramos-McKay (Eds.), *14 Ounces of prevention: A casebook for practitioners*. Washington DC: American Psychological Association.
- Felner, R.D., Brand, S., Adan, A.M., & Mulhall, P.F. (1993). Restructuring the ecology of the school as an approach to prevention during school transitions: Longitudinal follow-ups and extensions of the School Transitional Environment Project (STEP). *Prevention in Human Services*, 10, 103-136.
- Fitzpatrick, P., Molloy, B., & Johnson, Z. (1997). Community Mothers Programme: Extension to the Travelling Community in Ireland. *Journal of Epidemiology and Community Health*, 51, 299-303.
- Friedli, L. (2000). From the margins to the mainstream: The public health potential of mental health promotion - or mental health promotion - what works?. In M.C. Murray & C.A. Reed (Eds.), *The promotion of mental health*. Volume 7. The Clifford Beers Foundation, Ashgate Publishing Limited.
- Frost, N., Johnston, L., Stein, M., & Wallis, L. (1996). *Negotiated Friendship: Home-Start and the Delivery of Family Support*. Leicester: Home-Start.
- Gelfand, D.M., Teti, D.M., Seifer, S.A., & Jameson, P.B. (1996). Helping mothers fight depression: Evaluation of a home-based intervention program for depressed mothers and their infants. *Journal of Clinical Child Psychology*, 25, 406-422.
- Gibbons, J. & Thorpe, S. (1989). Can voluntary support projects help vulnerable families? The work of Home-Start. *British Journal of Social Work*, 19, 189-202.
- Gillham, J.E., & Reivich, K.J. (1999). Prevention of depressive symptoms in school children: A research update. *Psychological Science*, 10, 461-462.
- Gillham, J., Reivich, K., Jaycox, L., & Seligman, M. (1995). Prevention of depressive symptoms in school children: Two year follow-up. *Psychological Science*, 6, 343-351.
- Gillham, J.E., Reivich, K.J., Shatté, A.J., & Seligman, M.E.P. (2000). *Prevention of depressive symptoms: A comparison of two school-based interventions*. Unpublished data.
- Gottfredson, D.C. (1990). Changing school structures to benefit high-risk youths. *Understanding troubled and troubling youth: Multidisciplinary perspectives*. Newbury Park, CA: Sage.
- Greenberg, M.T., Kusché, C., & Mihalic, S.F. (1998). Blueprints for violence prevention, Book ten: *Promoting Alternative Thinking Strategies (PATHS)*. Boulder, CO: Center for the Study and Prevention of Violence.
- Greenberg, M.T., Domitrovich, C., & Bumbarger, B. (2001). The prevention of mental disorders in school-aged children: Current state of the field. *Prevention and Treatment*, 4(1). Available: <http://journals.apa.org/prevention/volume4/pre0040001a.html>
- Hanrahan, M.H., Prinsen, B., & De Graaf, Y. (1997). Mothers Inform Mothers: an innovative child care and development programme in the Netherlands. In M.H. Hanrahan & B. Prinsen (Eds.), *Community health, community care, community support* (pp.107-117). Utrecht: NIZW.
- Harden, A., Rees, R., Shepherd, J., Brunton, G., Oliver, S., & Oakley, A. (2001). *Young people and mental health: A systematic review on barriers and facilitators*. England: EPPI-Centre. Available: <http://eppi.ioe.ac.uk>
- Hawkins, J.D., Arthur, M.W., & Olson, J.J. (1997). Community interventions to reduce risks and enhance protection against antisocial behavior. In D.M. Stoff, J. Breiling & J.D. Maser (Eds.), *Handbook of antisocial behavior* (pp. 365-374). New York: John Wiley.
- Hawkins, J.D., Catalano, R.F., & Arthur, M.W. (2002). Promoting science-based prevention in communities. *Addictive Behaviour*, 27(6), 951-976.
- Hayes, B.A., Muller, R., & Bradley, B.S. (2001). Perinatal depression: A randomized controlled trial of an antenatal education intervention for primiparas. *Birth*, 28(1), 28-35.
- Heaney, C. A., Price, R. H., & Rafferty, J. (1995a). The Caregiver Support Program: An intervention to increase employee coping resources & enhance mental health. In L. R. Murphy, J. J. Hurrell, & S. L. Sauter & G. P. Keita (Eds.), *Job stress interventions* (pp. 93-108). Washington, DC: American Psychological Association.
- Heaney, C. A., Price, R. H., & Rafferty, J. (1995b). Increasing coping resources at work: A field experiment to increase social support, improve work team functioning, and enhance employee mental health. *Journal of Organizational Behavior*, 16, 335-352.
- Hermanns, L., Van de Venne, L., & Leseman, P. (1997). *Home start geëvalueerd*. Amsterdam: SCO-Kohnstamm Instituut.
- Herrman, H., & Jané-Llopis, E. (2005). Mental health promotion in public health. *Promotion & Education*. Suppl. 2, 42-47.
- Hersey, J.C., Klihanoff, L.S., Lam, D.J., & Taylor, R.L. (1984). Promoting social support: The impact of California's "Friends Can Be Good Medicine" campaign. *Health Education Quarterly*, 11(3), 293-311.
- Home-Start International (2004). Available: [www.home-start-int.org](http://www.home-start-int.org)
- Hosman, C. & Jané-Llopis, E. (1999). Political challenges 2: Mental health. In *The Evidence of Health Promotion Effectiveness: Shaping Public Health in a New Europe*, Chapter 3, 29-41. International Union for Health Promotion and Education, IUHPE, Paris: Jouve Composition & Impression.
- Jané-Llopis, E., Hosman, C., Jenkins, R., & Anderson, P. (2003). Predictors of efficacy in depression prevention programmes. Meta-analysis. *British Journal of Psychiatry*, 183, 384-397.
- Jané-Llopis, E. & Barry, M. (2005). What makes mental health promotion effective? *Promotion & Education*. Suppl. 2, 47-54.
- Jané-Llopis, E., & Anderson, P. (in press). A policy framework for the promotion of mental health and the prevention of mental disorders. In M. Knapp, D. McDaid, E. Mossialos & G. Thornicroft (Eds.), *Mental health policy and practice across Europe*. Oxford: Open University Press.
- Jejeebhoy, S.J. (1998). Associations between wife beating and fetal and infant death: Impressions from a survey in rural India. *Studies in Family Planning*, 29(3), 300-308.
- Johnson, Z., Howell, F., & Molloy, B. (1993). Community mothers'programme: a randomised controlled trial of non-professional intervention in parenting. *British Medical Journal*, 306, 1449-1452.
- Johnson, Z., Molloy, B., Scallan, E., Fitzpatrick, P., Rooney, B., Keegan, T., & Byrne, P. (2000). Community Mothers Programme - Seven year follow-up of a randomised controlled trial of non-professional intervention in parenting. *Journal of Public Health Medicine*, 22(3), 337-342.
- Klingman, A., & Hochdorf, Z. (1993). Coping with distress and self harm: The impact of a primary prevention program among adolescents. *Journal of Adolescence*, 16, 121-140.
- Lehtinen V., Ozamiz A., Underwood, L., & Weiss, M.G. (2004). The intrinsic value of mental health. In H. Herrman, S. Saxena & R. Moodie (Eds.), *Promoting mental health: Concepts, emerging evidence, practice*. Geneva: World Health Organization. Available: [http://www.who.int/mental\\_health/evidence/en/promoting\\_mhh.pdf](http://www.who.int/mental_health/evidence/en/promoting_mhh.pdf)
- Lei Yu, D., & Seligman, M.E.P. (2002). Preventing depressive symptoms in Chinese children. *Prevention and Treatment*, 5, np.
- Lister-Sharp, D., Chapman, S., Stewart-Brown, S., & Sowden, A. (1999). Health promoting schools and health promotion in schools: Two systematic reviews. *Health Technology Assessment*, 3(22).
- McAuley, C., Knapp, M., Beecham, J., McCurry, N., & Sled, M. (2004). Joseph Rowntree Foundation. Available: <http://www.jrf.org.uk/bookshop/ebooks/1859352189.pdf>
- Mentality. (2003). Making it effective: A guide to evidence based mental health promotion. *Radical mentalities* [briefing paper 1]. London: Mentality. Available: <http://www.mentality.org.uk>
- Moodie, R. & Jenkins, R. (2005). "I'm from the government and you want me to invest in mental health promotion. Well why should I?" *Promotion & Education*. Suppl. 2, 37-41.
- Morrell, C.J., Spiby, H., Stewart, P., Walters, S., & Morgan, A. (2000). Costs and benefits of community postnatal support workers: A randomised controlled trial. *Health Technology Assessment*, 4(6), 1-100.
- Mracek P.J., & Haggerty, R.J. (Eds.). (1994). *Reducing risks of mental disorder: Frontiers for preventive intervention research*. Washington: National Academy Press.



## References

- Mulrow, C.D., Aguilar, C., Endicott, J.E., Tuley, M.R., Velez, R., Charlip, W.S., Rhodes, M.C., Hill, J.A., & DeNino, L.A. (1990). Quality-of-life changes and hearing impairment. A randomized trial. *Annals of Internal Medicine*, 113, 188-194.
- Muñoz, R.F., Glish, M., Soo-Hoo, T., & Robertson, J. (1982). The San Francisco mood survey project: Preliminary work toward the prevention of depression. *American Journal of Community Psychology*, 10(3), 317-329.
- Olds, D.L. (2002). Prenatal and infancy home visiting by nurses: From randomized trials to community replication. *Prevention Science*, 3(3), 153-172.
- Olds, D.L. et al., (1998). Long-term effects of nurse home visitation of children's criminal and antisocial behaviour: A 15-year follow-up of a randomized trial. *Journal of the American Medical Association*, 280(8), 1238-1244.
- Olweus, D. (1989). Bully/victim problems among schoolchildren: Basic facts and the effects of a school based intervention program. In K. Ruben & D. Hepler (Eds.), *The development and treatment of childhood aggression*. Hillsdale, NJ: Erlbaum.
- Orbach, I., & Bar-Joseph, H. (1993). The impact of a suicide prevention program for adolescents on suicidal tendencies, hopelessness, ego identity, and coping. *Suicide and Life Threatening Behaviour*, 23, 120-129.
- Ostaszewski, K., Bobrowski, K., Borucka, A., Okulicz-Kozaryn, K., & Pisarska, A. (2000). Ocena skuteczności programu wczesniej profilaktyki alkoholowej "Program Domowych Detektywów". *Alkoholizm i Narkomania*, 1/13, 83-103.
- Patel, V., & Jané-Llopis, E. (in press). Chapter 5: Poverty and disadvantaged groups. In C. Hosman, E. Jané-Llopis & S. Saxena (Eds.), *Prevention of Mental Disorders: Effective Strategies and Policy Options*. Oxford: Oxford University Press.
- Patel, V., Rodrigues, M., & DeSouza, N. (2002). Gender, poverty and postnatal depression: A study of mothers in Goa, India. *American Journal of Psychiatry*, 159(1), 43-47.
- Patton, G.C., Olsson, C.A., & Toumbourou, J. (2002). Adolescent mental health promotion: The evidence. In L. Rowling, G. Martin & L. Walker (Eds.), *Mental health promotion and young people: Concepts & practice*. Sydney: McGraw-Hill.
- Pentz, M.A., Mihalic, S.F., & Grotzinger, J.K. (1998). *Blueprints for violence prevention, Book 1: The Midwestern Prevention Project*. Boulder, CO: Center for the Study and Prevention of Violence.
- Powell, C., & Grantham-McGregor, S. (1989). Home visiting of varying frequency and child development. *Pediatrics*, 84(1), 157-164.
- Price, R., Van Ryn, M., & Vinokur, A. (1992). Impact of a preventive job search intervention on the likelihood of depression among the unemployed. *Journal of Health and Social Behaviour*, 33, 158-167.
- Price, R.H., & Vinokur, A.D. (1995). Supporting career transitions in a time of organizational downsizing: The Michigan JOBS Program. In M. London (Ed), *Employees, careers, and job creation: Developing growth-oriented human resource strategies and programs*. (pp.191-209). San Francisco, CA: Jossey-Bass.
- Price, R.H. (2003). Understanding and improving the mental health of populations. In J.S. House, R.L. Kahn, F.T. Juster, H. Schuman & E. Singer (Eds.), *Telescope on society: Survey research and social science at the University of Michigan and beyond*. Ann Arbor, MI: The University of Michigan Press.
- Price, R., & Kompier, M. (in press). Work stress and unemployment: Risks, mechanisms, and prevention. In C. Hosman, E. Jané-Llopis, & S. Saxena (Eds.), *Prevention of mental disorders: Effective interventions and policy options*. Oxford: Oxford University Press.
- Puura, K., Davis, H., Papadopoulou, K., Tsiantis, J., Ispanovic-Radojkovic, V., Rudic, N., Tamminen, T., Turunen, M., Dragonas, T., Paradisioutou, A., Vizakou, S., Roberts, R., Cox, A., Day, C. (2002). The European early promotion project: a new primary health care service to promote children's mental health. *Infant Mental Health*, 22(6), 606-624.
- Rahman, A., Mubbashar, M.H., Gater, R., & Goldberg, D. (1998) Randomised trial of impact of School Mental-Health Programme in rural Rawalpindi, Pakistan. *The Lancet*, 352, 1022-1025.
- Rajan, L., Turner, H. & Oakley, A. (1996). *A study of Home-Start. Unpublished report*. London: SSRU, Institute of Education.
- Reading, R. (2005). Young families under stress: outcome and cost of Home Start support. *Child: care, health and development*, 31 (1), 122.
- Reid, J.B., Eddy, J.M., Fetrow, R.A., & Stoolmiller, M. (1999). Description and immediate impacts of a preventive intervention for conduct problems. *American Journal of Community Psychology*, 27, 483-517.
- Sartorius, N. (1997). Fighting schizophrenia and its stigma. A new World Psychiatric Association educational programme. *British Journal of Psychiatry*, 170, 297.
- Schaufeli, W., & Kompier, M. (2001). Managing job stress in the Netherlands. *International Journal of Stress Management*, 8(1), 15-34.
- Schweinhart, L.J. (2000). The High/Scope Perry Preschool Study: A case study in random assignment. *Evaluation and Research in Education*, 14(3&4), 136-147.
- Schweinhart, L.J., & Weikart, D.P. (1998). High/Scope Perry Preschool Program effects at age twenty-seven. In J. Crane (Ed.), *Social programs that work* (pp. 148-162). New York: Russell Sage Foundation.
- Shinman, S. (1994). *Family Album*. Leicester: Home Start.
- Shure, M.B., & Healey, K.N. (1993). *Interpersonal problem solving and prevention in urban school children*. Paper presented at the American Psychological Association Annual Convention, Toronto.
- Shochet, I.M., Dadds, M.R., Holland, D., Whitefield, K., Harnett, P.H., & Osgarby, S.M. (2001). The efficacy of a universal school-based program to prevent adolescent depression. *Journal of Clinical Child Psychology*, 30(3), 303-315.
- Snow, W.H., Gilchrist, L., Schilling, R.F., Schinke, S.P., & Kelso, C. (1986). Preparing students for Junior High School. *Journal of Early Adolescence*, 6(2), 127-137.
- Sogaard, A.J., & Fonnebo, V. (1995) The Norwegian Mental Health Campaign in 1992, Part 2: Changes in Knowledge and Attitudes. *Health Education Research*, 10(3), 267-278.
- Thomson, H., Petticrew, M., & Morrison, D. (2001). Housing interventions and health - A systematic review. *British Medical Journal*, 323, 187-190.
- Tilford, S., Delaney, F., & Vogels, M. (1997). Effectiveness of mental health promotion interventions: A review. *Health promotion effectiveness reviews no. 4*. London: Health Education Authority.
- Tsiantis et al. (2000). Early mental health promotion in children through primary health care services: a multi-center implementation. *International Journal of Mental Health Promotion*, 2(3), 5-17.
- Tuthill, D.P., Stewart, J.H., Coles, E.C., Andrews, J., & Cartledge, P.H. (1999). Maternal cigarette smoking and pregnancy outcome. *Paediatrics and Perinatal Epidemiology*, 13, 245-253.
- United Nations Children's Fund (UNICEF). (2002). *The state of the world's children 2002*. New York: UNICEF. Available: <http://www.unicef.org/sowc02/pdf/sowc2002-eng-full.pdf>
- Van der Eyken, W. (1982). *Home-Start: A Four Year Evaluation*. Leicester: Home-Start.
- Van Doesum, K.T.M., Hosman, C.M.H., & Riksen Walraven, J.M. (2005). A Model Based Intervention for Depressed Mothers and Their Infants. *Infant Mental Health Journal*, 26(2), 157-176.
- VicHealth. (2002). *Rural partnerships in the promotion of health and wellbeing*. Victoria, Australia: VicHealth.
- Vinokur, A.D., Price, R.H., & Schul, Y. (1995). Impact of the JOBS intervention on unemployed workers varying in risk for depression. *American Journal of Community Psychology*, 23(1), 39-74.
- Vinokur, A., van Ryn, M., Gramlich, E., & Price, R. (1991). Long-term follow-up and benefit-cost analysis of the Jobs Program: A preventive intervention for the unemployed. *Journal of Applied Psychology*, 76(2), 213-219.
- Vuori, J., Silvenen, J., Vinokur, A., & Price, R. (2002). The Työhoi Job Search Program in Finland: Benefits for the unemployed with risk of depression or discouragement. *Journal of Occupational Health Psychology*, 7(1), 5-19.
- Vuori, J., & Silvenen, J. (in press). The benefits of a preventive job search program on re-employment and mental health at two-year follow-up. *Journal of Occupational and Organizational Psychology*.

## References

- Weare, K. (2000). Promoting mental, emotional and social health: A whole school approach. London: Routledge.
- Webster-Stratton, C. (1982). The long-term effects of a videotape modelling parent-training programme: Comparison of immediate and 1-year follow-up results. *Behaviour Therapy*, 13, 702-714.
- Webster-Stratton, C. (1990). Long-term follow-up of families with young conduct problem children: From preschool to grade school. *Journal of Clinical Child Psychology*, 19, 144-149.
- Webster-Stratton, C., Kolpacoff, M., & Hollinsworth, T. (1988). Self-administered videotape therapy for families with conduct-problem children: Comparison with two cost-effective treatments and a control group. *Journal of Consulting and Clinical Psychology*, 56, 558-566.
- Weissberg, R.P., Barton, H.A., & Shriver, T.P. (1997). The Social Competence Promotion Program for Young Adolescents. In T.P. Gullotta & G.W. Albee (Eds.), *Primary prevention works* (pp. 268-290). Thousand Oaks, CA, US: Sage Publications.
- Wells, J., Barlow, J., & Stewart-Brown, S. (2001). *A Systematic Review of Universal Approaches to Mental Health Promotion in Schools*. HSRU: University of Oxford.
- Windsor, R.A., Lowe, J.B., Perkins, L.L., Smith-Yoder, D., Artz, L., Crawford, M., Amburgy, K., & Boyd, N.R. (1993). Health education for pregnant smokers: Its behavioral impact and cost benefit. *American Journal of Public Health*, 83(2), 201-206.
- World Health Organization. (1986). *The Ottawa Charter for Health Promotion*. Geneva: World Health Organization.
- World Health Organization. (1999). Health 21: Health for all in the 21st century. *European Health for all series, No. 6*. Copenhagen: World Health Organization.
- World Health Organization. (2001). The World Health Report 2001. *Mental health: New understanding, new hope*. Geneva: World Health Organization.
- World Health Organization. (2002). *Prevention and Promotion in Mental Health*. Geneva: World Health Organization.
- World Health Organization. (2004a). *Promoting mental health: Concepts, emerging evidence, practice*. A report from the World Health Organization, Department of Mental Health and Substance Abuse; in collaboration with the Victorian Health Promotion Foundation and the University of Melbourne. Geneva: World Health Organization. Available: [http://www.who.int/mental\\_health/evidence/en/promoting\\_mhh.pdf](http://www.who.int/mental_health/evidence/en/promoting_mhh.pdf)
- World Health Organization. (2004b). *Prevention of mental disorders: Effective interventions and policy options*. A report of the World Health Organization Dept. of Mental Health and Substance Abuse; in collaboration with the Prevention Research Centre of the Universities of Nijmegen and Maastricht. Geneva: World Health Organization. Available: [http://www.who.int/mental\\_health/evidence/en/prevention\\_of\\_mental\\_disorders\\_sr.pdf](http://www.who.int/mental_health/evidence/en/prevention_of_mental_disorders_sr.pdf)
- Wu, Z., & Detels, R., Zhang, J., Li, V., & Li, J. (2002). Community based trial to prevent drug use amongst youth in Yunnan, China. *American Journal of Public Health*, 92, 1952-1957.
- Wynn, J., Cahill, H., Rowling, L., Holdsworth, R., & Carson, S. (1999). Mindmatters, a whole-school approach promoting mental health and well-being. *Australian and New Zealand Journal of Psychiatry*, 34(4), 594-601.
- Zlotnick, C., Johnson, S.L., Miller, I.W., Paerlstein, T., & Howard, M. (2001). Zlotnick, C., Johnson, S.L., Miller, I.W., Paerlstein, T., & Howard, M. (2001). Postpartum depression in women receiving public assistance: Pilot study of an interpersonal-therapy-oriented group intervention. *American Journal of Psychiatry*, 158(4), 638-640.