Compassionate Mind Training in Adolescents: A Pilot Study

Fiona McFarlane

D.Clin.Psy. thesis (Volume 1), 2008

University College London

ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106-1346

Table of Contents

Table of Contents

LIST OF TABLES

Part 1: Literature Review

Part 2: Empirical Paper

Acknowledgements

This piece of research involved joint working with schools and could not have taken place without the support of staff and pupils at School. I would like to thank the staff there for their encouragement and enthusiasm and in particular S T for her endless energy, ideas and organisation skills. I would also like to thank all the girls who participated in the project. I am grateful for the time they gave up to take part during a busy period in their lives and for their willingness to share their experiences of the groups and thoughts on how to develop it with me.

I have also been lucky enough to have some very supportive supervisors. My thanks go to Nancy Pistrang, Emma Silver and Deborah Lee for all the time, support and knowledge they have invested in this work. I also thank Pasco Fearon and Paul Gilbert for their work in developing the original project proposal.

Finally, none of this would ever have happened without the input of friends and family. I thank in particular Claire Salmond, Sue Ellis, Laurel Swift and Samantha Bottrill without whom this journey would have been a much more bumpy one.

PART 1: LITERATURE REVIEW

Preventing Depression: A Review of Indicated Interventions for At-Risk Children and Adolescents

Abstract

Depression is one of the most common psychological disorders and is associated with a wide range of impairments. Whilst prevalence rates in childhood are relatively low they increase in adolescence and a number of programmes have now been developed which aim to prevent depression in this age group. This paper reviews those programmes that target children and adolescents considered at risk by virtue of their already elevated depression symptoms. A range of such programmes exist; the majority are cognitive behavioural but a number also focus on interpersonal influences on depression. Whilst results provide evidence that such programmes can potentially reduce depression symptoms only a few studies have considered diagnoses and more research is needed in this area. Differences in who programmes target, their setting, length of interventions and in design make studies difficult to compare and further coherence will be needed in the field if a picture of 'what works for whom' is to emerge.

Depression has often been labelled the 'common cold' of psychiatry, a reference to the huge number of people who suffer from it at one or another time in their lives – in any year between four and five percent of the population will suffer from depression (Bebbington, 2004). Depression was the fourth leading cause of disease burden worldwide in 1990 and is predicted to become the second leading cause by 2020 (Murray & Lopez, 1997 cited in Merry, McDowell, Hetrick, Bir & Muller, 2004). It is the most common reason for inpatient psychiatric treatment (Gotlib & Hammen 1992, cited in Ingram, Odom & Mitchusson, 2004) and can be chronic with around 50% of individuals who have an episode of Major Depressive Disorder (MDD) going on to have further episodes (Gillham, Shatte & Freres, 2000).

Depression is associated with a wide range of impairments: predicting future suicide attempts, academic failure, interpersonal problems, unemployment, substance abuse and delinquency (Evans et al., 2005a). Given the personal and economic burden of depression and a general pattern of under-treatment in the population (Gillham et al.,1995) much interest in recent years has been focused on the question of whether depression can be prevented.

Somewhere between a third and a half of first episodes of depression occur in adolescence (Andrews, 2001; Kessler et al., 2005 cited in Sims, Nottelman, Koretz & Pearson, 2006) and most adults with recurrent MDD have their initial episode in adolescence (Pine, Cohen, Gurley, Brook & Ma, 1998). Depression in adolescence impacts both academic and social development and is associated with an increased risk of suicide. Whilst rates of depression in childhood are low, epidemiological studies indicate a point prevalence of depression in adolescence in the range of 3 –8%

(Birmaher et al., 1996) and that by the age of 18 as many as 25% of adolescents will have had at least one depressive episode (Lewinsohn, Hops, Roberts, Seeley & Andrews, 1993). Furthermore there is evidence that rates of MDD, particularly in young people, are rising (Evans et al., 2004). Depression in adolescence frequently goes undiagnosed with symptoms often being seen as 'the normal stress of adolescence' (Saluja et al., 2004) and 70 - 80% of depressed adolescents never receive any professional help (Gillham et al., 2000). Many authors, therefore, suggest that children and adolescents are an ideal group for prevention efforts to be directed at, and recent years have shown a growing body of research in this area.

Prevention

The 1994 Institute of Medicine Report (Mrazek, 1994, cited in Evans & Seligman, 2005) recommended that the term 'prevention' be limited to those interventions that occur before the onset of a clinically diagnosable disorder. This includes interventions that target those who exhibit early symptoms but do not meet diagnostic criteria for a disorder. Three categories of prevention are listed in the report. *Universal* prevention programmes target whole populations regardless of the risk status of particular individuals. *Selective* programmes target those considered to be at higher risk of developing a disorder due to the presence of particular risk factors such as parental depression or parental divorce. *Indicated* programmes target those considered to be at higher risk of developing the disorder because they already exhibit some symptoms, but do not yet meet full criteria for the disorder. Indicated and selective programmes have at times been grouped together under the broader term *targeted* programmes.

Offord, Kramer, Kazdin, Jensen and Harrington (1998) have reviewed the relative advantages and disadvantages of these different approaches to prevention. They argue that particular advantages of universal prevention strategies include their ability to reach large numbers and to avoid problems with labelling or stigmatisation. However, disadvantages include that they may be unnecessarily expensive since they target large numbers of people who would not have gone on to develop the disorder anyway, that they may have only small effects for individuals and that they may have their greatest effects for those at lowest risk. The advantages of targeted interventions include their potential efficiency in targeting those most at risk of developing the future disorder and the fact that the intervention can be tailored according to individual risk factors. However, disadvantages include the 'labelling and stigmatization' that those selected for the programme may feel, as well as possible difficulties in finding accurate and low cost screening procedures to identify who should be given the intervention. Offord et al. (1998) conclude that any coherent prevention system would need to include both types of approaches.

Reviews of depression prevention programmes

A number of reviews have examined the literature on depression prevention in children and adolescents. Table 1 presents a summary of their characteristics and how they differ from the present review.

Three meta-analytic reviews have looked at the effect sizes of both universal and targeted interventions (Horowitz & Garber, 2006; Merry, McDowell, Hetrick, Bir & Muller, 2004; Jane-Llopis, Hosman, Jenkins & Anderson, 2003). Overall they find that prevention programmes in children and adolescents are generally effective at preventing

depressive symptoms, and effect sizes tend to be small to moderate. Both Horowitz and Garber (2006) and Merry et al. (2004) found an advantage for targeted programmes, with these giving significantly greater effect sizes than universal programmes. In contrast Jane-Llopis et al. (2003) found no difference between the three intervention types, but this review included prevention studies from all age groups, not only children and adolescents.

Two qualitative reviews have also considered issues in prevention research that span both universal and targeted programmes (Sutton, 2007; Gillham et al. 2000). They highlight a number of areas which need to be addressed in future research including: methodological issues such as sample size and which outcome variables to measure; generalisability of findings and moderating variables such as gender and ethnicity; the need to identify mediating variables and whether booster sessions could increase longevity of effects.

Two reviews have focused specifically on universal interventions (Spence & Shortt, 2007; Essau, 2004) and two on selective interventions (Ingram et al., 2004; Gladstone & Beardslee 2000). In focusing on specific intervention types these reviews have been able to map both how far research has got in these fields and specific directions for future research in the area. To the author's knowledge, no recent review has focused purely on indicated programmes.

Aims of this review

This review aims to fill the gap described above, to look at the current state of the field for indicated interventions and to consider challenges for future research.

At any point in time somewhere between 10 –20% of adolescents report moderate to high levels of depressive symptoms (Gotlib, Lewinsohn & Seeley, 1995; Nolen-Hoeksema 1986, cited in Gillham et al., 2006). Elevated depression symptoms in adolescence are one of the biggest risk factors for the development of later MDD (Lewinsohn et al., 1994; Pine, Cohen, Cohen & Brook 1999; Fergusson, Horwood, Riddler & Beautrais, 2005). Moreover they are themselves associated with considerable impairment (Gotlib et al., 1995; Lewinsohn, Seeley, Solomon & Zeiss, 2000). Outcomes for adolescents with sub-threshold depression symptoms have been found to be broadly similar to those who meet criteria for an MDD diagnosis, with elevated symptoms being found to predict not only onset of psychiatric disorder, but also inpatient hospitalisation, impaired social and academic functioning, substance abuse and suicidal ideation (Fergusson et al., 2005; Lewinsohn et al., 2000).

As such, children and adolescents with elevated symptoms are a key target group for prevention efforts. Indeed the Institute of Medicine has called for an increase in indicated prevention research and NIMH has emphasised the need to improve identification of sub-syndromal mood disorders (Sims et al., 2006).

Method

Three methods were used to identify potentially relevant papers published up to the cut-off date of December 2007. Firstly reference lists from previous reviews in the area were used. Secondly a search was conducted using the Psychinfo database. Search terms used were 'prevention', 'preventive-medicine' and 'primary-mental-health-prevention' combined with 'depression'. Searches were limited to the child and

Table 1

Recent reviews of depression prevention programmes that include children and/or adolescents

Review	Age range	Type of interventions included (universal/selective/indicated)	Method of review	Main difference to current review
Essau, 2004	Child and adolescent	Universal	Narrative	Only discusses universal interventions
Gillham, 2000	All ages	All	Narrative	Limited to cognitive behavioural and family interventions
Gladstone & Beardslee, 2000	Child and adolescent	Selective	Narrative	Limited to interventions for children with a parent with an affective disorder
Horowitz & Garber, 2006	Child and adolescent	All	Meta-analysis	Emphasis on effect sizes, looks at all types of interventions
Ingram et al., 2004	Child and adolescent	Selective and indicated	Narrative	Less formal review, emphasis on selective approaches
Jane-Llopis et al., 2003	All ages	All	Meta-Analysis	Emphasis on effect sizes, very little discussion of indicated approaches
Merry et al., 2004	Child and adolescent	All	Meta-Analysis	Emphasis on effect sizes, looks at all types of interventions
Spence & Shortt, 2007	Child and adolescent	Universal	Systematic	Only discusses universal interventions
Sutton, 2007	Child and adolescent	All	Narrative	Discusses only a few examples of indicated interventions in depth.

adolescent age groups and to articles written in English. Finally the reference lists of relevant studies were searched for further papers.

Criteria for inclusion of a study in the review were as follows: 1) One of the stated goals involved preventing depression symptoms or depression diagnoses; 2) The study targeted an 'indicated' group i.e. selected participants on the basis of elevated depression symptoms (measured by, for example, self-report depression measures and self or other report of more specific depression symptoms); 3) The majority of participants in the study were 18 or younger; 4) The study was published in a peer-reviewed journal.

Results

In total 22 papers were identified that met criteria for inclusion. As some studies led to multiple publications this group of papers represented a total of 16 studies. Included studies and their core characteristics are listed in Table 2.

Whilst all the studies target children and adolescents with elevated depressive symptoms they vary on a number of characteristics. They target participants aged between five and 22 and use a number of different methods to identify those with elevated symptoms. They investigate a number of different interventions, including both cognitive-behavioural and other intervention types such as interpersonal therapy. The interventions took place in a range of settings including schools and clinics and were run by a variety of personnel including the researchers themselves, community clinicians and school staff. Designs varied and ranged from randomised controlled trials to pilot studies with no control group.

The studies are grouped and discussed below by intervention type in order to consider the range of approaches that have been used and to facilitate comparison between studies with similar characteristics. Cognitive behavioural interventions are considered first, then other interventions, and finally studies which compare different approaches are summarised.

Cognitive-Behavioural Interventions

Research in adults has shown Cognitive Behaviour Therapy (CBT) to be an effective treatment for depression (Roth & Fonagy, 1996) and whilst less research has been conducted in children and adolescents, some studies have indicated that CBT can also be effective with this age range (Moore & Carr 2000). The prevention programmes in this section draw on CBT principles and variously aim to: promote more positive thinking, develop positive attributional styles, increase engagement in pleasurable events and to teach problem solving skills and stress management strategies. As illustrated below different interventions vary in the emphasis they place on these different components.

In total nine studies investigated four different cognitive-behavioural programmes. Five studies investigated the Penn Resiliency Programme, two the Coping with Stress Course, one the Preventing Anxiety and Depression in Youth programme, and one a nurse led coping skills group. The details of these are discussed below.

Penn Resiliency Programme (PRP)

The PRP is the most widely investigated indicated intervention for preventing depression. A variety of studies look at both its efficacy and effectiveness as well as

considering its adaptation to other cultural groups. A number of the studies have also looked at mediating variables in order to consider the programme's mechanism of change.

The most widely used version of PRP is a twelve-session programme designed for ten to thirteen year olds. It contains cognitive, problem-solving and more general stress management components. The 'cognitive' component includes: the relationship between thoughts and feelings; challenging negative thoughts and generating alternatives; explanatory style training and ways to cope when pessimistic attributions or thoughts are accurate and cannot be challenged. The 'problem-solving' component covers six stages of problem solving: goal setting; perspective taking; information gathering; generating alternatives for action; decision-making and self-instruction. More general stress management components focus on ways of coping with family conflict and other stressors, including de-catastrophising about potential outcomes of a problem, ways of distancing oneself from highly stressful situations, distraction techniques, relaxation techniques and seeking social support.

The initial study of PRP (Jaycox, Reivich, Gillham & Seligman 1994; Gillham, Reivich, Jaycox & Seligman, 1995; Gillham & Reivich, 1999) aimed to prevent depressive symptoms in at risk ten to thirteen year-olds. Children were identified as at risk based on both elevated depression symptoms and the degree of parental conflict in the home. A total of 119 participants were randomly allocated to either the PRP or a control group and the intervention was delivered by pairs of doctoral students in clinical psychology.

Significantly lower self-report depression scores were found in the intervention groups at both post- intervention and six-month follow-up (Jaycox et al., 1994) and later at 12 month, 18 month and 24 month follow-up (Gillham et al., 1995). At all of these measurement points those in the intervention group also showed a significantly more positive explanatory style and this was found to mediate the effect on depression symptoms. At 30 and 36 month follow-ups, the difference between the two groups on depression was no longer significant (Gillham & Reivich 1999), indicating the initial positive effects of the programme faded over time and leading the authors to suggest the 'booster sessions' might be necessary to maintain the effect. In contrast the effect on explanatory style was maintained bringing into question whether or not it did really mediate for the programme's effect on depressive symptoms.

The majority of participants in the above study were Caucasian and its applicability to children from a broader range of cultures was unclear. In order to begin to investigate this Yu and Seligman (2002) tested PRP with a cohort of Chinese children. As above at-risk children were identified on the basis of both depressive symptoms and family conflict. In all 220 children were randomised to intervention or control conditions. The groups took place on Saturdays and in contrast to the previous study were run by teachers rather than members of the research team. In order to be culturally sensitive the intervention was adapted slightly with assertiveness training taking into account the importance of respect (particularly for elders) and conformity in Chinese culture.

Results of the study were similar to those found by Jaycox et al. (1994). There was a significant reduction in depression symptoms for the intervention group compared to

the control group and this effect was maintained at six month follow-up. Individuals in the intervention group were also significantly more optimistic in terms of explanatory style and this was shown to mediate the effect on depressive symptoms.

Roberts, Kane, Thompson, Bishop, Matthews and Hart (2003; 2004) also tested the effectiveness of PRP as run by school staff, this time with a cohort of 11 –13 year olds from rural Australian schools. Those with the highest depressive symptoms in each class were invited to take part. Schools were randomly allocated to either intervention or control conditions and the intervention groups were run by school psychologists and nurses.

The study found no effects on depression for the intervention groups compared to the control groups at post measures or at six, 18 or 30-month follow-up. They did however find an effect for anxiety which was still evident at the 30-month follow-up. The intervention group also showed significantly more optimistic explanatory style at post-intervention but this was not maintained at any of the follow-up periods.

In selecting the thirteen children with the top CDI scores in each class, this study could be argued to have targeted a group with less depressive symptomotology than previous studies. Some classes had thirteen or less pupils in which case all were invited to take part, and a total of 61% of the screened sample were invited to take part in the next stage. Bearing this in mind, the authors analysed a subgroup of children with initially high depression scores; however, no effects were found for this group either.

Given the difference between these results and those of the previous studies, it is of note that depression symptoms in the control group decreased over the period of the study. From pre-intervention to six-month follow-up the mean CDI for the control group

dropped by three points. Changes of this size have been described elsewhere as clinically significant (Evans et al., 2005). The intervention group means also fell, in this case some four points on the CDI from pre-intervention to follow-up.

Gillham and colleagues (Gillham et al., 2006) piloted the addition of a parental component to the PRP. Children aged twelve to fourteen were selected to take part based on depressive and anxiety symptoms although due to low recruitment this represented some eighty percent of the screened sample. As well as intervention group children taking part in eight group sessions, parents were invited to take part in a six-session group of their own. This group both taught parents the same skills as their children, encouraging them to use them in their own lives and helped parents consider how they could model these skills for their children and encourage them to use them where appropriate.

A significant intervention effect was found for both depression and anxiety at six and twelve month follow-up but not immediately post-intervention. Parents attended on average sixty percent of sessions and the authors argue that their findings indicate that school based interventions which involve parents may prevent depression and anxiety symptoms in early adolescence. However, there was no comparison of the intervention with the parental component to the child-based intervention alone. Previous studies have shown PRP alone to be effective in reducing depression symptoms and maintaining the effect over a follow-up period, and the results of this study give no indication of whether the parental component increases the effectiveness of PRP.

The final indicated prevention study using PRP investigated its use in the primary care setting (Gillham et al., 2006 b.). A total of 271 eleven and twelve year-olds with

depression symptoms above the 50th percentile were invited to take part in the study. The intervention took place at the local health clinic and was run by highly experienced clinic workers. As well as self-report measures the HMO's computerised database was used to collect information on those who had been diagnosed with depressive, anxiety or adjustment disorders over the two years following the study.

The authors analysed the results by gender and found that the intervention significantly improved explanatory style and reduced depressive symptoms for girls but not boys. No difference was found in rates of depression diagnoses for intervention versus control subjects. However, when a sub-sample of those with initially high depressive symptoms was analysed, and diagnoses for depressive, anxiety and adjustment disorders were grouped together, there was an overall prevention effect, with the intervention group receiving significantly fewer diagnoses than the control group. Given the under diagnosis of depression in young people (Saluja et al., 2004) the HMO database is likely to have significantly underestimated the number of cases reaching diagnostic criteria and this may have affected results. The gender effect found in this study was not evident in previous PRP investigations and the reasons for it are not yet clear. Previous reviews have noted gender effects in a number of studies but as of yet no clear pattern has emerged as to either their direction or why they are evident in some studies but not others (Gillham et al., 2000; Horowitz & Garber, 2006).

Overall, studies using the PRP have had positive results with evidence of maintenance of effects at follow-up, although some studies have found no effect. It has been trialed with different ethnic groups and with both members of research teams and

community professionals running the groups. The addition of a parental component has also been piloted although the added benefit of this has yet to be established.

Coping with Stress Course (CWSC)

The CWSC is a 15-session intervention designed for high school students. Its predominant focus is on the relationship between thoughts and feelings and developing the skills to challenge negative thoughts and underlying beliefs. It also includes psychoeducation about depression and stress and briefly looks at problem solving.

Two studies have investigated this approach with indicated populations, one based in schools and one based in primary care health clinics. Both studies have shown both a reduction in depressive symptoms at post-intervention and a significantly lower rate of affective diagnoses over the following year for intervention groups.

In the school-based study (Clarke et al., 1995) 150 fourteen to sixteen year olds with elevated depression symptoms who did not currently meet criteria for an affective disorder were invited to take part. The intervention was delivered after school by school psychologists and counsellors.

At post-intervention the study found a significant advantage on depressive symptoms for those in intervention compared to control groups. However, this effect was no longer evident at 12-month follow-up. It also found significantly fewer diagnoses of either Major Depressive Disorder (MDD) or dysthymia (Dy) for the intervention group compared to the control group across the one year follow-up period, with 14.5% of intervention participants receiving a diagnosis compared to 25.7% of controls.

In the clinic based study (Clarke et al., 2001) 94 young people aged thirteen to eighteen who had at least one depressed parent, elevated depression symptoms, and who did not currently meet criteria for a diagnosis of an affective disorder were invited to take part and randomly assigned to control or intervention conditions. The intervention took place in the local health clinic and was delivered by a therapist trained in the approach.

A significant effect was found for self-report depressive symptoms. This effect was strongest at post-intervention and twelve month follow-up and seemed to fade somewhat by the 24-month follow-up. There were also significantly fewer cases of MDD or Dy in the intervention group throughout the 24-month follow-up, although again this effect was stronger at early follow-ups than at 24 months.

Preventing Anxiety and Depression in Youth (PANDY)

The PANDY Skills training group (Freidberg et al., 2003) is a ten-session programme that focuses on the relationship between thoughts and feelings and how to challenge negative thoughts. It focused on making the approach user-friendly, including cartoons, metaphors and video-vignettes (of children). Tokens and small prizes are also used to reinforce attendance, participation in tasks and homework compliance. Three meetings with parents to discuss their child's progress and any concerns are also scheduled.

A pilot study of the approach was conducted with eight children aged between eight and eleven years old with mild to moderate depressive or anxiety symptoms (Freidberg et al., 2003). The authors report a reduction in anxiety and depressive symptoms post-intervention, which was partly maintained at 6-month follow-up.

However there was no control group and no statistical analyses of the data were performed.

The authors also report on both parent and child perception of treatment, measured using a post-intervention questionnaire where different aspects of the treatment were rated using likert scales. Children rated the intervention as moderately fun and modestly helpful. Their favourite parts of the programme were receiving prizes, meeting other children and playing cognitive-behavioural board games. Parents reported the programme to be helpful particularly in terms of school worries, fears of criticism and fears of embarrassment. They were moderately satisfied with the outcome.

Nurse led Coping Skills Group

Lamb, Puskar, Sereika & Corcoran (1998) report on an eight-session nurse led coping skills group. The programme involves both didactic psychoeducation around common teen problems and more experiential learning around their own problems and ways of managing them. Full details of the content of the programme were not available, but it is clear that the link between thoughts and feelings, testing thoughts against reality, finding alternative ways of viewing situations and problem solving are all taught.

In this study 41 rural high school students aged between 14 and 19 with elevated depression symptoms were randomly allocated to intervention or control groups. Depressive symptoms in both control and intervention subjects decreased significantly over the intervention period, with a marginally significant greater decrease in the intervention group. When the group was analysed by gender significant effects of the intervention on depressive symptoms were found for females but not males. A significant increase in use of supportant coping styles was also found for the intervention

group and anecdotally participants reported using a wider range of coping strategies, however mediating effects of this variable were not investigated. No follow-up data was collected to test whether effects were maintained.

Other Interventions

Four studies have looked at other interventions. Each of these consider some of the interpersonal influences on depression. One is based on interpersonal therapy, another on social network theories, another on social learning theories and the final one combines cognitive behavioural and interpersonal approaches.

Interpersonal Psychotherapy –Adolescent Skills Training

Interpersonal therapy (IPT) for depression seeks to address the specific interpersonal factors which maintain the young person's symptoms. In doing so it aims to foster the development of supportive relationships, develop skills in co-operative problem solving and create a context for completing age appropriate developmental tasks. Several studies have shown Interpersonal therapy to be effective in the treatment of depression in adults and early studies indicate that it may also be an effective treatment for adolescents (Evans et al., 2005).

Young, Mufson & Davies (2006) developed a group based preventive version of IPT – Interpersonal Psychotherapy Adolescent Skills Training or IPT-AST. It aims to reduce social isolation, increase experiences of positive social interaction and increase positive resolution of interpersonal difficulties. The programme consists of two individual and eight group sessions. Group sessions include psychoeducation around depression and the relationship between feelings and interpersonal relationships as well

as building of interpersonal skills. In each session young people present a difficult interpersonal situation they have encountered and the group itself provides feedback and helps develop solutions and skills that are applicable to all members. An individual session at the start provides a space for young people to identify their particular areas of difficulty and thus a focus for their participation, whilst one at the end allows reflection on what they have learned and how they can further develop on any progress.

In a trial of the intervention 11 to 16 year olds with elevated depression symptoms and who did not meet criteria for any depressive or anxiety disorders, were invited to take part. A total of 41 pupils were randomised to either the IPT-AST group or treatment as usual, which in this case consisted of an average of four sessions with the school counsellor. The majority of participants were from a Hispanic population.

Results showed that at the end of the intervention those in the IPT-AST group had significantly fewer depressive symptoms than those in the control group and this was maintained at six month follow-up. Diagnosis of depressive disorders over the six-month follow-up period was also looked at. 3.7% of the IPT-AST group developed a depressive disorder compared to 28.6% of the group who received school counselling. This difference was not significant, perhaps reflecting a lack of power and the need for larger scale studies of this approach.

Personal Growth Class (PGC)

The PGC (Eggert, Thompson, Herting & Nicholas, 1995) was developed as an intervention to both reduce suicide risk and prevent onset of depression. Based on social network theories it assumes that risk and protective factors for suicide and poor mental health do not develop in isolation but 'emerge as a function of the individual within a

network of social relationships' (Eggert et al., 1995 p.278). The group aims to develop group based social support and help, as well as providing life skills training on areas such as self-esteem enhancement; decision making; anger, depression and stress management and interpersonal communications. It was not possible to obtain precise details of which skills are taught and how.

In a study of the intervention (Eggert et al., 1995; Thompson, Eggert & Herting, 2000) 106 youth deemed at risk of suicide agreed to take part in the project and were randomly assigned to treatment or assessment only conditions. Assessment consisted of a two-hour interview assessing the youth's suicide potential (Measurement of Adolescent Potential for Suicide – MAPS – Eggert, Thompson & Herting, 1994) as well as completing relevant questionnaires for the study. Participants in both groups were allocated a named 'case manager' and both the case manager and the parents/guardian of the young person were contacted after the MAPS interview to inform them of the youth's status and to offer advice regarding this.

Two versions of the intervention, one lasting one term and one lasting two terms, were trialled. The groups met daily and were facilitated by trained school personnel. Whilst both groups followed the outline given above, the longer group placed more emphasis on transferring both social support and the skills learned to contexts outside the group.

The authors found that depression, hopelessness, anger and suicide-risk behaviours were significantly reduced and self-esteem and ratings of social support were significantly increased for all three groups (including the assessment only control group). No differences on these variables were found between the groups. There was an

increase in personal control in the PGC groups only. They conclude that the thorough assessment condition was itself effective in improving depression and reducing suicide potential but hypothesise that the increase in personal control in the PGC groups will lead to more long term effects. No follow-up data are available to test this.

Wisconsin Early Intervention (WEI)

The WEI (King & Kirschenbaum, 1990) is based on social learning theories, which emphasise the social context in which learning takes place. This theory argues that much learning results from observation and modelling and emphasizes the importance of reward and punishment in learning. The WEI package contains two elements: parent/teacher consultation and social skills groups. The consultation component includes providing information about normal development; facilitating referrals; providing general guidance on strategies for managing behaviour; helping to develop specific intervention ideas and helping develop behavioural contracts. The group component included using modelling and reward of appropriate behaviour to teach social skills such as listening, empathy, assertiveness, self-control and social problem solving.

King and Kirschenbaum (1990) investigated the impact of the package for children from rural, low socio-economic communities. 135 five to ten year olds with identified problem behaviours, took part in the study. Whilst children were not selected on the basis of more common measures of depressive symptoms this study is included because symptoms of depression in young children are different to in adults and adolescents and include reactive mood, irritability, dysphoria and a high coincidence of conduct problems (Evans et al., 2005). Measures used to identify problem behaviours were

designed to pick up on many of these features. Children were randomly allocated to one of three groups: consultation, consultation and social skills group or treatment as usual. Consultation was provided by members of the research team, whilst social skills groups were run by specially trained members of the community. Groups of four to five children met weekly for 45-50 minutes for a total of 24 sessions.

Results showed a significant reduction in depressive symptoms for the consultation plus social skills group condition only. Parent and teacher ratings showed improvements in behaviours for both the consultation and consultation plus social skills groups. Given the lack of a 'social skills group only' condition it is unclear whether effects for depressive symptoms would be dependent on both components or whether the group would be effective as a stand alone intervention.

Adolescents Coping With Emotions

ACE is an eight-session intervention designed to prevent depression, which is based on both cognitive behavioural and interpersonal theories of depression (Kowalenko et al., 2002). Cognitive-behavioural components of the intervention include the link between thoughts and feelings, challenging negative thoughts and a step-by-step problem solving approach. Interpersonal components include teaching social skills, assertiveness, managing conflict and interpersonal negotiation.

Eighty-two 13 to 14 year old girls with elevated depression symptoms took part in a trial of the intervention (Kowalenko et al., 2005) and were allocated either to a group run by a school counsellor and a community mental health worker, or to a wait-list control condition. Results showed that compared to the control group the intervention group had significantly lower depressive symptoms and negative thoughts and

significantly better coping skills at post-intervention. These improvements were maintained at six-month follow-up.

In a previous pilot study the views of participants on the intervention were sought through a combination of focus groups and post intervention questionnaires (Kowalenko et al., 2002). Issues discussed included stigma, practicalities of the group, enjoyment and perceived usefulness of the skills taught and whether they felt the programme was worthwhile. Unfortunately full results of this have not been published, but their summary indicated that on the whole students did not feel stigmatised by their involvement in ACE and in fact some people not invited to take part were keen to join. Participants also reported the group had been useful, enabling them, for example, to be more open with their feelings; to feel better about themselves; to help themselves through difficult times and to sort out their problems more effectively. However, there is no data provided on which particular aspects of the programme the young people felt had supported them in making these changes.

Studies Comparing Different Interventions

Three studies involved comparison of different interventions. Two compared different kinds of indicated interventions, whilst the third compared the impact of universal, indicated or both approaches for at-risk students.

Role-play (social skills) vs. Cognitive Re-Structuring vs. Attention Placebo

Butler, Mietzitis, Friedman & Cole (1980) compared the effect of three interventions and a control condition on 10 to 12 year-olds manifesting depressive symptoms. The three interventions all involved ten weekly group sessions. In the role-

play condition children were taught social skills and problem solving through the medium of role-play. In the cognitive restructuring condition they were taught the relationship between thoughts and feelings and thought challenging techniques. In the attention placebo condition children were withdrawn from class in small groups and set group tasks relating to the school curriculum. In the control condition children remained in their usual school classes.

Results showed significant reductions in depressive symptoms in the role-play, cognitive restructuring and control conditions, but not for the attention placebo. Significant increases in self-esteem were found in the role-play and cognitive restructuring groups and improved locus of control in the role-play group only. When teachers were interviewed they reported the greatest amount of change in those who attended the role-play group and some improvement for those in the cognitive restructuring group. Some improvements were also reported for those in the control group, but they all came from the same school and had participated in a special set of externally facilitated workshops aimed at improving self-esteem, which may help explain the change in depressive symptoms for this group but not for the attention placebo group. The authors also note that children seemed to prefer the role play groups but it is not clear whether this was the opinion of group leaders or based on questions asked of the children themselves. No follow-up data were collected for any groups.

CBT vs. Supportive Expressive therapy

Stice, Burton, Bearman & Rohde (2006) compared five different interventions to a wait list control group. 225 youth with elevated depression symptoms were randomly assigned to: CBT group, supportive-expressive group, bibliotherapy, expressive writing

at the clinic, journaling or wait-list control. The authors hoped both to compare group CBT to another group intervention but also to consider whether CBT or expression of feelings using an individual 'self-help' approach might also be effective.

The CBT and supportive expressive groups each met for four weekly one-hour sessions. Groups were composed of six to ten participants and were facilitated by a trained clinical graduate student and an undergraduate co-facilitator. The content of the CBT group included psychoeducation around the impact of depression, the link between thoughts and feelings, ways of challenging negative thoughts, pleasurable activity scheduling and problem solving potential future hassles. The supportive expressive group focused on allowing the young people to identify and express their feelings, to discuss the impact of feelings on their functioning and to provide them with emotional support. This group did not contain any skills teaching.

Those in the bibliotherapy condition were given a copy of 'Feeling Good' by David Burns (1980), and encouraged to use it as a self-help resource. The book is based on a CBT approach to resolving depression and related problems. Those in the expressive writing condition attended the clinic on 3 occasions where they were asked to write about an 'extremely important emotional issue that has affected you' and informed that no-one would read what they had written. Those in the journaling condition were given similar instructions about writing, however instead of attending the lab they were asked to write at home at a frequency of their choosing.

Immediately post intervention the authors found a significant decrease in depressive symptoms in all groups, including the wait list controls. When compared, all five active groups showed significantly greater decreases to the wait list controls. Of

these only CBT and bibliotherapy showed any maintenance of effects at follow-up. When the different interventions were compared to each other CBT and the supportive expressive group were significantly better than journaling from pre to post intervention and bibliotherapy was significantly better than the supportive expressive group from pre-intervention to the six-month follow-up. Drop out rates varied between the groups, with the greatest drop out rates for CBT and journaling and the lowest for the supportive expressive group and expressive writing.

The authors conclude that there may be multiple ways to reduce depressive symptoms in high-risk adolescents. Whilst this study certainly gives initial evidence for that, it is limited by a number of factors. The low dosage of the interventions compared to previous studies may have limited their effectiveness, whilst a lack of longer-term follow-up data, limited cell sizes and no diagnostic interviews also make it difficult to examine true prevention effects.

Indicated vs. Universal Interventions

Sheffield et al. (2006) designed a large-scale study comparing universal, indicated and combined approaches to depression prevention. Four conditions consisted of: universal delivery of the Problem Solving for Life programme (PSFL); indicated delivery of the Adolescents Coping with Emotions course (ACE); a combined approach where PSFL was first delivered universally followed by indicated delivery of ACE and a control, assessment only, condition. A total of 2,479 students (521 who met 'indicated' criteria) aged thirteen to fifteen, took part in the study which was based in Australian schools. Outcome measures included both self-report depressive symptoms and depressive disorders as measured by diagnostic interview.

PSFL is an eight session cognitive behavioural intervention delivered by teachers to whole classes. It consists of two main components: cognitive restructuring, which includes the link between thoughts and feelings and ways of challenging negative thoughts, and problem-solving. ACE was delivered as described above (Kowalenko et al., 2002) and consisted of eight sessions run by school counsellors and mental health professionals.

Results of the study were somewhat surprising, with no differences being seen between any of the groups. For high symptom ('indicated') participants there was no difference in outcome for those in universal, indicated, combined or control conditions. For low symptom participants there was no difference in outcome for control or universal conditions. ACE has previously been found to be effective for indicated groups (see above) and PSFL has produced significant effects in universal groups and for high-risk students within these groups (e.g Spence, Sheffield & Donovan 2003). The reasons for the lack of effect in this study are not clear, but the reduction of symptoms in the control group as well as minimal training given to those delivering both programmes may be relevant. In fact, more detailed analysis showed no difference in improvement of negative thinking or negative problem solving for those receiving the interventions, suggesting that students did not develop the skills the interventions were designed to teach.

Data were also collected on satisfaction and stigma associated with the programmes (Rapee et al., 2006). Both students and facilitators rated the indicated programme as significantly more satisfying (moderate to large effect size) although whether this is attributable to the smaller groups or to the differences in content between

the programmes is not clear. Students rated the indicated programme as significantly more stigmatising although the effect size was small and overall ratings of stigma were very low.

Discussion

Overall, the studies reviewed here provide evidence that preventive interventions targeting young people with elevated depressive symptoms can potentially reduce depressive symptoms and limited but promising evidence that they can prevent mood disorders.

All sixteen studies analysed changes in depressive symptoms, the majority finding significant effects. Thirteen found intervention groups to be significantly better than treatment as usual, although two found effects only for girls and not boys (Gillham et al., 2006, Lamb et al., 1998). Three studies found no effects on depressive symptoms. Roberts et al. (2003, 2004) found no effect on depressive symptoms but a long lasting reduction in anxiety symptoms. Eggert et al. (1995) found significant reductions in all groups including the control group who received a very thorough assessment. Sheffield et al. (2006) found no significant reductions for either their indicated or universal programmes, despite both programmes having previous been shown to be efficacious.

Four studies looked at depression diagnoses and whether rates of these were reduced in intervention groups over a follow-up period. Three of these showed positive effects (Clarke et al., 1995; Clarke et al., 2001; Gillham et al., 2006) although one only for the highest symptom participants (Gillham et al., 2006). One showed no effects but nor did it show any effects on depressive symptoms (Sheffield et al., 2006). Monitoring

diagnosis is much more costly than monitoring symptoms and presumably this has limited the number of studies looking at this outcome variable. However, given that prevention is defined in terms of reducing the rate of onset of new cases of the disorder, more studies will need to consider this, particularly for interventions shown to be efficacious at reducing depressive symptoms.

In order for indicated programmes to be a cost-effective means of preventing depression, effects need to be maintained after the end of intervention. Studies vary in terms of the follow-up data provided. Five studies produced either no follow-up data or no statistical analysis of follow-up data. Eleven studies produced follow-up data at least 6 months after the end of the intervention. Of the nine studies which showed effects at post-intervention, seven showed maintenance of these at follow-up (Jaycox et al., 1994, Gillham et al., 2006a.,Gillham et al., 2006b., Clarke et al., 2001, Yu & Seligman 2002, Young et al., 2006 & Kowalenko et al., 2005), one showed only limited maintenance of effects at any point (Stice et al., 2006) and one showed no maintenance of effects (Clarke, 1995). The original study of the PRP (Jaycox et al., 1994; Gillham et al., 1995; Gillham et al., 1999) provides the longest period of follow-up and showed effects on depressive symptoms lasting as long as two years after the intervention but which were no longer significant at two and a half or three year follow-ups. Other studies have shown significant effects at twelve or six month follow-ups but it is yet unclear whether these effects are longer lasting.

Future studies of efficacious interventions will need to give further consideration to measuring the longevity of effects. Previous reviews have highlighted the possibility

of 'booster sessions' to increase the period over which effects are maintained but there has not yet been any study of these in the indicated field.

Overall, despite the promising picture, there is clearly considerable variety in the results of studies to date. The studies included here cover a great breadth and this may go some way to explaining the variability in outcome. Differences between studies include the age group targeted, the setting of the intervention, the content of the intervention and the screening process used to identify potential participants. These variations are relevant both in terms of the generalisability of findings and the potential to compare between studies and will be considered in more depth below.

Setting and Recruitment

Twelve of the sixteen studies were based in schools and four took place in clinic settings. Recruitment for the majority of studies involved obtaining consent at two time points: for the screening stage and then, for those who met relevant criteria, for the intervention stage. Not all studies reported take-up rates at both these time points, but where available they vary widely (see Table 2). Consent rates for the screening stage ranged between 14 and 99 percent and consent rate for the interventions between 47 and 98 percent.

Given that the efficiency of indicated interventions depends on a cost-effective and accurate screening process (Offord et al., 1998) uptake is crucial. Four studies had consent rates for screening process of less than twenty percent and only three had rates greater than 75%. We have no comparative information of those who provide consent at this point versus those that do not and it is possible that those with higher symptoms are more likely to come forward. However, with opt-in rates as low as twenty percent

programmes are likely to reach only a small proportion of the at-risk individuals they are targeting.

The reasons for the variety in take-up rates is not clear. It is of note that the two clinic based studies which report take-up rates have particularly low rates of consent to screening. This may be a result of clinic attendance being less convenient than school-based interventions or because attending a clinic may be perceived as more labelling. Two after-school programmes also have consent to screening rates of less than 20%, perhaps because after-school is a less convenient time. Some studies (Gillham et al., 2006, Clarke et al., 1995 & Young et al., 2006) have collected data on reasons for not participating, although this has largely been for the intervention stage. Scheduling conflicts were highlighted by all three studies, and this would be in fitting with generally lower rates of consent for after school programmes than for those during school lesson time. However, two of the after school programmes had extremely high opt-in rates and general disinterest was cited as the most common reason for non-participation by Young et al. (2006).

There are many unanswered questions as to how interventions can reach more young people. Future studies should report data on take-up rates and where possible obtain reasons for non participation. Focus groups with young people and parents may provide another means of gathering information on how to increase the appeal of such programmes.

Screening Process

Once consent was obtained, a variety of means were used to identify participants considered 'at risk' by virtue of their depressive symptoms. Thirteen studies used self-

report measures, whilst three used either teacher report or a combination of self and other report. Teacher report of symptoms was more common in studies looking at the youngest age ranges where self-report might have been more difficult. In terms of self-report measures nine studies used the Child Depression Inventory (CDI), four studies used the Centre for Epidemiological Studies –Depression Scale and one used the Reynolds Adolescent Depression Scale. Even where the same tool was used there was variety in terms of the 'cut-off' level above which individuals were invited to participate; for example cut-off scores used on the CDI ranged from the top fifty to top ten percent.

Further variation comes in terms of whether those who met clinical criteria for mood disorders were excluded from the study. Strictly speaking effects are only considered as prevention where participants neither meet criteria for a clinical disorder nor have previously suffered from one. Some studies (e.g. Young et al., 2006) set a maximum score on self-report measures above which individuals were referred for more intensive treatment. Others included a diagnostic interview as part of the screening process and excluded those who currently met clinical criteria for depression or dysthymia (e.g. Gillham et al., 2006; Clarke et al., 1995). Others invited all those scoring above the cut off score to take part. However, no study excluded participants with previous diagnoses.

This variety means that different studies have investigated very different populations making it hard to compare their results. When further characteristics of the target populations are considered, such as age, gender, socio-economic status and ethnicity, comparisons between studies are even harder. If a more coherent picture of the

field is to be obtained future studies will need to be able to be compared to each other and will need to use more similar criteria for participation.

Interventions

Given NICE guidelines for the treatment of depression in adults (National Institute for Health and Clinical Excellence, 2004), and early indications that CBT can be effective for adolescents with depression (Moore & Carr, 2000), it is perhaps not surprising that the majority of the prevention studies use cognitive behavioural interventions. Whilst the majority of these produced positive results there was variability in terms of both immediate outcomes and follow-up results.

Variability in results from cognitive behavioural prevention programmes has been noted in previous reviews and possible causes highlighted include methodological variability, differing 'dose-effects' with differing lengths of intervention, and differences in how the intervention is delivered including whether it is run by members of the research team or personnel from the relevant setting (see Sutton 2007; Spence & Shortt, 2007; Ingram et al., 2004).

In considering the interventions in more detail this review also highlights differing content as a potential source of variability. Whilst all the interventions reviewed here highlight the link between thoughts and feelings, different emphasis is placed on other cognitive behavioural components such as psychoeducation, cognitive restructuring, problem solving and relaxation and other stress management techniques. For example the Coping With Stress course and PANDY focus almost entirely on cognitive restructuring, whereas Lamb et al's intervention places more emphasis on problem solving and PRP covers many components but in less depth. In order to design

interventions that are as effective as possible it will be important to identify the relative importance of different components. Studies to date have not provided information regarding this. Comparisons of interventions, investigation of mediating variables and participant feedback on which skills they found relevant and which they have continued to use over follow-up periods may all provide useful information in this area.

Four studies highlighted the interpersonal context of the development of depression and targeted social skills and support networks. Results are promising, with the majority showing positive effects. Only Eggert et al. (1995) found no difference between intervention and control conditions but their control condition itself seemed to be an effective intervention. By and large these programmes have been less extensively studied than some of the cognitive behavioural interventions but the positive results indicate that more thorough investigation is merited.

Future research will need to focus both on establishing what the effective components of individual interventions are and comparing different programmes to one another.

Design Issues

Methodological considerations in prevention research have been more thoroughly considered elsewhere (e.g. Sutton, 2007; Spence & Shortt, 2007). However, the issue of comparison groups is worth highlighting here. The studies in this review varied greatly in terms of the types of comparison groups used, ranging from uncontrolled pilot studies to randomised trials with carefully designed control groups.

It is of note that in many of the studies symptoms in control participants reduced over the course of the intervention and that at times these changes were clinically significant. This makes it harder for interventions to show benefits above and beyond controls. In some studies (e.g. Eggert et al. 1995) the thorough assessment and signposting received by control participants may account for their improvement; in other studies, however, the reasons behind this are less clear. It may be that taking part in projects such as these raised awareness in schools of depression, or that identification of high-risk individuals changes the interaction of the school system or family with them in some way.

Similar issues arose when different interventions were compared to each other. Butler et al. (1980) attempted to compare cognitive behavioural and role-play (social skills) interventions but their sample size did not allow statistical comparison of results. Sheffield et al. (2005) compared universal and indicated interventions but found no change for either group compared to controls. Stice et al. (2006) showed positive effects for five differing interventions, but when the interventions were compared no condition was consistently better than the others. However, the dose of each intervention in this study was very low and this may have affected results.

Future researchers will need to think carefully about relevant comparison groups and should bear in mind that even minimal interventions may produce a reduction in symptoms. Sample sizes and intervention dosing will also need to be taken into account in order to maximise the chance of detecting effects that are present.

Stigma and User-Satisfaction

Low take-up rates of mental health services as well as the low opt-in rates of the studies reviewed here indicate the importance of considering how interventions can be made appealing to children, young people and their parents. In adolescence the views of one's peers assume greater importance and interventions which are seen as less stigmatising and which have gained peer approval are likely to be more appealing.

Despite this, very few studies report collecting participant feedback on the intervention. Friedberg et al's (2003) collection of data on participant satisfaction highlighted that the components they had anticipated being most appealing to the young people were not; such information could be used to adapt the programme accordingly. Participant's feedback in Kowalenko et al.'s (2005) and Rapee et al.'s (2006) studies suggest that while participants do report some level of feeling stigmatised this is not nearly as great as has been hypothesised. This indicates that we may need to think more broadly than just stigma to understand why young people do not opt into programmes.

Clearly, participants are a valuable source of information on how interventions might be best designed and marketed to maximise their effectiveness and their appeal, and their feedback has been underused to date. Future research would do well to capitalise on this resource.

Developmental Perspectives

The studies in this review consider depression prevention across a wide age range – from as young as five to eighteen and over. Cognitive, emotional and social development over this period is vast and it is extremely unlikely that the same

interventions will be effective for young children as for late adolescents without, at the very least, significant adaptations.

The majority of the studies included here looked at children over the age of ten years. This fits with evidence that incidence of depression in pre-pubescent children is low (Carr, 2006). At this stage the evidence does not provide a clear pattern of certain approaches working for particular ages. Indeed, some studies applied the same intervention to a wide age-range (King & Kirschenbaum, 1990; Yu & Seligman, 2002; Young et al. 2006) and whilst one can assume a certain amount of adjustment for age must have been made, no details of this, nor of the responses of different age groups to the programmes, are reported.

Some patterns in the data are of note, however. Several of the more frequently studied interventions target differing age ranges and it is possible to consider their content in light of this. CSWC has been used with young people aged thirteen and above, whereas the PRP has primarily targeted children aged between ten and thirteen. The CWSC focuses not only on negative thoughts, but on the beliefs that lie behind these thoughts. There is debate as to when such beliefs develop, but research suggests that their role in depression is minimal in childhood and gradually grows through adolescence (Evans et al., 2005). Whilst the PRP also looks at challenging negative thoughts it does not emphasise the beliefs behind these and it has a much greater focus on teaching skills for managing stressful events. This is in keeping with evidence that negative events rather than beliefs drive depression in younger children (Evans et al., 2005). The PGC (Eggert et al., 1995) targets young people aged 14 to 18. Its focus on peer support fits with this developmental stage and may have been less relevant to

younger children who spend less time with peers and for whom peer opinions are less important than for adolescents.

Very few studies consider the family context of participants and few interventions involved parents at more than a minimal level. Both King and Kirschenbaum (1990) and Eggert et al. (1995) offered advice to parents who requested it and Friedberg et al. (2003) included review sessions with parents in their intervention. In all of these cases, however, the focus was on keeping parents informed and managing current symptoms of the young people rather than on reducing family risk factors. Based on evidence that children learn interpretive and coping styles from their parents, Gillham et al. (2006) trialled a parallel parent intervention to the PRP. Whilst it is not yet clear whether this confers additional benefit to the PRP alone, its success as a pilot merits further study.

Perhaps the lack of consideration of family context has been a result of the definition of risk for indicated programmes being located in the individual. Furthermore, most interventions have been developed from adult treatment approaches to depression where less attention is paid to family context. The reasons for increased depressive symptoms in children and adolescents, however, are likely to be multi-fold and to include risk factors operating at the family level such as expressed emotion. Many selective studies have included family components (e.g. Rotheram-Borus, Lee, Gwadz & Draimin, 2001; Sandler et al 2003; Beardslee et al., 1997 & Wolchik et al., 1993). This is in keeping with the fact that the risk factors used to identify participants in this area have included family ones such as parental ill health or mental health, recent parental separation and parental death. Many of these programmes have proved efficacious and some of their principles may prove applicable to indicated groups.

Future research, then, will need to identify which interventions are most effective at which age group and whether programmes including other family members might have larger or longer-lasting effects.

Conclusions

This review highlights a promising picture for indicated prevention programmes. A number of different interventions have shown a reduction in depressive symptomotology maintained at six-month follow-up or beyond. A few studies have also shown a prevention effect in terms of reduced rates of onset of mood disorders in the twelve months following intervention. Whilst a large number of these studies have used approaches based on cognitive-behavioural techniques, a number of other approaches looking at more social factors have also been successful and it seems that future research should continue to look at a broad range of different programmes.

The field is still young, and at present the comparative efficacy of different interventions and the relative importance of different components within interventions is not clear. The differing target groups in different studies, in terms of age, gender, ethnicity and level of symptomotology amongst others, makes comparisons between studies difficult and future research in the field will need to consider this. In time a picture of 'what works for whom' will be needed to maximise the impact of any mass depression prevention programmes of the future. Future research will also need to consider the take-up rates of interventions and consider how programmes can reach a wider audience.

Table 2

Description of studies included in the review

Study	Intervention used	Age range (and n)	Selection of Participants	Design (comparison groups & length of follow up)	Location	Take-up rate	Outcome measures	Results (depression only)
Cognitive Behavioural Studies								
Clarke et al 1995	CWSC	14-16 (150)	Depression scores (CES-D>23)	Intervention vs. usual care. 12-month follow-up.	School – after hours	99% to screen 47% to intervention	Depressive symptoms, depression diagnosis	Reduced depressive symptoms and diagnoses
Clarke et al 2001	CWSC	13-18 (94)	Depressed parent plus depression scores (CES-D>23)	Intervention vs. usual care. 24-month follow-up.	Local clinic	16% to screen 76% to intervention	Depressive symptoms, depression diagnosis	Reduced depressive symptoms and diagnoses
Friedberg et al 2003	PANDY	8-11 (8)	Depression and anxiety symptoms	No comparison group. 6-month follow-up.	Local clinic	No data given	Depression & anxiety	No stats but anecdotal reductions in depressive symptoms
Gillham et al 2006 a.	PRP + parental compone nt	12-14 (44)	Combined depression and anxiety scores	Intervention vs. no treatment control. 12-month follow-up.	School – after hours	16% to screen 73% to intervention	Depressive symptoms, anxiety	Reduced depressive symptomotology at 6 & 12 month follow-up
Gillham et al 2006 b.	PRP	11-12 (271)	Depression scores (>50th percentile on CDI)	Intervention vs. usual care. 12-month follow-up.	Local clinic	14% to screen 77% to intervention	Depressive symptoms, depression diagnosis, explanatory style	Reduced depressive symptoms for girls but not boys and psychiatric diagnoses for high symptom participants.

Jaycox et al 1994, Gillham et al 1995, Gillham et al 1999	PRP	10-13 (143)	Combined Z score for depression and family conflict. (z>0.5)	Intervention vs. waitlist & no treatment controls. 36month follow-up	School – after hours	19% to screen 94% to intervention	Depression symptoms, conduct, explanatory style	Reduced depressive symptomotology maintained to 24 months,
Lamb et al 1998	Nurse led course	14-19 (41)	Depressive symptoms (RADS 66+)	Intervention vs. no treatment control. No follow-up.	School – during lessons	No data for screen, 54% to intervention	Depressive symptoms, coping style	Reduction in depressive symptoms for girls only
Roberts et al 2003 & 2004	PRP	11-13 (189)	CDI score (top 13 per class)	Intervention vs. regular health care curriculum. 6-month follow-up	School – during lessons	51% to screen 93% to intervention	Depressive symptoms, anxiety, explanatory style & social skills	No effect on depressive symptoms
Yu & Seligman 2002	PRP	8-15 (220)	Combined Z score for depression and family conflict. (top 25%)	Intervention vs. no treatment control. 6-month follow-up.	School - Saturdays	99% to screen, 63% to intervention	Depressive symptoms, explanatory style	Reduced depressive symptomotology maintained at 6 month follow-up.
Other interventions								
Eggert et al 1995, Thompson et al 2000	PGC	14 – 18 (106)	Suicide risk	1 term intervention vs. 2 term interventions vs. no treatment controls. No follow-up	School – during lessons	No data for screen, 96% to intervention	Depressive symptoms, self-esteem, self control	Reduction in depressive symptoms for all groups including controls.

King & Kirschenbaum 1990	WEI	5-10 (135)	Problem behaviours (top 25% AML or by teacher judgement)	Consultation and group (full services vs. consultation only vs. no services. No follow-up.	School – during lessons	No data	Depressive symptoms, problem behaviours	Children in full services group showed significant reduction in depressive symptoms
Kowalenko et al.	ACE	13-14 (82)	Depression scores (CDI>18)	Intervention vs. wait-list controls. 6-month follow-up.	School – during lessons	55% to screen, 80% to intervention	Depressive symptoms, coping, negative thoughts	Reduction in depressive symptoms maintained at 6 months
Young et al 2006	IPT-AST	11-16 (41)	Depression scores (CES-D 13 - 39)	Intervention vs. school counselling. 6-month follow-up.	School – after hours	No data for screen, 49% to intervention	Depressive symptoms, depression diagnosis	Reduction in depressive symptoms, effect on diagnoses not significant
Comparative studies								
Butler et al 1980	Role Play vs. Cognitive Restructuring vs. attention placebo	10-12 (56)	Depression scores (1.5 SD above mean) plus teacher identification	Role Play vs. Cognitive Restructuring vs. attention placebo vs. no treatment control. No follow-up.	School – during lessons	No data for screen, 98% to intervention	Depressive symptoms, self-esteem, teacher perception of child	Main effect for group on depressive symptoms
Sheffield et al 2006	Universal (PSFL) vs. Indicated (ACE) vs. Combined	13-15 (2,479, 521 indicated)	Depression scores (top 20% on sum of CDI & CES-D)	Universal intervention vs. indicated intervention vs. combined intervention vs. no intervention. 12-month follow-up.	School – during lessons	Approx 50% to screen and intervention	Depressive symptoms, depression diagnosis, negative thoughts, problem solving	No effects for any group

Stice et al 2006	CBT group, Supportive Expressive group, bibliotherapy, expressive writing, journaling	15-22 (225)	Depression scores (CES-D>19, BDI<29)	CBT group vs. Supportive Expressive group vs. bibliotherapy vs. expressive writing vs. journaling vs. wait-list controls 6-month follow-up.	Clinic	No detailed data, but low	Depressive symptoms,	All 5 interventions show reduction in depressive symptoms compared to controls

Notes:

ACE	Adolescents Coping with Emotions	PANDY	Preventing Anxiety and Depression in Youth
BDI	Beck Depression Inventory	PGC	Personal Growth Class
CDI	Children's Depression Inventory	PRP	Penn Resiliency Programme
CES-D	Centre for Epidemiological Studies- Depression Scale	PSFL	Problem Solving for Life
CWSC	Coping with Stress Course	RADS	Reynolds Adolescent Depression Scale
IPT-AST	Interpersonal Psychotherapy Adolescent Skills Training	WEI	Wisconsin Early Interventions

References

Andrews, G. (2001). Should depression be managed as a chronic disease? *British Medical Journal, 322,* 419-421.

Bebbington, P. (2004). The Classification and Epidemiology of Unipolar Depression. In M.Powers (Ed.), *Mood Disorders: A Handbook of Science and Practice* (pp. 3-20). Chichester: John Wiley & Sons Ltd.

Birmaher, B., Ryan, N. D., Williamson, D. E., Brent, D. A., Kaufman, J., Dahl, R. E. et al. (1996). Childhood and Adolescent Depression 1: A Review of The Past 10 Years. *Journal of the American Academy of Child and Adolescent Psychiatry, 35,* 1427-1439.

Burns, D. D. (1980). *Feeling good: the new mood therapy.* New York: William Morrow & Co.

Butler, L., Mietzitis, S., Friedman, R., & Cole, E. (1980). The Effect of Two School-Based Intervention Programs in Depressive Symptoms in Preadolescents. *American Educational Research Journal, 17,* 111-119.

Carr, A. (2006). Mood Problems. In A.Carr (Ed.), *The handbook of child and adolescent clinical psychology* (2nd ed., Hove: Routledge.

Clarke, G. N., Hawkins, W., Murphy, M., Sheeber, L. B., Lewinsohn, P. M., & Seeley, J. R. (1995). Targeted prevention of unipolar depressive disorder in an at-risk

sample of high school adolescents: a randomised trial of a group cognitive intervention. *Journal of the American Academy of Child and Adolescent Psychiatry, 34,* 312-321.

Clarke, G. N., Hornbrook, M., Lynch, F., Polen, M., Gale, J., Beardslee, W. et al. (2001). A randomised trial of a group cognitive intervention for preventing depression in adolescent offspring of depressed parents. *Archives of General Psychiatry, 58,* 1127-1134.

Eggert, L. L., Thompson, E. A., & Herting, J. R. (1994). A measure of adolescent potential for suicide (MAPS): development and preliminary findings. *Suicide and Life-Threatening Behavior, 24,* 359-381.

Eggert, L. L., Thompson, E. A., Herting, J. R., & Nicholas, L. J. (1995). Reducing suicide potential among high-risk youth: tests of a school-based prevention program. *Suicide and Life-Threatening Behavior, 25,* 276-296.

Essau, C. A. (2004). Primary prevention of depression. In D.J.A.Dozois & K. S. Dobson (Eds.), *The prevention of anxiety and depression. Theory, research and practice* (pp. 185-204). Washington, DC: American Psychological Association.

Evans, D. L., Beardslee, W., Bierderman, J., Brent, D. A., Charney, D., Coyle, J. et al. (2005). Defining depression and Bipolar Disorder. In L.E.Evans, E. B. Foa, H. Hendin, C. P. O'Brien, M. E. P. Seligman, & B. T. Walsh (Eds.), *Treating and preventing adolescent mental health disorders: What we know and what we don't know.* (pp. 3-28). New York: Oxford University Press.

Evans, D. L. & Seligman, M. E. P. (2005). Introduction. In D.L.Evans, E. B. Foa, R. E. Gur, H. Hendin, C. P. O'Brien, M. E. P. Seligman, & B. T. Walsh (Eds.), *Treating and preventing adolescent mental health disorders: what we know and what we don't know* (pp. xxv-xl). New York: Oxford University Press.

Evans, D. L., Beardslee, W., Bierderman, J., Brent, D. A., Charney, D., Coyle, J. et al. (2005). Treatment of Depression and Bipolar Disorder. In D.L.Evans, E. B. Foa, R. E. Gur, H. Hendin, C. P. O'Brien, M. E. P. Seligman, & B. T. Walsh (Eds.), *Treating and preventing adolescent mental health disorders: what we know and what we don't know* (pp. 29-54). New York: Oxford University Press.

Fergusson, D. M., Horwood, L. J., Riddler, E. M., & Beautrais, A. L. (2005). Subthreshold depression in adolescence and mental health outcomes in adulthood. *Archives of General Psychiatry, 62,* 66-72.

Friedberg, R. D., McClure, J. M., Wilding, L., Goldman, M. L., Long, M. P., Anderson, L. et al. (2003). A cognitive-behavioral skills training group for children experiencing anxious and depressive symptoms: a clinical report with accompanying descriptive data. *Journal of Contemporary Psychotherapy, 33,* 157-175.

Gillham, J. E., Reivich, K. J., Jaycox, L. H., & Seligman, M. E. P. (1995). Prevention of depressive symptoms in schoolchildren: Two-year follow-up. *Psychological Science, 6,* 343-351.

Gillham, J. E. & Reivich, K. J. (1999). Prevention of depressive symptoms in schoolchildren: A research update. *Psychological Science, 10,* 461-462.

Gillham, J. E., Shatte, A., & Freres, D. R. (2000). Preventing depression: A review of cognitive-behavioural and family interventions. *Applied and Preventive Psychology, 9,* 63-88.

Gillham, J. E., Reivich, K. J., Freres, D. R., Lascher, M., Litzinger, S., Shatte, A. et al. (2006). School-based prevention of depression and anxiety symptoms in early adolescence: a pilot of a parent intervention component. *School Psychology Quarterly, 21,* 323-348.

Gillham, J. E., Hamilton, J., Freres, D. R., Patton, K., & Gallop, R. (2006). Preventing depression among early adolescents in the primary care setting: A randomized controlled study of the penn resiliency program. *Journal of Abnormal Child Psychology, 34,* 203-219.

Gladstone, T. R. G. & Beardslee, W. R. (2000). The prevention of depression in at-risk adolescents: current and future directions. *Journal of Cognitive Psychotherapy, 14,* 9-23.

Gotlib, I. H. & Hammen, C. L. (1992). *Psychological aspects of depression: Toward a cognive-interpersonal integration.* Chichester: Wiley.

Gotlib, I. H., Lewinsohn, P. M., & Seeley, J. R. (1995). Symptoms versus a diagnosis of depression: differences in psychosocial functioning. *Journal of Consulting and Clinical Psychology, 63,* 90-100.

Horowitz, J. L. & Garber, J. (2006). The prevention of depressive symptoms in children and adolescents: a meta-analytic review. *Journal of Consulting and Clinical Psychology, 74,* 401-415.

Ingram, R. E., Odom, M., & Mitchusson, T. (2004). Secondary prevention of depression: risk, vulnerability and intervention. In D.J.A.Dozois & K. S. Dobson (Eds.), *The prevention of anxiety and depression. Theory, research and practice* (pp. 205-231). Washington, DC: American Psychological Association.

Jane-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.

Jaycox, L. H., Reivich, K. J., Gillham, J. E., & Seligman, M. E. P. (1994). Prevention of depressive symptoms in school children. *Behaviour Research and Therapy, 32,* 801-816.

Kessler, R. C., Wai, T. C., Demler, O., & Walters, E. E. (2005). Prevalence, severity and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Surevy Replication. *Archives of General Psychiatry, 62,* 617-627.

King, C. A. & Kirschenbaum, D. S. (1990). An experimental evaluation of a school-based program for children at risk: Wisconsin early intervention. *Journal of Community Psychology, 18,* 167-177.

Kowalenko, N., Wignall, A., Rapee, R., Simmons, J., Whitefield, K., & Stonehouse, R. (2002). The ACE program: Working with schools to promote emotional health and prevent depression. *Youth Studies Australia, 21,* 23-30.

Kowalenko, N., Rapee, R., Simmons, J., Wignall, A., Hoge, R., Whitefield, K. et al. (2005). Short-term effectiveness of a schoo-based early intervention program for adolescent depression. *Clincial Child Psychology and Psychiatry, 10,* 493-507.

Lamb, J. M., Puskar, K. R., Sereika, S. M., & Corcoran, M. (1998). School-based intervention to promote coping in rural teens. *The American Journal of Maternal/Child Nursing, 23,* 187-194.

Lewinsohn, P. M., Hops, H., Roberts, R. E., Seeley, J. R., & Andrews, J. A. (1993). Adolescent Psychopathology: I. Prevalence and incidence of depression and other DSM-III-R disroders in high school students. *Journal of Abnormal Psychology, 102,* 133-144.

Lewinsohn, P. M., Roberts, R. E., Seeley, J. R., Rohde, P., Gotlib, I. H., & Hops, H. (1994). Adolescent psychopathology: II. Psychosocial risk factors for depression. *Journal of Abnormal Psychology, 103,* 302-315.

Lewinsohn, P. M., Seeley, J. R., Solomon, A., & Zeiss, A. (2000). Clinical implications of 'subthreshold' depressive symptoms. *Journal of Abnormal Psychology, 109,* 345-351.

Merry, S., McDowell, H., Hetrick, S., Bir, J., & Muller, N. (2004). Psychological and/or educational interventions for the prevention of depression in children and adolescents (Review). *Cochrane Database of Systematic Reviews, 2004.*

Moore, M. & Carr, A. (2000). Depression and grief. In A.Carr (Ed.), *What works with children and adolescents? A critical review of psychological interventions with children, adolescents and their families* (pp. 203-232). London: Routledge.

Murray, C. & Lopez, A. (1996). *The Global Burden of Disease*. Cambridge MA: Harvard University Press.

NICE. (2004). Depression: management of depression in primary and secondary care. National Institute for Health and Clinical Excellence.

Nolen-Hoeksema, S., Girgus, J. S., & Seligman, M. E. P. (1986). Learned helplessness in children: A longitudinal study of depression, achievement and explantory style. *Journal of Personality and Social Psychology, 51,* 435-442.

Offord, D. R., Chmura Kraemer, H., Kazdin, A. E., Jensen, P. S., & Harrington, R. (1998). Lowering the burden of suffering from child psychiatric disorder: trade-offs among clinical, targeted and universal interventions. *Journal of the American Academy of Child and Adolescent Psychiatry, 37,* 686-694.

Pine, D. S., Cohen, E., Cohen, P., & Brook, J. (1999). Adolescent depressive symptoms as predictors of adult depression: moodiness or mood disorder? *American Journal of Psychiatry, 156,* 133-135.

Pine, D. S., Cohen, P., Gurely, D., Brook, J., & Ma, Y. (1998). The risk for early-adulthood anxiety and depressive disorders in adolescents with anxiety and depressive disorders. *Archives of General Psychiatry, 55,* 56-64.

Rapee, R., Wignall, A., Sheffield, J., Kowalenko, N., Davis, A., McLoone, J. et al. (2006). Adolescents' reactions to universal and indicated prevention programs for depression: perceived stigma and consumer satisfaction. *Prevention Science, 7,* 167-177.

Roberts, C., Kane, R., Thomson, H., Bishop, B., & Hart, B. (2003). The prevention of depressive symptoms in rural school children: a randomized controlled trial. *Journal of Consulting and Clinical Psychology, 71,* 622-628.

Roberts, C., Kane, R., Bishop, B., Matthews, H., & Thomson, H. (2004). The prevention of depressive symptoms in rural school children: A follow-up study. *International Journal of Mental Health Promotion, 6,* 4-16.

Roth, A. & Fonagy, P. (1996). *What works for whom? A critical review of psychotherapy research.* NewYork: The Guilford Press.

Rotheram-Borus, M. J., Lee, M. B., Gwadz, M., & Draimin, B. (2001). An Intervention for parents with AIDS and their adolescent children. *American Journal of Public Health, 91,* 1294-1302.

Saluja, G., Iachan, R., Scheidt, P. C., Overpeck, M. D., Sun, W., & Giedd, J. N. (2004). Prevalence of and risk factors for depressive symptoms among young adolescents. *Archives of Pediatric and Adolescent Medicine, 158,* 760-765.

Sandler, I. N., Ayers, T. S., Wolchik, S. A., Tein, J., Kwok, O., Haine, R. A. et al. (2003). The family bereavement program: efficacy evaluation of a theory-based prevention program for parentally bereaved children and adolescents. *Journal of Consulting and Clinical Psychology, 71,* 587-600.

Sheffield, J., Spence, S. H., Rapee, R., Kowalenko, N., Wignall, A., Davis, A. et al. (2006). Evaluation of universal, indicated and combined cognitive-behavioural approaches to the prevention of depression among adolescents. *Journal of Consulting and Clinical Psychology, 74,* 66-79.

Sims, B. E., Nottelman, E., Koretz, D., & Pearson, J. (2006). Prevention of Depression in Children and Adolescents. *American Journal of Preventive Medicine, 31,* S99-S103.

Spence, S. H., Sheffield, J. K., & Donovan, C. L. (2003). Preventing adolescent depression: an evaluation of the Problem Solving for Life Program. *Journal of Consulting and Clinical Psychology, 71,* 3-13.

Spence, S. H. & Shortt, A. L. (2007). Research Review: Can we justify the widespread dissemination of universal, school-based interventions for the prevention of depression among children and adolescents? *Journal of Child Psychology and Psychiatry, 48,* 526-542.

Stice, E., Burton, E., Bearman, S. K., & Rohde, P. (2006). Randomized trial of a brief depression prevention program: An elusive search for a psychosocial placebo control condition. *Behaviour Research and Therapy, 45,* 863-876.

Sutton, J. M. (2007). Prevention of depression in youth: a qualitative review and future suggestions. *Clinical Psychology Review, 27,* 552-571.

Thompson, E. A., Eggert, L. L., & Herting, J. R. (2000). Mediating effects of an indicated prevention program for reducing youth depression and suicide risk behaviors. *Suicide and Life-Threatening Behavior, 30,* 252-271.

Wolchik, S. A., West, S. G., Westover, S., Sandler, I. N., Martin, A., Lustig, J. et al. (1993). The children of divorce parenting intervention: Outcome evaluation of an empirically based program. *American Journal of Community Psychology, 21,* 293-331.

Young, J. F., Mufson, L., & Davies, M. (2006). Efficacy of Interpersonal Psychotherapy - Adolescent Skills Training: an indicated preventive intervention for depression. *Journal of Child Psychology and Psychiatry, 47,* 1254-1262.

Yu, D. L. & Seligman, M. E. P. (2002). Preventing depressive symptoms in Chinese children. *Prevention and Treatment, 5.*

PART TWO: EMPIRICAL PAPER

Compassionate Mind Training in Adolescents: A Pilot Study of a Depression Prevention Programme

Abstract

This study investigated the acceptability and effectiveness of group-based Compassionate Mind Training for depression prevention in adolescents. Participants were thirty-five girls, aged 14-15, who were identified by school staff as having low self-esteem. They were monitored over a baseline period before taking part in the intervention, and completed outcome measures post-intervention and at 3 month follow-up. For the whole sample social comparison and submissive behaviour improved over the intervention period but not over baseline. There were no improvements in depression, self-criticism or self-reassurance. For a sub-sample of participants with initially elevated depression symptoms, depression and self-criticism also improved over the intervention period; however, improvements were also evident over baseline. Qualitative data indicated that the intervention was acceptable to participants, that they found the concepts meaningful and highlighted changes in other domains such as anger and the ability to self-soothe. Overall results indicate that further research on CMT for adolescents is merited.

Depression is the fourth leading cause of disease burden worldwide and estimated to become the second leading cause by 2020 (Murray & Lopez, 1996). In any year 4-5% of the population will suffer from a depressive episode (Bebbington, 2004). It can be chronic with relatively high relapse and recurrence rates and causes significant personal suffering (Ingram, Odum & Mitchusson, 2004).

Whilst depression rates in children are relatively low, depression is one of the most common disorders in adolescents (Essau, 2004) with a lifetime prevalence of over 20% by the age of 18 (Hankin et al., 1998; Lewinsohn, Hops, Roberts, Seeley & Andrews, 1993). Approximately half of first episodes of depression occur in adolescence (Sims, Nottelman, Koretz & Pearson, 2006) and most adults with recurrent depression report their initial episode during adolescence (Pine, Cohen, Gurley, Brook & Ma, 1998). Depression in childhood and adolescence is associated with many negative outcomes including academic problems, impaired social relationships, smoking, high-risk sexual behaviour, physical health problems and a 30-fold increased risk of completed suicide (Horowitz & Garber 2006; Merry, McDowell, Hetrick, Bir & Muller, 2004). Furthermore, very few depressed adolescents receive professional help (Gillham, Shatte & Freres, 2000).

Given the high cost of depression and the low treatment rate, there has been much interest in recent years as to whether depression can be prevented. The fact that a high percentage of first episodes occur in adolescence means that children and adolescents have been seen as an ideal target group for such prevention efforts.

Prevention Programmes

Garber (2006) has emphasised that the development of prevention programmes should be based on research on the causal risk factors for depression. Multiple risk factors for the development of depression in childhood and adolescence have been identified; these have been divided into a number of key domains including gender, genetics, personality and temperament, sub-syndromal depression symptoms, cognitive vulnerability, stress and interpersonal relationships (Evans et al., 2005; Garber, 2006). Whilst some of these factors are linked to causal mechanisms (e.g. cognitive vulnerability, stress, interpersonal relationships), others identify populations who may be particularly at risk and whom prevention efforts might be targeted at (e.g. gender, sub-syndromal depression symptoms, genetics).

Prevention programmes to date have been designed to address a number of these risk factors. The majority are based on cognitive behavioural principles and seek to teach more adaptive thinking styles as well as problem solving skills so that negative life events are less likely to trigger depressive episodes. Examples of this kind of programme include the Penn Prevention Programme (Jaycox, Reivich, Gillham & Seligman, 1994) and the Coping with Stress Course (Clarke et al., 1995). Other programmes, such as Young, Mufson and Davies' (2006) Interpersonal Therapy – Adolescent Skills Training, have sought to address peer difficulties and social skill deficits through social skills training. Further programmes (e.g. Beardslee et al., 1993) have sought to address some of the negative family interactions that are thought to partly explain the increased vulnerability to depression associated with having a depressed parent.

Self –criticism and depression

Self-criticism, a cognitive vulnerability factor, is well established as being associated with a wide range of psychological problems including depression, but no prevention programmes have yet targeted this risk mechanism. It has been shown to predate disorders and elevate risk. Zuroff, Igreja and Mongrain's (1990) study of undergraduate women found that self-criticism predicted depression over a 12-month period. Brewin and Firth-Cozens (1997) found that self-criticism measured during the undergraduate period predicted depression two years later for both male and female medical students. Murphy et al (2002) found that self-disparagement and feelings of personal inadequacy were associated with lifetime risk of depression.

Furthermore, Zuroff and Koestner (1994) found that self-criticism was highly stable in females from age 12 to 31. In an extensive longitudinal study they found adverse consequences of self-criticism that were broader than just a vulnerability to depression. Self-criticism at age 12 predicted involvement in fewer high school activities, and, at age 31, fewer completed years of education, less satisfaction in being a parent and poorer personal and social adjustment. Reducing self-criticism might have a number of benefits then, including reducing the risk of future depressive episodes.

Gilbert and Irons (2005) suggest that self-critics not only have overdeveloped neurological pathways related to a hostile internal relationship, but also have less well developed pathways that trigger feelings of reassurance and soothing. The ability to self-reassure is not merely the opposite of self-criticism but a process in its own right. It has been shown to be negatively correlated with depression – that is, it acts as a protective factor against it (Gilbert, Clarke, Hempel, Miles & Irons, 2004; Irons &

Gilbert, 2006). Thus, if this skill could be developed it might also help prevent the development of depression.

Addressing Self-Criticism

There is increasing evidence that those with high self-criticism may respond less well to traditional cognitive therapy (Rector, Bagby, Segal, Joffe & Levitt, 2000) and that they are less often reassured by cognitive tasks or behavioural experiments (Lee, 2005). Whilst self-critics can see the logic of alternative thinking styles they report not feeling a difference – the shift in cognitive perspective fails to produce a congruent emotional shift (Lee, 2005). For example a self-critic may understand from an intellectual perspective that they are not inadequate but they still *feel* like they are not good enough. Thus prevention programmes based on traditional cognitive therapy are unlikely to help those who have high self-criticism and an alternative approach for this group is needed.

Compassionate Mind Training (CMT) was developed specifically for people with high self-criticism (Gilbert & Proctor, 2006). Its central aim is to change the characteristic or qualities of self-to-self relating (the way one speaks to oneself) from one based on criticism, to a more caring and supportive relationship based on compassion. CMT draws on a number of key theoretical ideas, including Social Mentality Theory and evidence from neuroscience of three key affect systems in the brain (Gilbert 2005). Gilbert sees CMT not as a therapy in its own right but as a transdiagnositic approach to deal with self-criticism and shame; as such it is nestled within other therapies, in particular Cognitive Behaviour Therapy and Dialectical Behaviour Therapy, and draws on many of the techniques used in these therapies.

According to this approach there are three neurologically identified affect systems of relevance to depression: the 'threat-focused' system (serotonin based) which when activated causes safety-seeking behaviour and a focus on threat; the 'incentive/resource-focused system' (dopamine based) which activates behaviours congruent with meeting needs (e.g. goals) and the 'affiliation-focused' system which when activated causes behavioural motivation to seek out support and leads to feelings of safeness, contentment and soothing (Gilbert, 2005a). Both internal and external stimuli act on these systems (Gilbert & Proctor, 2006).

Self-criticism is a threat to self-integrity and as such activates the threat system. This in turn dampens down the incentive/resource-focused and affiliation-focused systems via reciprocal inhibition. Chronic activation of this system leads to the negative spiral of withdrawal and low mood that leads to depression (possibly via serotonin depletion). In contrast self-reassurance activates the feelings of safeness and contentment associated with the affiliation focused system and encourages social interactions and the seeking out of mutual support. Activation of this system dampens down the threat-focused system and its inhibitory effect on behaviour. Thus, it appears that if a more caring and compassionate form of self-relating could be developed, depressive symptoms and the depressive spiral would be less likely to occur and clinical episodes of depression could potentially be prevented.

In this way CMT differs from more traditional forms of CBT – rather than trying to challenge self-critical thoughts directly it seeks to achieve an emotional shift in the relationship with the self that undermines self-criticism and negative emotions towards the self (Lee, 2005).

Key components of CMT

Clinical experience suggests that the steps needed to facilitate this emotional shift may vary for different individuals (Gilbert & Irons 2005). For some individuals, who have previously been able to self-soothe and whose affiliation system appears to be well developed but shut down by depression, psycho-education and a discussion of the rationale behind compassion towards the self may be sufficient to start this journey. For others, whose self- criticism is chronic, and who find self-soothing difficult and even frightening, a more step-by-step approach may be needed. Gilbert & Irons (2005) outline these steps.

Psycho-education around the three key affect systems and the way in which our own minds can act on them is used to develop an increased awareness of the personal suffering which self-criticism causes. Techniques such as a functional analysis of the historical reasons for developing such an approach to the self, or externalisation of an 'inner bully' may assist with this. A gradual development of feelings of warmth towards the self can then be embarked upon. Lee (2005) uses an imagery intervention known as the 'perfect nurturer' to facilitate this. The individual is encouraged to develop a personal image of a perfectly compassionate other and imagine being in their supportive and reassuring presence. Once the image is well developed clients can be encouraged to use it when they are feeling threatened and to imagine what their perfect nurturer would say in order to 'reframe' self-critical thoughts. Gilbert and Irons (2005) highlight the need to practice generating these feelings of warmth and empathy for the self in order that the relevant neurological circuits become well developed and more easily triggered.

Research on CMT

A small number of studies have examined the use of this innovative approach with adults and results to date are promising. Gilbert and Irons (2004) conducted a pilot study with eight self-identified self-critics recruited from a self-help group for depression. Over four sessions participants developed compassionate images and monitored self-critical thoughts and the ability to self-soothe. Whilst reductions in self-criticism were not significant, increases in ease of self-soothing were. Six of the eight participants described finding the intervention helpful and all felt that if they could continue to develop compassion for themselves this would have a significant impact on their lives. Lee (2005) reports on her use of CMT with individuals with post-traumatic stress disorder who had high self-criticism and a low capacity to self-soothe. In a series of case studies she describes how people were able to engage with the approach and how it had a significant effect on treatment, with depression scores greatly improving after CMT was introduced.

Gilbert and Proctor (2006) examined the effects of a twelve-session CMT group for six self-critical participants recruited from a day centre for people with chronic mental health difficulties. The intervention included psycho-education, examining the origins and functions of self-criticism and the development of compassionate images. Participants also shared their self-critical thoughts and ways of relating to themselves more compassionately. Results showed that over the course of the group there was a significant reduction in depression, anxiety, self-criticism and shame as well as significant increases in the ability to self soothe.

Current Study

The current study aimed to investigate whether CMT could be adapted for adolescents and whether a group-based intervention could help alleviate symptoms of depression. A ten-week CMT group intervention was designed, implemented and evaluated using a mixed-methods approach. Quantitative measures were used to investigate the effectiveness of the intervention with the expectation that the intervention would lead to reductions in self-criticism, depressive symptomotology and submissive behaviour, and increases in self-reassurance, self-esteem and social-comparison. Qualitative data was used to examine the acceptability of the approach to this age group, to investigate which aspects participants found more or less helpful and to gain detailed descriptions of any changes they reported.

Method

Design

As can be seen in Figure 1, participants completed a series of self-report measures at four time points: 10 weeks prior to the intervention (Time 1), at the start of the intervention (Time 2), at the end of the intervention (Time 3) and three months after completion of the intervention (Time 4). At the end of the intervention some participants also took part in semi-structured interviews designed to find out more about their experiences of the group.

A within-subjects, delayed-treatment design was used to investigate the impact of the CMT intervention. The study took place in two waves. Participants in the first wave were recruited at the beginning of the spring term 2007, those in the second wave

were recruited at the end of the summer term 2008. Figure 1 shows the time sequence of each wave.

Ethics

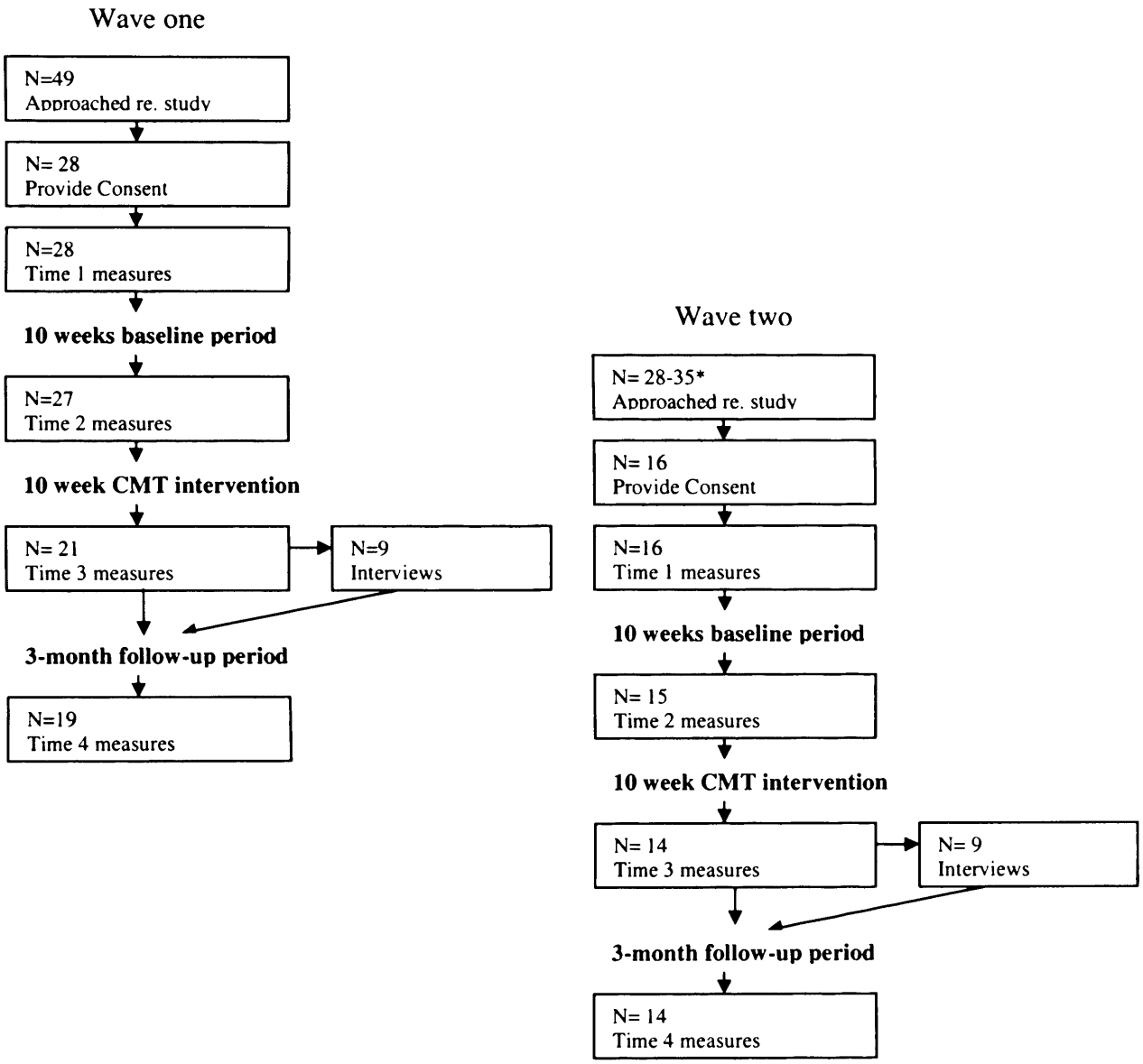
Ethical approval for the study was granted by the UCL Graduate School Research Ethics Committee. Informed consent was obtained from both the participants and a parent or guardian. Copies of the ethics approval, information sheets and consent forms can all be found in Appendices one and two.

Participants

Power Calculation. A power calculation was completed in order to estimate the required sample size. Previous studies, one using the same intervention in adults and several targeted interventions in adolescents, indicated that large effect sizes could be expected. (Burton, 2004; Clarke et al., 2001; Gilbert & Proctor, 2006; Lamb et al., 1998). In order to find a significant mean difference between baseline and treatment with an alpha value of 0.05 and 80% power, assuming an effect size of d=0.5 and a correlation of 0.6, a sample size of 25 was required.

Recruitment. Participants were recruited in two waves from a girls secondary school in North London. All participants were in Year 10 at the time of the intervention. The study targeted girls as gender is a risk factor for depression, with adolescent girls being at twice the risk than adolescent boys (Evans et al., 2005). Year 10 students (age 14 to 15) were selected both so as not to clash with exam years (Year 9, 11, 12 & 13) and because symptoms of depression have been reported to increase from 13 years of age (Sutton, 2007).

Figure 1. – Time sequence of the study



**exact numbers not available*

Cost and time limitations meant that screening for at-risk students using self-report scales was not feasible. Instead, school staff were asked to identify students who they felt had low self-esteem. Although the intervention targeted self-criticism and depressive symptoms, the concept of self-esteem was used for recruitment as it is one

that is used in education and was likely to be more familiar to teachers Whilst self-esteem is a different concept from self-criticism the two are closely linked since poor self-esteem is associated with a tendency to be harshly critical of one's own short-comings (Pope, 1988). Furthermore, it has been suggested that low self-esteem could be a risk factor for depression (Evans et al. 2005). A list of characteristics commonly associated with low self-esteem was provided for staff, to facilitate identification of appropriate students.

Students on the 'school-action-plus' stage of the special educational needs register (i.e. those who need support from external agencies to access the curriculum effectively) and those with behaviour likely to cause significant disruption to the group were excluded as the staffing levels required to cater for their needs were not available. Wave one included many young people with significant conduct problems and as a result the guidelines provided for identifying students were adjusted for the second wave. Both sets of guidelines can be found in Appendix 3.

For each wave all participants identified by school staff were invited to a meeting about the project. Here the researcher explained the aims of the research project, the nature of the proposed groups and what participating in the project would involve. Those interested were given a consent form and participant information sheet for themselves as well as an information sheet and consent form for their parent/guardian. Parents/guardians were offered the opportunity to discuss the project with the researcher although only a few chose to do so.

Participant Characteristics

In wave one 49 girls were approached about the study and 28 (57%) opted to take part. Exact numbers approached in wave two were not available as much of this was done independently by school staff; it is estimated that between 28 and 35 were approached and 16 (approx. 50%) agreed to take apart. Where given, reasons for not wanting to participate included worrying about missing lessons, not wanting to take part without their friends, feeling they did not need the group and general lack of interest.

Once they had agreed to take part, participants were allocated to an intervention group (three were run in wave one and two in wave two). In allocating individuals to groups advice from school staff was heeded such that girls with a historically difficult relationship were not placed in the same group.

Three participants (one from wave one, two from wave two) dropped out before the beginning of the intervention saying that they were no longer interested in the project. Six participants dropped out during the intervention (all from wave one); one of these had been excluded from school, two had very poor school attendance and attended only one intervention session, two became concerned about missing lessons and the reason for the final participant was not known. In total 35 participants (21 in wave one, 14 in wave two) received the intervention and completed post-intervention measures.

At the first assessment point participants were aged between 13.9 and 15.5 years, with a mean of 14.7 (s.d. 0.47). Sixty percent of participants qualified for free school meals (a broad indicator of low SES, Hobbs & Vignoles, 2007) compared to a national average of 14.3% (Sutton Trust, 2005). Participants were from a variety of ethnic backgrounds: 12 (34%) were white British or white European; 15 (43%) were

Black British, Black African or Black Caribbean; 4 (11.5%) were Asian and 4 (11.5%) were from other ethnic backgrounds.

Depression scores (Children's Depression Inventory; Kovacs, 2001) at this point ranged between 0 and 30 with a mean of 11.0 (s.d. 7.2). The range makes it immediately clear that this is not an indicated sample (made up solely of those with elevated depressive symptomotology but not meeting clinical criteria for the disorder), although the mean indicates that scores for the group are above average (average score is 8; Kovacs, 2001).

Intervention

The intervention was adapted from Gilbert and Procter's (2006) Compassionate Mind Training group for adults with severe and complex mental health difficulties and aims to increase awareness of the way we relate to ourselves, to reduce self-criticism and to increase the capacity to self-soothe. Adaptations to Gilbert and Proctor's intervention included shortening it from 12 two-hour sessions to fit into 10 one-hour sessions, as well as adapting exercises to an adolescent, non-clinical population.

The adapted intervention took place over ten weekly one-hour sessions during lesson time and was delivered to groups of six to ten participants. The groups were run by the researcher, a trainee clinical psychologist who received three days training in the approach and weekly supervision from a consultant clinical psychologist experienced in the approach.

A list of the topics covered in each session is given in Table 1 and full weekly session plans can be found in Appendix 4. The key components of the intervention were as follows: 1) Psychoeducation about three emotional systems in the brain – threat,

drive and soothing - and the impact of these on our functioning. 2) Discussion of self-criticism and its impact on well being; monitoring own self-talk and increasing awareness of situations in which self-criticism arises. 3) Discussion of compassion and its key components; developing compassionate self-talk as an alternative to self-criticism. 4) Development of self-soothing strategies including relaxation, compassionate imagery and compassionate letter writing.

In keeping with the developmental stage of participants the intervention used a variety of teaching methods including didactic teaching, role-plays, discussions, debates, quizzes and sharing of personal experiences. In response to feedback from wave one participants, the proportion of didactic teaching was reduced and more games and quizzes were included in the intervention in wave two, although the overall content remained the same.

Measures

Copies of all measures are in Appendix 5.

Depression. Depressive symptomotology was measured using the Children's Depression Inventory -CDI (Kovacs, 1985). This 27-item self-report questionnaire is designed for children aged between six and 17 years. For each item the child is asked to chose which of three statements best describes how they have been over the past two weeks, e.g. 'I am sad once in a while, I am sad many times or I am sad all the time'. It has been shown to have good validity and good internal consistency with this age-group with reliability coefficients ranging from 0.71 to 0.89 (Kovacs, 2001)

Table 1 – Main topics covered in each session

Session	Main Content
1	Introduction to the project, contract setting, getting to know each other
2	Psychoeducation & discussion of emotion systems in the brain
3	Psychoeducation & discussion of self-talk and its effect on well-being
4	Discussion of the perceived functions and disadvantages of self criticism
5	Raising awareness of self-talk (role-plays) & visualising inner-critic
6	Components of compassionate responses (role play and discussion)
7	Practising compassionate responses to personal examples & relaxation practice
8	Practising compassionate responses to personal examples & compassionate imagery practice
9	Compassionate letter writing & compassionate imagery practice
10	Review & feedback

Self-Esteem. Self-esteem was measured using the 5 Scale Test of Self-Esteem for children (Pope et al., 1988). This 60 item self-report questionnaire measures self-esteem across five domains of relevance to young people – academic, social, body, family and global. The child is asked to respond to a series of statements such as 'I would like to look like someone else' using a three point response scale to note whether they feel this way almost always, sometimes or almost never. The total score across all domains was used for the purpose of this study. Reliability and validity figures are not available for this measure although it has good face validity and Burton (2004) found it to be sensitive to changes in self-esteem over a short period.

Self-criticism and Self-reassurance. Levels of self-criticism and self-reassurance were measured using the Forms of Self-Criticising/Attacking and Self-Reassuring Scale (FSCRS; Gilbert et al., 2004). This 22 item self-report measure examines how

critical/attacking or supportive/reassuring people are when things go wrong for them. Participants are given a probe statement 'When things go wrong for me.....' and asked to respond on a 5-point Likert scale (ranging from 0 = not at all like me to 4 = extremely like me) to a series of statements, e.g. 'I am easily disappointed with myself'. The scale can be separated into three different components – two of self-criticism and one of self-reassurance. These have been shown to have good internal consistency and good convergent and discriminant validity (Gilbert et al, 2004), although this data was collected from an adult population. For the purposes of this study the two self-criticism subscales were summed to give an overall measure of self-criticism.

Social Rank. Two components of perceived social rank were measured: social comparison and submissive behaviour. Social comparison was measured using the Adolescent Social Comparison Scale Revised (ASCS –R Irons & Gilbert, 2005). It consists of ten items that relate to how the participant feels in comparison to their peers. Participants respond on a 10-point Likert scale relating to a bipolar construct. For example: 'Compared to your friends how confident do you feel?' High scores represent a more positive social comparison and lower levels of shame. Good internal consistency has been reported for this scale (Irons & Gilbert 2005).

Submissive behaviour was measured using the Adolescent Submissive Behaviour Scale (ASBS Irons & Gilbert, 2005). This consists of 12 items which asks participants to consider how they would behave in potential 'conflict' situations. It measures the degree of submissive choice to each situation. Participants respond on a 5-point Likert Scale (ranging from 1 = never to 5 = always) to a series of statements such as 'I do things because others are doing them, rather than because I want to'. Higher

scores indicate a greater degree of submissive behaviour, and are indicative of higher levels of shame. Good internal consistency has been reported for this scale (Irons & Gilbert 2005).

Semi-structured Interview (See Appendix 6). Qualitative information on participants' experience of the group was obtained through individual semi-structured interviews. The interview schedule was developed with the research questions in mind and covered topics such as how the participants found taking part, whether they had noticed any changes as a result of their participation and what they attributed those changes to. Before use the schedule was reviewed by several experienced researchers and adapted according to their feedback.

Procedure

At each measurement point questionnaires were administered to participants in a group format. This took place in a school classroom during lesson time. The researcher emphasised the instructions on the questionnaires, answered questions and helped the participants with reading or comprehension as required. Questionnaires were always completed in the same order, starting with the CDI, followed by the five-scale test of self-esteem, the FSCRS, the ASCS-R and finishing with the ASBS. At Time 2 participants were also asked to complete a general information sheet of demographic data.

Each time self-report measures were completed they were examined for indications of risk of suicide or self-harm and where appropriate individual interviews were arranged with the young person in order to complete a risk assessment. In

conjunction with school staff referrals were made to statutory or community services as was deemed necessary.

Qualitative interviews were conducted in the week following the end of the intervention. Participants with the highest initial CDI scores were selected for interview, although care was taken to ensure both improvers and non-improvers were represented. All interviews took place in a private room and were conducted by the author who had run the groups. A semi-structured interview schedule was used to guide the questions asked (see Appendix 6) and all interviews were digitally recorded. Before commencing the interview the author emphasised her desire to hear both positive and negative feedback in order to be able to develop the group for other young people in the future. Interviews ranged from nine to twenty-six minutes in length.

Data analysis

Quantitative analysis. Within-subjects effects were examined over both the baseline and intervention periods. It was anticipated that there would be no changes over the baseline period and that an improvement on all measures would be observed over the intervention period. Analysis was conducted for both the full cohort and an 'at-risk' subgroup defined as those with a pre-intervention depression score at or above the 50th percentile (CDI >7; Kovacs, 2001).

Prior to analysis individual measures were checked to assess whether they met normality assumptions. Where possible measures were transformed in order to be able to use parametric tests. For each measure, repeated-measures ANOVAs were performed with time as the within–subjects factor. Where a significant main effect was found for time this was analysed using planned pair-wise comparisons. Throughout the analysis α

was set at .05 for a significant result and .10 for a trend. Two-tailed p-values are reported throughout to allow for the possibility of both positive and negative change over the intervention period.

Qualitative analysis. Thematic analysis, a method for identifying, analysing and reporting patterns within data, was used to analyse the interviews with participants. Braun and Clarke's (2006) guidelines were used to ensure that this was conducted in a transparent and rigorous manner.

The tapes of each interview were listened to several times and transcribed. Once the researcher was familiar with the data set, codes for the ideas expressed were generated and all the transcripts were gone through several times collating data for each code. Remaining data was re-read and checked for other features not included in the original codes. The codes were then grouped together and checked for emerging patterns, consistency and variability. This generated a number of themes, which were examined for their relationship with each other and checked back against the original data. The themes were then organised into domains informed by the research questions. The coding system, themes and interpretations were reviewed by an experienced researcher in order to check the credibility of the data. A list of the original codes generated and a sample annotated transcript are provided in appendix 7.

Results

Quantitative Results

Preliminary Analysis of Measures

The depression, self-esteem and self-reassurance measures did not meet normality assumptions. Square root transformations were performed successfully for each of these

variables although for ease of comparison raw means are reported throughout.

Internal consistency and test-retest reliability coefficients were calculated for those measures for which figures were not already available for the adolescent age group. Internal consistency coefficients were calculated using data from Time 1, whilst test-retest reliability values were calculated across the Time 1 to Time 2 baseline period. Table 2 gives the Time 1 means and standard deviations, internal consistency (Cronbach's α-values) and test re-test reliability (Pearson's correlation coefficients) for these measures. All values are good and indicate that the measures used are reliable for this population.

Attrition Analysis

A number of participants dropped out of the study between completing measures for the first time (Time 1) and the end of the intervention (Time 3) and further participants dropped out before the follow-up measurement (Time 4). There were no significant differences on any Time 1 measures between those participants who dropped out by the end of the intervention and those who did not. When the analysis was repeated comparing those who had dropped out by follow-up and those who remained in throughout it was found that the drop-out group had higher Time 1 social comparison scores ($t(42) = 2.02$, $p=.049$) and lower Time 1 submissive behaviour scores ($t(41) = 2.35$, $p=.023$) but were no different on Time 1 depression, self-esteem, self-criticism or self-reassurance measures. This means that overall participants who dropped out had better scores on both shame measures. Full details of this analysis can be found in appendix 8.

Table 2 Mean, standard deviation, internal consistency and test-re-test reliability values for the five-scale test of self-esteem and FSCRS

Measure	Mean	SD	alpha	r
5-scale Test of Self-esteem	68.2	16.4	0.94	0.82
FSCRS – Self criticism	21.9	12.5	0.90	0.67
- Self reassurance	22.3	7.1	0.90	0.71

Note:

FSCRS – Forms of Self-Criticising/Attacking and Self-reassuring scale

Attendance

For those who remained in the project attendance ranged between three and ten sessions (M=7.6, s.d. = 1.8).

Analysis of whole sample

A one-way repeated-measures ANOVA was performed for each variable to analyse the effect of time. Although ordinarily this would have been done across all four measurement points, due to attrition and the need to ensure maximum sample size for the key analysis, ANOVAs were performed over the first three time points and analysis of the follow-up data was conducted separately. Where sphericity assumptions required for the ANOVA were not met Greenhouse –SS estimates were used to correct degrees of freedom.

Where the ANOVA showed a significant main effect of time, planned comparisons were completed using paired t-tests. In accordance with Howell's (2001) recommendations for a priori comparisons, the pooled variance estimate was replaced with the mean square error from the overall analysis of variance and the t-statistic was evaluated using the error degrees of freedom. Results for ANOVAs and planned comparisons for each variable are reported in Table 3.

Table 3 - Mean scores at baseline, pre-intervention and post-intervention

Measure	Baseline (1)		Pre-intervention (2)		Post-intervention (3)		F (2 d.f.)	p	Planned Comparisons
	M	SD	M	SD	M	SD			
Depression	11.0	7.2	9.2	7.1	8.1	6.1	5.4	.006	1>2=3
Self-Esteem	68.7	16.3	73.6	16.8	74.1	16.6	7.8	.001	1<2=3
Self-Criticism	21.9	12.6	17.7	11.1	15.9	8.5	8.1_b	.002	1<2<3[a]
Self-Reassurance	22.1	6.9	23.9	5.5	23.4	5.8	2.1	.134	
Social Comparison	59.3	13.2	59.8	11.5	63.3	12.2	3.8_b	.040	1=2<3
Submissive Behaviour	30.6	8.3	29.3	10.2	27.4	9.4	5.1	.009	1>2>3

Note:
The numbers in parentheses in column heads refer to the numbers used for illustrating significant effects in the last column titled 'planned comparisons'
[a] Trend - significant at P<.10
[b] Sphericity assumptions not met, degrees of freedom corrected using Greenhouse-SS estimate

As predicted, social comparison scores improved over the period of intervention ($t(59) = 2.71$, $p<.01$) with no change over the baseline period. Submissive behaviour decreased over the intervention period ($t(66) = 2.69$, $p<.01$), but there was also a trend for a decrease over baseline ($t(66) = 1.78$, $p=.08$).

Results for self-reassurance, self-criticism, depression and self-esteem were not in accordance with predictions. For self-reassurance there was no main effect of time. For self-criticism, depression and self-esteem there were no changes over the intervention period; however, all three measures improved over baseline (self-criticism $t(57) = 3.52$, $p<.01$; depression $t(68) = 3.34$, $p<.01$; self-esteem, $t(68) = 4.76$, $p<.01$), which was the opposite to what was expected.

Effect of risk assessments. Between Time 1 and Time 2, seven participants received an individual risk assessment where they had the opportunity to discuss difficulties, strategies for managing these and other sources of support. Three of the participants were referred to external agencies and two were seen by such organisations at least once during the wait list period. None, however, received on-going support and none were seen during the intervention period.

In order to investigate whether these risk assessments might account for some of the unanticipated changes over the baseline period the analysis comparing Time 1 and Time 2 was re-run excluding these individuals. The results of the tests showed that there was no longer a significant change in depression symptoms over the wait list period ($t(27) = 1.03$, $p>.05$) and the significant decrease in self-criticism was reduced to a trend ($t(27) = 1.94$, $p = 0.064$); however the improvement in self-esteem remained ($t(27) =$

2.6, p= 0.015). Thus it appears that the risk assessments may explain some but not all of the changes over this period.

Analysis of At-Risk Sample

The full sample contained many individuals with low base-line levels of symptomatology. As such the overall cohort was more similar to a universal than an at-risk sample. Effect sizes are generally smaller for universal samples and so larger sample sizes are required to have sufficient power to detect effects. With this in mind, analysis was also conducted on an at-risk sub-sample, defined as those with an initial depression score above the 50^{th} percentile for their age and sex.

Analysis of this sub-sample was conducted in the same way as for the full sample. Means and standard deviations for each of the three time points, F-values and results of planned comparisons are given in Table 4. Two of the ANOVAs in this case just failed to reach significance. Pairwise comparisons were carried out in these cases, but the borderline F-test will be taken into account when drawing conclusions from these results.

Results for submissive behaviour were in the expected direction, improving significantly over the intervention period ($t(29) = 3.06$, $p<.005$) but showing no significant change over baseline. Although the F-test was non-significant, pair-wise comparisons for social comparison also showed an improvement over the intervention period ($t(29) = 2.94$, $p<.01$) with no significant change over baseline.

Depression and self-criticism showed an improvement over the intervention period (depression $t(40) = 3.04$, $p<.005$; self-criticism $t(31) = 2.24$, $p<.05$); however,

Table 4 - Mean scores for at-risk group at baseline, pre-intervention and post- intervention

Measure	Baseline (1)		Pre-intervention (2)		Post-intervention (3)		F	p	Planned Comparisons
	M	SD	M	SD	M	SD			
Depression	15.3	6.0	12.4	6.8	9.8	6.5	10.2	<.001	1>2>3
Self-Esteem	61.5	16.2	66.6	16.3	68.3	17.9	4.4_b	0.033	1<2=3
Self-Criticism	28.0	11.8	22.9	10.8	18.8	8.7	8.0_b	0.003	1>2>3
Self-Reassurance	19.1	5.8	21.9	5.0	20.8	4.8	2.9^a	0.065	1<2=3
Social Comparison	55.4	13.7	56.2	12.3	61.1	13.7	$3.4_b{}^a$	0.061	1=2<3
Submissive Behaviour	33.1	9.0	33.1	10.5	29.5	10.1	4.1_b	0.037	1=2>3

Notes:
The numbers in parentheses in column heads refer to the numbers used for illustrating significant effects in the last column titled 'Post- hoc'
[a] Trend - significant at P<.10
[b] Sphericity assumptions not met, degrees of freedom corrected using Greenhouse-Geiger estimates.

there were also improvements over the baseline period (depression t (40) = 3.38, p<.005; self-criticism t (31) = 2.78, p<.01).

Results for self-esteem and self-reassurance were in direct contradiction to predictions. There was no change in either over the intervention period, but an improvement in both over baseline (self-esteem t (29) = 2.91, p<.01; self-reassurance t (40) = 3.41, p<.005).

Effect of risk assessments. As with the full sample it was hypothesised that changes over the wait list period might be explained by the risk assessments and the subsequent support that occurred during this time. Analyses comparing Time 1 and Time 2 were re-run excluding these individuals. There was no longer any difference between Time 1 and Time 2 scores on depression t(13) = 0.484, p>.05, self-esteem t(13) = 0.57, p>.05 or self-criticism t(13) = 1.54, p>.05. This indicates that the effects detected over the wait-list period may have been the result of the risk assessments completed.

Follow-up measures

In order to minimise the possibility of Type 1 errors, follow-up analysis was only conducted on those variables for which there was a significant effect over the intervention period. Paired-sample t-tests were conducted comparing Time 2 to Time 4 scores, in order to see if the difference that was detectable between Time 2 and Time 3 had been maintained over the follow-up period.

Whole Sample. There were effects over the intervention period for both social comparison and submissive behaviour for the whole sample. Follow-up analysis showed that submissive behaviour scores were lower at Time 4 than at Time 2 (t(31) =

2.34, p = <.05) and a trend for social comparison to be higher at Time 4 than at Time 2 (t (31) = -1.90, p = 0.07). That is, improvements in submissive behaviour were maintained and improvements in social comparison were partly maintained over the follow-up period.

At risk sample. There were effects over the intervention period for depression, self-criticism, submissive behaviour and social comparison for this group. Follow-up analysis showed submissive behaviour was lower at Time 4 than Time 2 (t(17) = 3.12, p = .006) and there was a trend for self-criticism to be lower (t(17) = 1.95, p = .068). That is, improvements in submissive behaviour were maintained at follow-up and improvements in self-criticism were partly maintained. In contrast there were no differences between Time 2 and Time 4 scores for depression (t (18) = 1.28, p>.05) or social comparison (t(17) = 1.61, p>.05.)

Reliable change

In order to assess reliable change, the changes in depression scores in the at-risk group over the intervention period were assessed using the reliable change index. This was calculated by dividing the difference between the pre-treatment and post-treatment depression scores by the standard error[1] of the difference between the two scores (Jacobson & Truax, 1991). Of the twenty-one participants in the at risk group, 3 showed a reliable improvement, 16 showed no reliable change and 2 showed a reliable deterioration.

Clinically significant change

The changes in depression scores in the at-risk group over the intervention period were also assessed for clinically significant change. A change of three points on

[1] $SE=SD*\sqrt{(1-\alpha)}$, α = reliability coefficient

the CDI has been cited as clinically significant for adolescents (Evans et al 2005). On this basis of the twenty one at-risk participants 9 showed a clinically significant improvement, 9 showed no clinically significant change and 3 showed a clinically significant deterioration.

Qualitative Results

Eighteen adolescents were interviewed about their participation in the group. They generally seemed able to reflect on their experiences and whilst their accounts were generally very positive they seemed able to discuss both negative and positive aspects of the group. Thematic analysis yielded ten key themes organised into three broad domains (see Table 5). The three domains were informed by the research questions and refer to: (1) experience of the group; (2) changes as a result of taking part; (3) the process by which these changes occurred.

Numbers after each quote refer to the source of the quote. Since the group was adapted slightly before wave two, participants are numbered according to which wave they took part in: 1-9 are participants from the first wave of groups, and 10-18 are from the second wave of groups. Within quotes ellipses (...) have been used to indicate places where the text has been edited for the sake of brevity.

Domain 1: The Experience of being in the group

The themes in this domain relate to participants' descriptions of what it was like to take part in the group. They range from pre-group thoughts and feelings to how they felt whilst in the group and how they reflected on it afterwards.

Theme 1.1 'To go or not to go': pre-group thoughts and feelings.

Whilst some participants had been clear from the start that they wanted to attend the group, many highlighted an initial ambivalence whilst others felt they had 'fallen into it' somehow without really thinking about it. A variety of reasons for initial ambivalence were given.

Table 5. Domains and themes

Domain	Theme
1. The experience of being in the group	1.1 'To go or not to go': pre-group thoughts and feelings
	1.2 Talk as good vs. talk as boring
	1.3 'To share or not to share': dilemmas about speaking up
2. Changes as a result of the group	2.1 The relationship with the self
	2.2 'Broadening your brain': a change in perspective
	2.3 Managing feelings and stress
	2.4 'It could change your life': change as significant
3. Processes of change	3.1 'I dunno but...': change as a complex process
	3.2 Soothing and threat: processes specific to CMT
	3.3 Sharing and receiving advice: generic processes

Many participants felt they didn't really understand what the group was about or what they were signing up for, some said they hadn't been listening when it had been explained, whilst others felt it needed to be explained more thoroughly. Participants also referred to other demands on their time and concerns about missing curriculum lessons in order to take part in the group.

My group was really good and I'm really glad I went to it cos I wasn't sure if I should go to it. Cos last year, thingy, when all the people were called I actually didn't want to come really cos I was too scared about missing out on lessons and stuff and I didn't really see there was a point to it, cos I wasn't 100% sure what it was about. (11)

Although a small number spoke of the experience of being selected for the group as positive, many felt the name the school used for the group (self-esteem group) was off-putting. The term 'self-esteem' seemed to be associated with stigma for many and some linked it to having 'special needs' of some kind – a term schools use for those who need extra support to access the curriculum. For some being chosen for the group seemed to have a direct impact on how they felt about themselves, whilst others were concerned with the reaction from their peers.

I thought the school thought I had no self-esteem or I had special problems like I needed special needs or something ... it made me feel a bit stupid. (16)

Maybe you could have called it differently ... Yeah, because everyone says, 'Oh you've got low self esteem' (17)

Theme 1.2 Talk as good vs. talk as boring

The majority of wave one participants felt that the group had been boring at times and suggested more activities be incorporated. The intervention was adapted accordingly before wave two and far fewer of these participants referred to boredom as an issue.

There was, however, a split across both waves, with some participants describing the opportunity to talk and discuss issues as positive and others finding talking boring and requesting more activity based sessions in the future. Participants seemed to relate these feelings to a more general disposition of their own which accounted for their preferences.

I liked doing exercises, what really annoys me is sitting down and talking, that's what annoys me; I just can't do it. (18)

The thing about me is I like talking anyway and I like debating so, yeah I liked the discussions because when we talked about things we learned new things that we didn't know and we could share things that other people didn't know with them. (4)

Theme 1.3 To share or not to share: dilemnas about speaking up.

Some participants described how speaking up and sharing their thoughts in the group could be difficult. For the majority this seemed to be an issue only at the beginning of the group and they described it easing as they got to know and trust others and as others shared their own experiences.

I don't know, the people, apart from A and N I didn't know anyone else there so I thought it would be a bit awkward with them there as well talking about my feelings and things with other people I don't know there ... The people I didn't know, they were really nice so, and they were talking about their feelings as well, so it shows that if they don't feel uncomfortable, why should I? (14)

The issue of how much to share private feelings and experiences was also highlighted. A few participants described concerns about confidentiality or about being laughed at or judged which got in the way of sharing things they felt they might want to bring to the group.

People would know what kind of problems I had and that, but then if they all find out they will tell everyone, so that's why I don't express my feelings. (1)

A number of wave one participants felt that there had not been enough time to get to know each other and that more time would have helped with the dilemna of sharing.

I think you should make like, play some games at the beginning where you like get to meet everyone, so just like kind of play the games for like session 1 play some games. And try people to get to know each other more so they become more confident. (2)

This was addressed in wave two and participants in this wave generally commented more positively on group dynamics and the ability to share things with others.

Domain 2: Changes as a result of the group

The themes in this domain relate to participants' descriptions of changes that had occurred for them whilst talking part in the group. The majority of participants reported positive changes as a result of the group; none reported negative changes although two participants felt there had been no change for them.

Theme 2.1 The relationship with the self

Many participants described a change in the way in which they talked to themselves since starting the group. They tended to describe putting themselves down less and feeling less like they were being bullied by themselves. Some described also being able to encourage and support themselves and how these changes had resulted in them feeling happier and more normal.

Cos you know whenever you're putting yourself down, you always feel like crying and all those things, like you feel like no-one likes you and all those things, you're just in the world with no-one to [pause].But now I feel like why should I listen to the bad side of me and start feeling down and start crying because of, just because of some little mistake that I did, [rather] than to listen to the good side of things when I will be happy and all of those things. (8)

Participants also described how this change in self-talk freed them up to do other things, to focus on their work and generally made problems less of a 'big deal'.

It's easier to like do things and when I do something wrong I just say 'Ok I made a mistake but I can still do something else and get it right'. [Before] I would have said that I was silly and that I was dumb and then I would have just went and took my anger out on someone. (6)

For some this process seemed to extend to how they reacted to comments from others. Several described being able to stand up for themselves better, rather than giving in to what others want, and some felt more able to withstand negative comments from peers.

I noticed myself, I don't know, becoming more confident with people and like when someone says bad stuff about me or I say it to myself I can actually deny it which I haven't done before. (7)

A related change was a difference in the way they felt about themselves, with some participants describing feeling less pressure to be perfect and being happier with the way they were; similarly, other participants described liking themselves more.

I think more about myself now. Before I used to think more about other people, I used to dislike myself, but now I think about it more carefully and I realise that I don't hate myself actually, I like to be who I am. (4)

One participant who didn't feel the group had changed anything for her described seeing the logic in becoming less self-critical but associated giving it up with blaming other people and this seemed to make it hard for her to develop a more compassionate relationship with herself.

It's like my point of view, and I can't change that. Cos if like I do something bad or something then its like I don't want to blame other people, so I blame myself, yeah. Even though sometimes its not my fault ... I was thinking it was a good idea but then it feels like if I get into trouble and your mum shouts on you and stuff you can't take the bully out of your head, it like, it stays in the head. (2)

Theme 2.2 'Broadening your brain' – a change in perspective

Participants commented on having more insight into their feelings by the end of the group. It seemed they were more able to label their own emotional experiences and simply by doing so felt more in control. For some this insight also included increased

knowledge about how to move from one feeling state to another and they described being able to help themselves feel better more easily.

I dunno, learning about different parts of the brain was interesting ... cos then you know yourself better and you know what you feel like and what you need and if you're like upset you learn to know what you want when you are upset, its like when you're hungry, you need to learn what your body wants at that time ... You can help yourself better, and let other people help you. (10)

Participants also commented on being more able to see 'the other side of things'. It seemed that hearing multiple perspectives when discussing problems had enabled them to think about things in a broader way and they described how this gave them better insight into how others were feeling. This appears to have both helped them deal better with issues such as disagreements with friends, and made them able to support others more effectively.

You look at things in a different perspective, like you look at others stories and stuff and it makes you realise like if you were on the receiving end how you would feel or if you were on the other end, like what would make you do things. It just makes you look at things broader, wider. Broaden your brain. (12)

In relation to these changes in insight, participants also frequently described a feeling of being less alone with their problems, even ones they hadn't shared with the group. It appeared that hearing about other people's difficulties and having a model that fitted with their own emotional experiences made their own problems feel more understandable and less overwhelming.

it was really good because then you could understand what other people's problems were and what other things people are suffering and stuff. Its just like, sometimes if something goes wrong with you yeah, you think that you are the only person that anything is going wrong with, it's not no-one else, its just you – so when you hear other people's problems you don't feel good about yourself but you know that there's other people out there as well who's going through the same problems. (11)

Theme 2.3 Managing feelings and stress

Changes in the way they managed feelings were discussed by a number of participants. Overall it appeared that they had become more active in managing difficult emotions, using strategies they had learnt, rather than avoiding them, denying them or passively waiting for someone else to make them feel better. A few participants also commented on re-assessing their old management strategies, noticing their weaknesses and developing new ones accordingly. Overall participants seemed to be much more reflective on their emotional experience and how they managed it.

Now I feel a bit more different, because like I use my emotions more, before I never used to, but now I do, like if I'm, if I was upset before, I used to just hold it in, I wouldn't tell no-one or whatever; but now I would tell someone and I would cry about it and use like my feelings. (4)

When there's like bad things going on sometimes you try to block it out but its easier to think about it and get it over; get over it when like you're lying down in that calm way. (13)

Anger in particular, was an emotion that participants felt they had more control over. They described feeling much calmer, being less easily irritated by others and being less likely to take out their frustration on other people in their lives. For many participants this seemed to have led to better relationships with other family members, whilst other described being in trouble at school less often.

I think like at home I'm calmer a lot more cos, at school I don't really have that much a short temper, but at home I tend to have a bit of a short temper, but I've like done the breathing exercise and not been so short tempered at home all the time, its like I've become much a more calmer person I think. (13)

Several participants commented on the level of stress in their lives, in particular in the context of coursework and exams. They felt that the group had given them strategies to manage this stress and many commented that they were able to relax more.

For some this meant they could concentrate better and think more clearly about their work when they returned to it.

I'm always so tense and now I just think if I am too stressed and I relax then I can do my work better or I can focus better on things after I've been relaxing (14)

As a consequence of the above changes a number of participants also referred to a more general emotional change, in terms of feeling better overall. This seemed to include both a reduction in negative feelings and an increase in more positive ones.

I wouldn't say feel more happy but I'm definitely less sad and I don't like go around feeling upset about all the bad things I just seem sort of in the middle - fine – cos the things aren't getting me upset. (...) Yeah but probably happy more, cos I'm like more open to the chance of happiness. I feel less like suspicious that things are sort of out to harm me, and more free. (7)

Theme 2.4 'It could change your life' - Change as significant

Participants did not consider the changes that occurred to be inconsequential; they described how they were significant to them and had had a real impact on their lives. Two participants had stopped self-harming over the course of the group and one had stopped thinking about it. One participant put her feelings of happiness on a scale of zero (unhappy all the time) to ten (happy all the time), saying at the beginning of the group she had been a zero but by the end she had moved to a five. Another participant when describing the change for her said it was 'a big happy smile, a big happy smiley face'. Participants particularly commented on this significance when asked whether they would recommend the group to someone else:

Because yeah, its really helpful, because the fact that it can change me from behaving really bad before and all quiet in lessons and all those things... yeah I would [recommend it], because in the end everyone wants to be happy, so I found my joy, why can't I help someone else to find theirs? (8)

In addition to talking about changes in the present it seemed that many of the participants anticipated that the changes they had made would last well into the future. They seemed to feel both the way they thought about problems and the way they managed their emotions had permanently changed and described how this might affect their future working and family lives.

It's like even if it doesn't help you now, cos now everyone's young if you don't have major problems or a difficult situation to deal with, but I think as we get older it will help us more, cos we'll have difficult things to deal with, it won't be just about school. (9)

Domain 3: Processes of change

The themes in this domain relate to participants' ideas about what had caused any changes they described.

Theme 3.1 'I dunno but...': Change as a complex process

Whilst participants could often identify components of the programme they had liked or found helpful, some also described having difficulty pinpointing what exactly had caused the changes. Others described there being multiple influences on change, which included influences from their daily lives as well as influences from the group.

I think cos none of the groups, I didn't notice any immediate effect afterwards, we just seemed to be doing some stuff that I couldn't see the importance of but then at the end of it I was like thinking differently. (7)

I don't know, maybe when we was doing the bad thought things and stuff but I don't know, maybe I just woke up and decided to talk to myself differently. (6)

Furthermore, a number of participants described how components they initially struggled with often turned out to be some of the most helpful parts when they managed to persevere with them.

And at first the imaginary friend thing, cos I thought it was a bit weird like I said before but yeah, it actually does help, cos you're telling someone, but you're not telling someone. Yeah. (15)

Theme 3.2 'Soothing and threat': Processes specific to CMT

Participants highlighted a number of the key components of compassionate mind training as having been instrumental in the changes in their lives. Four areas in particular were discussed by multiple participants and seemed to have had the greatest influence. These were: relaxation and imagery; psycho-education around the emotion systems; externalising the bully and compassionate letter writing.

Relaxation and imagery were cited by the most participants, in fact almost all participants referred to one or the other. They are grouped together here as they were taught together and participants chose for themselves whether to just use relaxation or whether to add an imagery component to it. One of the key changes related to these components was better management of anger. Participants described these skills as helping them to move into a more soothed state of mind where they could 'let go' of their anger and to deal with problems differently. Imagery and relaxation were also described as a way to have 'time-out' when things were getting stressful, as an opportunity to have space to yourself that then made things feel easier.

The thing with that, it's just a few minutes to yourself really, a few minutes thinking about what is going on around you, concentrating just on yourself, its like there's nothing to worry about at that moment ... Like say if you are stressed or you are angry you just calm yourself down, sit down, give yourself two minutes, think over what's just happened and just relax, let it go kind of thing. (11)

The imagery was also described as a helpful way to counteract negative self-talk. Participants appeared to use it to manage worries about the self, feelings of guilt and feelings of shame.

When I think of the good person I think of like, I dunno, not exactly an angel but someone like with a friendly face. They are warm and they are kind and they like listening and I don't really see a picture I just kind of hear it in thoughts ... It makes me feel better about myself. Like if I'm upset or angry about something It's like I can hear them saying to me that its not my fault and that I shouldn't worry about it. (4)

Psycho-education was the next most frequently cited process accounting for change. This component was particularly related to having more insight into feelings and managing them differently as a consequence. It was noticeable that throughout the interviews participants used the language inherent to compassionate mind training to describe how things were for them and how they coped with stresses at present. This way of thinking about feelings and behaviour seemed meaningful to them and appeared to provide a useful framework for thinking about how to look after yourself emotionally.

Oh yeah, that was when we mentioned soothing and I found that bit helpful because like you didn't need to have a new something to work on to be positive, you could just be calm, which is a lot easier. (7)

I just remember it, and, I just think, like, what am I in right now. And I try and put myself in the drive and soothing, yeah (3)

The process of 'externalising the bully' was referred to by a number of participants. This was described very much as a turning point – the point at which they realised the impact of self-criticism and how such thoughts didn't necessarily represent the 'truth'. Following on from this realisation it seemed it was easier to both reduce self-criticism and to challenge it when it did occur.

This is actually when we were doing the role play and I remember when A was walking around someone and saying negative stuff I think, and she was just being really spiteful ... but then you could see that the inner bully is just bullying and take them less seriously because they're not like talking about who you are, they are just trying to say the worst they can think of. (7)

Whilst not all wave one participants got the opportunity to try compassionate letter writing, this was referred to as a useful activity by a number of wave two participants. It seemed that having the opportunity to think about issues without having to share them with the group was particularly important to those who found it more difficult to share their feelings openly.

Cos I think its like sometimes when you talk about it you don't know how to talk about it and sometimes you have a feeling the person might laugh or something cos they might find it funny. When you write it down the paper's not going to laugh at you or something, you know you can trust the paper. (8)

In terms of its effect, participants described both how it was a release to be able to express things that had been 'stuck' in their head, and how the act of getting it out enabled them to think of ways in which they could support themselves.

Yeah cos its just, its like your just taking away all of that anger and stuff and getting everything and just putting it on to the piece of paper, so its just out of your head and then you don't have to keep it locked up in your head ... it makes you feel more calmer and a bit more like free kind of thing so it doesn't have to keep holding you down and knocking you down (15)

Theme 3.3 'Sharing and receiving advice' - Generic processes

A number of the processes which participants described as being helpful were not specific to compassionate mind training; instead they were more generic processes such as being part of a group where feelings and problems were shared and discussed. In particular the opportunity to 'express oneself', to share problems and to receive advice on them from peers seemed important both in providing other perspectives and making participants feel less alone.

Because you were expressing how you felt, what happened to you, letting other people know that it has happened and then the advice that was given back felt pretty good. (11)

Others described how the very nature of the things that were discussed encouraged them to go away and think through their own difficulties more, even if they were not able to bring them to the group.

It helps a lot and, and, it, I don't know it just helps me, when I, after, when, when the thing has, the session has finished, it just helps me think about stuff, and it helps, yeah. (1)

A small number of participants also commented on pre-intervention processes which they felt had contributed to change. Several of those who had had risk assessments commented on the how this had resulted in them implementing some changes. Others commented on how the questionnaires they had completed at the very beginning of the study made them stop and think about how they managed difficulties and how they talked to themselves.

It sort of helped because when I met you the second time I started telling you my problems ... it really helped because I started telling you my problems, and you had this group and we had to do a questionnaire and then we stated having this group and it really helped. (1)

Discussion

Overall the results from this study indicate that participants found the intervention acceptable and that the concepts involved were meaningful to them. Results for the whole sample showed improvements in social comparison and submissive behaviour over the intervention period but not over baseline. Additionally results for an at-risk sub-sample showed improvements in depression and self-criticism although these changes were also evident over baseline. Qualitative results showed changes in additional areas such as anger and self-reassurance.

Acceptability of the intervention

Around 50% of participants offered the intervention in this study declined to take part. Take-up has varied for previous depression prevention studies, but rates of around 50% are common (e.g. Clarke et al., 1995; Lamb et al., 1998; Young et al., 2006; Sheffield et al., 2006). Many of the participants in this study described an initial ambivalence about joining and whilst their reasons for hesitation may have differed from those who did not participate, they provide some cause for deliberation. Participants described being unsure about what the intervention was, being concerned about other competing demands such as schoolwork and worried that the group was only for 'people with something wrong with them'. Three previous prevention studies for at-risk adolescents have reported data on reasons for non-participation (Clarke et al., 1995; Gillham et al., 2006; Young et al., 2006) and these are broadly in keeping with the data presented here.

Stigma and labelling have been cited as one of the main disadvantages of preventive interventions that target at-risk individuals (Offord, Kramer, Kazdin, Jensen and Harrington, 1998). Participants in this study raised some concerns about this but only a few described it as being more than a minor problem. They described the name of the group being one of the major reasons for feeling stigmatised and encouragingly most described the feeling as subsiding once they had met others in the group.

Qualitative data indicated that by and large those who did take part found the experience of being in the group a positive one. They described finding the key components of CMT meaningful and reported being able to use skills outside the group. Individuals varied in how they found the process of learning the skills, with some

picking them up immediately whilst others found them challenging and even frightening at first. This is in keeping with Gilbert and Iron's (2005) proposition that people's threat and soothing systems may be differentially developed. Despite this, all bar one of the participants interviewed reported that they would recommend the group to other young people their age.

Effectiveness of the intervention

For the whole sample, only submissive behaviour and social comparison improved over the intervention period. For the at-risk sub-sample, results were more promising with depression, self-criticism, submissive behaviour and social comparison all improving over the intervention period, although there was no significant change for either self-reassurance or self-esteem.

There was, however, a significant improvement in many variables over the baseline period. There are several ways in which this might be interpreted. The changes over baseline may reflect a process of ongoing change and any changes over the intervention period might therefore be attributable to this rather than to any efficacy of the intervention itself. Alternatively the changes might result from anticipatory effects as participants knew they would receive the intervention, or it could be that the questionnaires, which participants completed at baseline, were a form of intervention themselves. It could also be that interfering events contributed to the change: wave two participants filled in their Time 1 and Time 2 questionnaires before and after the summer holidays and this may have affected how they were feeling. Finally those who had a risk assessment during the baseline period seemed to have improved the most, suggesting that the change in these individuals might account for the overall change

over the baseline period. Analysis of the sample excluding those who had received a risk assessment partially supported this interpretation. It seems likely that the risk-assessments were in themselves an effective intervention, which is consistent with Eggert et al.'s (1995) finding of improvements in a similar 'assessment only' condition.

Reliable change analyses of depression symptoms in the at-risk group indicated that only three of the 21 participants showed reliable improvement and two showed deterioration. Examination of clinically significant change gave a more positive picture, with nine showing improvement and three deterioration. However, interpretation of these results without a control group is difficult since we do not know what proportion of individuals would have improved or deteriorated without any intervention.

Follow-up analysis showed that changes in submissive behaviour were maintained at follow-up and a trend for changes in social comparison to be maintained. No other changes were maintained, suggesting that some of the positive effects of the intervention washed out rather quickly. The reasons for this are not immediately clear, especially given that participants described using the skills outside the group and anticipated continuing using them well into the future. It may be that the dosage of the intervention was insufficient to result in long term change. Gilbert and Proctor's (2006) investigation of group CMT in adults involved twelve two-hour sessions compared to the ten one-hour sessions used in this study. However, they did not report follow-up data and it is unclear whether their effects would have been maintained either. Alternatively, the lack of follow-up effects in this study may be related to the reduced sample size at this point and a lack of power to detect relevant effects. The lack of a control group also makes these results difficult to interpret: previous research has

suggested that where no intervention is given depressive symptoms may actually rise in at-risk groups. Interventions may prevent this rise, even if they do not reduce symptoms per se. (Possel, Horn, Groen & Hautzinger 2004).

Whilst social comparison and submissive behaviour were not the main outcome variables of interest, changes in these measures were the most consistent and the only changes maintained at follow-up. Negative social comparison and submissive behaviour are both social behaviours associated with shame, and improvements in them indicate reductions in shame. CMT sees shame as the emotional state associated with self-criticism; thus it is possible that these changes are a result of a different relationship with the self. It is also possible, however, that changes are the result of more generic group processes such as participants discovering they are not alone in experiencing problems and the formation of supportive relationships.

Participants' Views of Change

Almost all of the participants who were interviewed described feeling that the group had resulted in significant changes for them. The range of changes described was broad and included areas that were not measured quantitatively such as reduced anger and improved relationships with others. Whilst a few participants were unsure about the causes of the changes, most of them attributed them to the intervention.

In some areas there were no changes evident in the quantitative measures and yet participants spontaneously described changes in them in the interviews. For example, many participants described being able to calm themselves down and reassure themselves more effectively whereas there were no quantitative changes for any groups on self-reassurance. It may be that the quantitative measures used did not capture the

relevant changes. The questionnaire used to measure self-reassurance has previously only been used in adults and whilst it was anticipated that adolescents would be able to complete it, anecdotally they found this difficult. Perhaps this measure does not tap the particular developmental aspects of self-reassurance relevant to adolescents. Alternatively it may be that self-reassurance takes longer to develop for adolescents as a whole, and that the changes described by some participants were not sufficient to make a significant difference on the quantitative measure.

When describing what they had found useful participants spontaneously referred to both specific components of CMT and to more generic group processes. Four main components of CMT were highlighted: psycho-education around the three key emotion systems; externalising the bully; relaxation and imagery and compassionate letter writing. In terms of more generic processes participants described how being able to express their own feelings, hearing about other people's difficulties and receiving advice from their peers were all helpful.

Limitations

The current study had a number of limitations. All participants were girls and from a narrow age range (14-15 years). Previous studies have shown that some interventions have differential effects by gender (e.g. Gillham et al., 2006 b) and developmental theories would also suggest that effects are likely to vary with age. The acceptability and effectiveness of this approach for boys or younger participants is not yet clear and would warrant further investigation.

All groups were run by a trainee clinical psychologist who whilst trained in CMT was inexperienced in the approach. Furthermore, due to limited resources all

groups were run by just one facilitator. Both of these factors may have limited the effectiveness of the intervention.

It is of note that the qualitative data seem to paint a more positive picture than the quantitative data and the reasons for this should be considered. Qualitative interviews were conducted by the researcher who ran the groups and by the time of the interview participants had established a relationship with her. It may be that participants wished to please the researcher and thus gave more positive responses. However, participants were able to comment on negative aspects of the group and they often described changes the researcher had not anticipated; thus this is unlikely to be the full explanation.

Unanticipated difficulties with recruitment will also have affected the study's power to detect effects. The sample size of at-risk participants fell just below the number indicated by the power calculation, and since this was based on anticipated large effect sizes the study was unlikely to have been able to detect any smaller effects. The wait-list design meant that anticipation effects and interfering events may have influenced baseline measurements and that there was no comparison group for follow-up measures.

Conclusions and future directions

The adolescent brain is still undergoing development, in particular in the frontal lobes (Spear, 2000; cited in Evans & Seligman 2005) and as such we cannot assume that adult interventions will automatically work for this age group. This study indicates that cognitive development in adolescence is sufficient for the concepts involved to be meaningful to this age-group. CMT aims to develop specific neurological pathways

relating to the soothing emotion system. The on-going process of synaptic pruning means that neural circuitry is still more plastic at this age than in adulthood (Evans & Seligman 2005), and as such adolescence may be an ideal time for such an intervention.

There is evidence that those with high self-criticism do not respond as well to Cognitive Behavioural Therapy (Rector et al., 2000), which is the most frequently used approach to both prevention and treatment of depression, and there is evidence that high self-criticism can both pre-date and be associated with psychopathology (e.g. Murphy et al., 2000). CMT may provide an approach, which can build on traditional cognitive-behavioural interventions, to help individuals with high self-criticism. This study indicates that the approach may well be relevant to the adolescent age group and further research into its effectiveness both in the treatment and prevention of depression for this group is merited.

References

Andrews, G. (2001). Should depression be managed as a chronic disease? *British Medical Journal, 322,* 419-421.

Andrews, G., Szabo, M., & Burns, J. (2002). Preventing major depression in young people. *British Journal of Psychiatry, 181,* 460-462.

Avenevoli, S. & Merikangas, K. R. (2006). Implications of high-risk family studies for prevention of depression. *American Journal of Preventive Medicine, 31,* S126-S135.

Barrera, M. (2006). Directions for expanding the prevention of depression in children and adolescents. *American Journal of Preventive Medicine, 31,* S182-S183.

Beardslee, W. R., Salt, P., Porterfield, K., Rothnerg, P. C., Van de Velde, P., Swatling, S. et al. (1993). Comparison of preventive interventions fro families with parental affective disorder. *Journal of the American Academy of Child and Adolescent Psychiatry, 32,* 254-263.

Beardslee, W. R., VErsgae, E. R., Wright, E. J., Salt, P., Rothberg, P. C., Drezner, K. et al. (1997). Examination of preventive interventions for families with depression: Evidence of change. *Development and Psychopathology, 9,* 109-130.

Bebbington, P. (2004). The Classification and Epidemiology of Unipolar Depression. In M.Powers (Ed.), *Mood Disorders: A Handbook of Science and Practice* (pp. 3-20). Chichester: John Wiley & Sons Ltd.

Beck, A. T., Ward, C. H., Mendleson, M., Mock,. J., &. Erbaugh. J. (1961). An Inventory for Measuring Depression. *Archives of General Psychiatry, 31,* 319-325.

Birmaher, B., Ryan, N. D., Williamson, D. E., Brent, D. A., Kaufman, J., Dahl, R. E. et al. (1996). Childhood and Adolescent Depression 1: A Review of The Past 10 Years. *Journal of the American Academy of Child and Adolescent Psychiatry, 35,* 1427-1439.

Bowey, L. &. M. A. (2006). The Youth Crime Reduction Video Project: An Evaluation of a Pilot Intervention Targeting Young People at Risk of Crime and Social Exclusion. *Howard Journal of Criminal Justice, 45,* 268-283.

Bownds, D. (1999). *The Biology of the Mind.* Bethesda: Fitzgerald Press.

Braun, V. & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative research in Psychology, 3,* 77-101.

Brewin, C. R. & Firth-Cozens, J. (1997). Dependency and Self-Criticism as Predictors of Depression in Young Doctors. *Journal of Occupational Health Psychology, 2,* 242-246.

Brewin, C. R. & Firth-Cozens, J. (1997). Dependency and Self-Criticism as predictors of depression in young doctors. *Journal of Occupational Health Psychology, 2,* 242-246.

Burns, D. D. (1980). *Feeling good: the new mood therapy.* New York: William Morrow & Co.

Burton, S. (2004). Self-esteem groups for secondary pupils with dyslexia. *Educational Psychology in Practice, 20,* 55-73.

Butler, L., Mietzitis, S., Friedman, R., & Cole, E. (1980). The Effect of Two School-Based Intervention Programs in Depressive Symptoms in Preadolescents. *American Educational Research Journal, 17,* 111-119.

Carr, A. (2006). Mood Problems. In A.Carr (Ed.), *The handbook of child and adolescent clinical psychology* (2nd ed., Hove: Routledge.

Clarke, G. N., Hawkins, W., Murphy, M., Sheeber, L. B., Lewinsohn, P. M., & Seeley, J. R. (1995). Targeted prevention of unipolar depressive disorder in an at-risk sample of high school adolescents: a randomised trial of a group cognitive intervention. *Journal of the American Academy of Child and Adolescent Psychiatry, 34,* 312-321.

Clarke, G. N., Hornbrook, M., Lynch, F., Polen, M., Gale, J., Beardslee, W. et al. (2001). A randomised trial of a group cognitive intervention for preventing depression in adolescent offspring of depressed parents. *Archives of General Psychiatry, 58,* 1127-1134.

Cowen, E., Pederson, A., Babigan, H., Izzo, L. C., & Trost, M. A. (1973). Long-term follow-up of early detected vulnerable children. *Journal of Consulting and Clinical Psychology, 41,* 438-446.

DfES. (2005). Primary national strategy. Excellence and enjoyment. Social and Emotional aspects of learning. Guidance Booklet. Nottingham, DfES publications.

DfES. (2007). Secondary national strategy. Social and emotional aspects of learning for secondary schools. Guidance booklet. Nottingham, DfES publications.

Eggert, L. L., Thompson, E. A., & Herting, J. R. (1994). A measure of adolescent potential for suicide (MAPS): development and preliminary findings. *Suicide and Life-Threatening Behavior, 24,* 359-381.

Eggert, L. L., Thompson, E. A., Herting, J. R., & Nicholas, L. J. (1995). Reducing suicide potential among high-risk youth: tests of a school-based prevention program. *Suicide and Life-Threatening Behavior, 25,* 276-296.

Essau, C. A. (2004). Primary prevention of depression. In D.J.A.Dozois & K. S. Dobson (Eds.), *The prevention of anxiety and depression. Theory, research and practice* (pp. 185-204). Washington, DC: American Psychological Association.

Evans, D. L., Beardslee, W., Bierderman, J., Brent, D. A., Charney, D., Coyle, J. et al. (2005). Defining depression and Bipolar Disorder. In L.E.Evans, E. B. Foa, H. Hendin, C. P. O'Brien, M. E. P. Seligman, & B. T. Walsh (Eds.), *Treating and preventing adolescent mental health disorders: What we know and what we don't know.* (pp. 3-28). New York: Oxford University Press.

Evans, D. L. & Seligman, M. E. P. (2005). Introduction. In D.L.Evans, E. B. Foa, R. E. Gur, H. Hendin, C. P. O'Brien, M. E. P. Seligman, & B. T. Walsh (Eds.), *Treating and preventing adolescent mental health disorders: what we know and what we don't know* (pp. xxv-xl). New York: Oxford University Press.

Evans, D. L., Beardslee, W., Bierderman, J., Brent, D. A., Charney, D., Coyle, J. et al. (2005). Treatment of Depression and Bipolar Disorder. In D.L.Evans, E. B. Foa, R. E. Gur, H. Hendin, C. P. O'Brien, M. E. P. Seligman, & B. T. Walsh (Eds.), *Treating and preventing adolescent mental health disorders: what we know and what we don't know* (pp. 29-54). New York: Oxford University Press.

Fergusson, D. M., Horwood, L. J., Riddler, E. M., & Beautrais, A. L. (2005). Subthreshold depression in adolescence and mental health outcomes in adulthood. *Archives of General Psychiatry, 62,* 66-72.

Friedberg, R. D., McClure, J. M., Wilding, L., Goldman, M. L., Long, M. P., Anderson, L. et al. (2003). A cognitive-behavioral skills training group for children

experiencing anxious and depressive symptoms: a clinical report with accompanying descriptive data. *Journal of Contemporary Psychotherapy, 33,* 157-175.

Garber, J. (2006). Depression in children and adolescents: Linking risk research and prevention. *American Journal of Preventive Medicine, 31,* S104-S125.

Gilbert, P., Clake, M., Hempel, S., Miles, J. N. V., & Irons, C. (2004). Criticising and Reassuring Oneself: An Exploration of Forms, Styles and Reasons in Female Students. *British Journal of Clinical Psychology, 43,* 31-50.

Gilbert, P. & Irons, C. (2004). A pilot exploration of the use of compassionate images in a group of self-critical people. *Memory, 12,* 507-516.

Gilbert, P. & Irons, C. (2005). Focused therapies and compassionate mind training for shame and self-attacking. In P.Gilbert (Ed.), *Compassion: Conceptualisations, Research and Use in Psychotherapy* (pp. 263-325). London: Routledge.

Gilbert, P. (2005). Compassion and Cruelty - A biopsychosocial approach. In P.Gilbert (Ed.), *Compassion: conceptualisations, research and use in psychotherapy* (pp. 9-74). London: Routledge.

Gilbert, P. & Procter, S. (2006). Compassionate Mind Training for people with high shame and self-criticism: Overview and pilot study of a group therapy approch. *Clincal Psychology and Psychotherapy, 13,* 353-379.

Gillham, J. E., Reivich, K. J., Jaycox, L. H., & Seligman, M. E. P. (1995). Prevention of depressive symptoms in schoolchildren: Two-year follow-up. *Psychological Science, 6,* 343-351.

Gillham, J. E. & Reivich, K. J. (1999). Prevention of depressive symptoms in schoolchildren: A research update. *Psychological Science, 10,* 461-462.

Gillham, J. E., Shatte, A., & Freres, D. R. (2000). Preventing depression: A review of cognitive-behavioural and family interventions. *Applied and Preventive Psychology, 9,* 63-88.

Gillham, J. E., Reivich, K. J., Freres, D. R., Lascher, M., Litzinger, S., Shatte, A. et al. (2006). School-based prevention of depression and anxiety symptoms in early adolescence: a pilot of a parent intervention component. *School Psychology Quarterly, 21,* 323-348.

Gillham, J. E., Hamilton, J., Freres, D. R., Patton, K., & Gallop, R. (2006). Preventing depression among early adolescents in the primary care setting: A randomized controlled study of the penn resiliency program. *Journal of Abnormal Child Psychology, 34,* 203-219.

Gladstone, T. R. G. & Beardslee, W. R. (2000). The prevention of depression in at-risk adolescents: current and future directions. *Journal of Cognitive Psychotherapy, 14,* 9-23.

Gotlib, I. H. & Hammen, C. L. (1992). *Psychological aspects of depression: Toward a cognive-interpersonal integration.* Chichester: Wiley.

Gotlib, I. H., Lewinsohn, P. M., & Seeley, J. R. (1995). Symptoms versus a diagnosis of depression: differences in psychosocial functioning. *Journal of Consulting and Clinical Psychology, 63,* 90-100.

Hankin, B. L., Abramson, L. Y., Moffit, T. E., Silva, P. A., McGee, R., & Angell, K. E. (1998). Development of depression from pre-adolescence to young

adulthood: Emerging gender differences in a ten year longitudinal study. *Journal of Abnormal Psychology, 107,* 128-140.

Harrington, R. & Clark, A. (1998). Prevention and early intervention for depression in adolescence and early adult life. *European Archives of Psychiatry and Clinical Neuroscience, 248,* 32-45.

Hawton, K., Rodham, K., Evans, E., & Weatherall, R. (2002). Deliberate self harm in adoesecents: Self report survey in schools in England. *British Medical Journal, 325,* 1211.

Hobbs, G. & Vignoles, A. (2007). *Is Free School Meals status a valid proxy for Socio-Economic Status (in schools research)?* London: Centre for the Economics of Education, London School of Economics.

Horowitz, J. L. & Garber, J. (2006). The prevention of depressive symptoms in children and adolescents: a meta-analytic review. *Journal of Consulting and Clinical Psychology, 74,* 401-415.

Howell, D. (2001). *Statistical Methods for Psychology.* (5th ed.) England: Wadsworth Publishing Company.

Ingram, R. E., Odom, M., & Mitchusson, T. (2004). Secondary prevention of depression: risk, vulnerability and intervention. In D.J.A.Dozois & K. S. Dobson (Eds.), *The prevention of anxiety and depression. Theory, research and practice* (pp. 205-231). Washington, DC: American Psychological Association.

Irons, C. & Gilbert, P. (2005). Parental recall, attachment relating and self-attacking/self-reassurance: Their relationship with depression. *British Journal of Clinical Psychology, 45,* 297-308.

Irons, C. & Gilbert, P. (2006). Parental recall, attachment relating and self-attacking/self re-assurance: Their relationship with depression. *British Journal of Clinical Psychology, 45,* 297-308.

Jacobson, N. S. & Truax, P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology, 59,* 12-19.

Jane-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.

Jarrett, C. (2008). When Therapy Causes Harm. *The Psychologist, 21,* 10-12.

Jaycox, L. H., Reivich, K. J., Gillham, J. E., & Seligman, M. E. P. (1994). Prevention of depressive symptoms in school children. *Behaviour Research and Therapy, 32,* 801-816.

Kessler, R. C., Wai, T. C., Demler, O., & Walters, E. E. (2005). Prevalence, severity and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Surevy Replication. *Archives of General Psychiatry, 62,* 617-627.

King, C. A. & Kirschenbaum, D. S. (1990). An experimental evaluation of a school-based program for children at risk: Wisconsin early intervention. *Journal of Community Psychology, 18,* 167-177.

Kovacs, M. (1985). The Children's Depression Inventory. *Psychopharmacology Bulletin, 21,* 995-998.

Kovacs. M. (2001) Child's Depression Inventory Manual. New York: Muli-Health Systems.

Kowalenko, N., Wignall, A., Rapee, R., Simmons, J., Whitefield, K., & Stonehouse, R. (2002). The ACE program: Working with schools to promote emotional health and prevent depression. *Youth Studies Australia, 21,* 23-30.

Kowalenko, N., Rapee, R., Simmons, J., Wignall, A., Hoge, R., Whitefield, K. et al. (2005). Short-term effectiveness of a schoo-based early intervention program for adolescent depression. *Clincial Child Psychology and Psychiatry, 10,* 493-507.

Ladson-Billings, G. (2006). It's not the culture of poverty, it's the poverty of culture: The problem with teacher education. *Anthropology and Education Quarterly, 37,* 104-109.

Lamb, J. M., Puskar, K. R., Sereika, S. M., & Corcoran, M. (1998). School-based intervention to promote coping in rural teens. *The American Journal of Maternal/Child Nursing, 23,* 187-194.

Lee, D. A. (2005). The Perfect Nurturer: A Model to Develop a Compassionate Mind Within the Context of Cognitive Therapy. In P.Gilbert (Ed.), *Compassion: conceptualisations, research and use in psychotherapy* (pp. 326-351). London: Routledge.

Lewinsohn, P. M., Hops, H., Roberts, R. E., Seeley, J. R., & Andrews, J. A. (1993). Adolescent Psychopathology: I. Prevalence and incidence of depression and other DSM-III-R disroders in high school students. *Journal of Abnormal Psychology, 102,* 133-144.

Lewinsohn, P. M., Roberts, R. E., Seeley, J. R., Rohde, P., Gotlib, I. H., & Hops, H. (1994). Adolescent psychopathology: II. Psychosocial risk factors for depression. *Journal of Abnormal Psychology, 103,* 302-315.

Lewinsohn, P. M., Seeley, J. R., Solomon, A., & Zeiss, A. (2000). Clinical implications of 'subthreshold' depressive symptoms. *Journal of Abnormal Psychology, 109,* 345-351.

Martinovic, Z., Simonovic, P., & Djovic, R. (2006). Preventing depression in adolescents with epilepsy. *Epilepsy and Behavior, 9,* 619-624.

Merry, S., McDowell, H., Hetrick, S., Bir, J., & Muller, N. (2004). Psychological and/or educational interventions for the prevention of depression in children and adolescents (Review). *Cochrane Database of Systematic Reviews, 2004.*

Moore, M. & Carr, A. (2000). Depression and grief. In A.Carr (Ed.), *What works with children and adolescents? A critical review of psychological interventions with children, adolescents and their families* (pp. 203-232). London: Routledge.

Mufson, L., Gallagher, T., Dorta, K. P., & Young, J. F. (2004). A group adaptation of interpersonal psychotherapy for depressed adolescents. *American Journal of Psychotherapy, 58,* 220-237.

Murphy, J. M., Nierenberg, A. A., Monson, R. R., Laird, N. M., Sobol, A. M., & Leighton, A. H. (2002). Self-Disparagement as Feature and Forerunner of Depression: Findings from the Stirling County Study. *Comprehensive Psychiatry, 43,* 13-21.

Murray, C. & Lopez, A. (1996). *The Global Burden of Disease*. Cambridge MA: Harvard University Press.

NICE. (1994). Depression: Management of depression in primary and secondary care. National Insitute for Health and Clinical Excellence.

NICE. (2004). Depression: management of depression in primary and secondary care. National Institute for Health and Clinical Excellence.

NICE. (2005). Depression in children and young people: identification and management in primary, community and secondary care. London, National Institute for Health and Clinical Excellence.

NICE. (2008). Social and emotional well being in primary education. London, National Institute for Health and Clinical Excellence.

Ref Type: Pamphlet

Nolen-Hoeksema, S., Girgus, J. S., & Seligman, M. E. P. (1986). Learned helplessness in children: A longitudinal study of depression, achievement and explantory style. *Journal of Personality and Social Psychology, 51,* 435-442.

Offord, D. R., Chmura Kraemer, H., Kazdin, A. E., Jensen, P. S., & Harrington, R. (1998). Lowering the burden of suffering from child psychiatric disorder: trade-offs among clinical, targeted and universal interventions. *Journal of the American Academy of Child and Adolescent Psychiatry, 37,* 686-694.

Pine, D. S., Cohen, P., Gurely, D., Brook, J., & Ma, Y. (1998). The risk for early-adulthood anxiety and depressive disorders in adolescents with anxiety and depressive disorders. *Archives of General Psychiatry, 55,* 56-64.

Pine, D. S., Cohen, E., Cohen, P., & Brook, J. (1999). Adolescent depressive symptoms as predictors of adult depression: moodiness or mood disorder? *American Journal of Pscyhiatry, 156,* 133-135.

Pope, A. W., McHale, S. M., & Crits-Christoph, P. (1998). *Self-Esteem enhancement with children and adolescents.* New York: Pergamon Press.

Possel, P., Horn, A. B., Groen, G., & Hautzinger, M. (2004). School-based prevention of depressive symptoms in adolescents: A 6-month follow-up. *Journal of the American Academy of Child and Adolescent Psychiatry, 43,* 1003-1010.

Rapee, R., Wignall, A., Sheffield, J., Kowalenko, N., Davis, A., McLoone, J. et al. (2006). Adolescents' reactions to universal and indicated prevention programs for depression: perceived stigma and consumer satisfaction. *Prevention Science, 7,* 167-177.

Rector, N. A., Bagby, R. M., Segal, Z. V., Joffe, R. T., & Levitt, A. (2000). Self-criticism and dependency in depressed patients treated with cognitive therapy or pharmacotherapy. *Cognitive Therapy and Research, 24,* 571-584.

Roberts, C., Kane, R., Thomson, H., Bishop, B., & Hart, B. (2003). The prevention of depressive symptoms in rural school children: a randomized controlled trial. *Journal of Consulting and Clinical Psychology, 71,* 622-628.

Roberts, C., Kane, R., Bishop, B., Matthews, H., & Thomson, H. (2004). The prevention of depressive symptoms in rural school children: A follow-up study. *International Journal of Mental Health Promotion, 6,* 4-16.

Roth, A. & Fonagy, P. (1996). *What works for whom? A critical review of psychotherapy research.* NewYork: The Guilford Press.

Rotheram-Borus, M. J., Lee, M. B., Gwadz, M., & Draimin, B. (2001). An Intervention for parents with AIDS and their adolescent children. *American Journal of Public Health, 91,* 1294-1302.

Saluja, G., Iachan, R., Scheidt, P. C., Overpeck, M. D., Sun, W., & Giedd, J. N. (2004). Prevalence of and risk factors for depressive symptoms among young adolescents. *Archives of Pediatric and Adolescent Medicine, 158,* 760-765.

Sandler, I. N., Ayers, T. S., Wolchik, S. A., Tein, J., Kwok, O., Haine, R. A. et al. (2003). The family bereavement program: efficacy evaluation of a theory-based prevention program for parentally bereaved children and adolescents. *Journal of Consulting and Clinical Psychology, 71,* 587-600.

Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2002). *Mindfulness-Based Cognitive Therapy for Depression: A New Approach to Preventing Relapse.* New York: Guilford Press.

Sheffield, J., Spence, S. H., Rapee, R., Kowalenko, N., Wignall, A., Davis, A. et al. (2006). Evaluation of universal, indicated and combined cognitive-behavioural approaches to the prevention of depression among adolescents. *Journal of Consulting and Clinical Psychology, 74,* 66-79.

Sims, B. E., Nottelman, E., Koretz, D., & Pearson, J. (2006). Prevention of Depression in Children and Adolescents. *American Journal of Preventive Medicine, 31,* S99-S103.

Spear, L. P. (2000). The adolescent brain and age-related behavioural manifestations. *Neuroscience and Biobehavioural Reviews, 24,* 417-463.

Spence, S. H., Sheffield, J. K., & Donovan, C. L. (2003). Preventing adolescent depression: an evaluation of the Problem Solving for Life Program. *Journal of Consulting and Clinical Psychology, 71,* 3-13.

Spence, S. H. & Shortt, A. L. (2007). Research Review: Can we justify the widespread dissemination of universal, school-based interventions for the prevention of depression among children and adolescents? *Journal of Child Psychology and Psychiatry, 48,* 526-542.

Stice, E., Burton, E., Bearman, S. K., & Rohde, P. (2006). Randomized trial of a brief depression prevention program: An elusive search for a psychosocial placebo control condition. *Behaviour Research and Therapy, 45,* 863-876.

Sutton, J. M. (2007). Prevention of depression in youth: a qualitative review and future suggestions. *Clinical Psychology Review, 27,* 552-571.

The Sutton Trust (2005). *Rates of eligibility for free school meals at the top state schools* London: The Sutton Trust.

Thompson, E. A., Eggert, L. L., & Herting, J. R. (2000). Mediating effects of an indicated prevention program for reducing youth depression and suicide risk behaviors. *Suicide and Life-Threatening Behavior, 30,* 252-271.

Wolchik, S. A., West, S. G., Westover, S., Sandler, I. N., Martin, A., Lustig, J. et al. (1993). The children of divorce parenting intervention: Outcome evaluation of an empirically based program. *American Journal of Community Psychology, 21,* 293-331.

Young, J. F., Mufson, L., & Davies, M. (2006). Efficacy of Interpersonal Psychotherapy - Adolescent Skills Training: an indicated preventive intervention for depression. *Journal of Child Psychology and Psychiatry, 47,* 1254-1262.

Yu, D. L. & Seligman, M. E. P. (2002). Preventing depressive symptoms in Chinese children. *Prevention and Treatment, 5.*

Zuroff, D. C., Igreja, I., & Mongrain, M. (1990). Dysfunctional attitudes, dependency and self criticism as predictors of depressive mood states: a 12-month longitudinal study. *Cognitive Therapy and Research, 14,* 315-326.

Zuroff, D. C. & Koestner, R. (1994). Self-Criticism at Age 12: A Longitudinal Study of Adjustment. *Cognitive Therapy and Research, 18,* 367-385.

PART 3: CRITICAL APPRAISAL

Introduction

This paper is a reflection on the process of setting up and conducting the current study. It will consider a number of the issues involved, their possible effects on the results of the study and their implications for future research and clinical work. Four areas in particular will be considered: 1) recruiting and selecting an at-risk group, 2) the process of running the groups, 3) risk assessments and the prevalence of mental health issues in schools and 4) working within an education context.

Recruitment and selecting an at-risk group

The study aimed to investigate the effects of a compassionate mind training (CMT) group for adolescents with elevated depression symptoms. Due to a lack or resources and time, traditional means of recruiting such a group, such as screening large cohorts, were not possible and a more unusual approach was taken. Teachers were asked to identify students with low self-esteem (a term commonly used in education services) on the basis that low self-esteem has been associated with both development of depression (Evans et al., 2005) and with self-criticism (Pope, 1998), the risk factor CMT seeks to address. Some guidelines were issued along with this, highlighting behaviours common in young people with low self-esteem or high self-criticism and outlining the exclusion criteria (e.g. challenging behaviour that would disrupt the smooth running of a group). Although an unusual approach, this is not the first study to use teachers to identify at-risk students. King and Kirschenbaum (1990) used teacher interviews to identify children with aggressive or shy/moody/withdrawn behaviours. However, their study targeted very young children where self-report methods would have been difficult and focused on behaviours rather than internal experiences.

This strategy proved to be problematic for this study in several ways. Firstly, a significant proportion of the participants scored near floor on depression and self-criticism measures and near ceiling on self-reassurance and self-esteem measures. Secondly, despite the exclusion criteria, nearly a third of the first wave of participants had known behaviour problems in school and some had a reputation for bullying and aggressive behaviour.

As discussed in Part 2 of this thesis, participants scoring near floor makes it harder to detect effects of the intervention, particularly with a small sample size. A separate analysis of an at-risk sample was conducted with this in mind, but the sample size here was smaller than recommended by power calculations; also, conducting more analyses increases the possibility of making Type I errors and so is not ideal.

Recruitment of young people with significant behaviour problems had implications for the smooth running of the groups, particularly as I was running them single-handed. From my first meeting with those who had consented to take part, it was clear that behaviour was going to be an issue and would need careful management. The initial strategy was to carefully distribute those with more challenging behaviour across the three intervention groups. This was based on the assumption that they would be easier to manage if kept apart. However, during the first session it became evident that this was not going to work – the within group combination of loud and behaviourally challenging with shy and withdrawn young people seemed to immediately set up a dynamic for bullying and I was concerned that if something was not changed the groups would have a negative impact on those they were particularly designed for.

From then on the majority of the more behaviourally challenging young people (as assessed by school staff) were kept together in one group and only those considered

unlikely to be involved in bullying were placed in the remaining two groups with the quieter participants. This arrangement seemed to work in protecting those vulnerable to bullying and indeed many expressed relief at the changes. It did, however mean that the third group was very challenging to run and it was only when several participants dropped out that I really began to feel that these sessions ran smoothly. Obviously this may have impacted on the effectiveness of the intervention for this particular group.

In the second round of recruitment the guidelines for teachers in nominating students for the group were adapted and more care was taken to exclude those who presented with challenging behaviour. The groups in this wave did not need any re-arranging and ran much more smoothly. It seems important that future studies and programmes give careful consideration to how young people are grouped together and to the impact that group dynamics may have on the effectiveness of an intervention.

It is also of note that many of the participants with challenging behaviour had low depression scores and high self-esteem scores. There is a discourse in the education system that behavioural problems are often the result of low self-esteem (e.g. Ladson-Billings, 2006) and I wonder whether this influenced teachers' choices about who to refer. Certainly teacher judgements about self-esteem were often at odds with participants' own self-report scores. An alternative explanation for this may be that these particular young people took a defensive stance, declaring to see themselves positively, even though this wasn't entirely in fitting with their own experience. Either way, the means for selecting young people for such projects is not straightforward and needs to be carefully thought through. Perhaps in hindsight, the use of the term self-esteem in recruitment for this study was unhelpful. I wonder now if greater transparency about the

kind of young people we wished to target would have been more helpful than trying to frame it in terms more commonly used in schools.

The other issue of recruitment centred around take-up rates amongst those who had been put forward for the intervention. Approximately 50% of young people offered the intervention declined to take part. This is in keeping with many other targeted prevention efforts (e.g. Clarke et al., 1995; Lamb et al., 1998; Sheffield et al., 2006;Young et al., 2006); the reasons behind it however, are worth investigating.

All young people put forward by teachers were invited to a meeting to hear more about the intervention; however, due to absences and lesson clashes some were unable to attend and instead found out about the intervention through participant information sheets and discussions with school staff. For those who did attend the meeting, due to problems with rooms it was held in a dining hall where both acoustics and distractions made it a difficult situation to manage.

Participants reported being initially unsure what the intervention was and who it was meant for and wondered whether that was why some of their peers had opted not to attend. They also felt the school's name for the group ('Self-Esteem Group') was stigmatising and labelling. Almost all reported they were pleased they had attended in the end and I wonder whether better 'marketing' of the intervention could have accessed more young people and whether those who turned it down would have approved of it if they had come.

It was clear that very few participants read their information sheets and perhaps in future the design of these needs to be made more teenager friendly and appealing. I was very impressed by the ideas held by those who took part in the groups and feel that their input could be very helpful in designing information sheets and posters and planning

how to best describe the group in initial meetings so as to reach as many young people as possible.

The process of running the groups

Running the groups in itself was a continual and on-going learning process for me. Despite having run several group interventions in other settings and having extensive experience with adolescents I found myself very much in at the deep end to start with. Whilst my supervisor and I had already worked to adapt the intervention for this age group there were some initial difficulties around language and the kind of real life situations participants were likely to encounter. The majority of the young people were from deprived London boroughs where gangs, knife crime and violence are everyday experiences and their coping mechanisms needed to take this context into account. Much of the development of the group happened 'on the ground' as it were. Participants constantly provided feedback, put things into their own language and made suggestions that resulted in an evolving intervention. At the start of the groups I was very wary of patronising the young people and had a tendency to treat them in a relatively adult manner; however it soon emerged that games, competitions and chocolate were all tools that made the process much easier for me and more enjoyable for participants. By the time of running the second wave of groups I felt much more comfortable with what I was doing and adaptations as we went along tended to be smaller and more personalised. Perhaps the central point here is not only that interventions need to be developed on the ground, but that manualised interventions will need to incorporate sufficient flexibility to allow adaptation to local populations and context.

Running the groups single-handed was the only way in which this project could run, but was by no means ideal. Having co-run young people's groups since then I

realise what a difference a co-facilitator would have made. Having someone else in the room means more feedback and other signals from the young people can be picked up on which could have made behaviour management easier.

Attendance of the groups, particularly in wave one, was disappointing at times. Timings of the group varied from week to week in order to avoid participants missing the same lesson too frequently, and the group was held in different rooms each week, both of which led to some confusion. Participants also had to juggle competing demands. Wave one was run in an exam term and towards the end participants were often not allowed out of class to attend. Wave two participants also missed occasional sessions in order to attend important coursework lessons.

Given public exams and coursework now happen every year from year 9 until year 13 avoiding such clashes may prove challenging. Ideally the intervention would have been run during Personal Social and Health Education lessons. However, this was timetabled differently for pupils in different form classes and was also on different days on alternate weeks, making it impossible for me to attend whilst juggling my own competing demands of clinical placement. Some prevention programmes have now trialled interventions run by school staff who are provided with training and supervision (e.g. Clarke et al., 1995; Roberts et al., 2003) and this might provide a way of integrating them into the school timetable more easily.

Risk assessments and prevalence of mental health issues

Initially we set a relatively high threshold for risk assessments and only young people who marked the item 'I want to kill myself' on the CDI were to be interviewed. No individuals met this threshold in wave one. However, one of the young people who had completed the initial measures went on to take a non-fatal overdose and we

reviewed the threshold in light of this. Criteria were changed such that any young person who marked 'I think about killing myself but I would not do it' on the CDI or scored 'I have become so angry with myself that I want to hurt or injure myself' as 'moderately like me' or above on the FSCRS received a risk assessment interview.

Using these new criteria four wave one participants and five wave two participants (one of whom dropped out before the intervention) received full risk assessments. Two other participants were briefly interviewed but it was immediately evident that they had only made 'normative' fleeting threats to kill themselves during arguments and that there had never been any actual intent. In total four participants had taken previous overdoses, two were currently self-harming, two raised serious current child protection concerns and two were coping with recent family bereavements. Only one of them had had any contact with mental health services. The number of overdoses taken, especially as only one of the participants had been to hospital and two had taken what could have been lethal doses, particularly struck me. Whilst this is a very small sample to draw conclusions from, the implication is that there is a significant population of young people with untreated and risky mental health problems in schools. This is in keeping with previous findings (Hawton, Rodham, Evans & Weatherall, 2002).

Given that only two of ten participants identified using these new criteria did not need a full risk-assessment interview, the change in criteria appears to have been a sensible one. It was also of note that being able to ask participants about specific responses they had made to a questionnaire enabled a conversation to take place about feelings and thoughts that I am not sure they would otherwise have been able to share. Both of these observations are likely to influence my future clinical practice with young people.

The impact of a one off risk assessment for these young people also caught my attention. None of them engaged with mental health services for more than a single session and yet there was an average drop in their CDI scores of 5.3 points. This is well above what is seen to be clinically significant change. Of course, this may have been in part attributable to regression to the mean, or to a desire to score lower next time in order not to be interviewed again. However, anecdotally many of these young people described making significant changes in their lives as a result of the one off conversation we had. This certainly implies that even a minimal amount of support can make a significant difference to young people when difficulties are caught early on. The question of how to increase the chances of young people receiving appropriate support early on is not a straightforward one and is one that is receiving increasing attention (see below for recent NICE guidelines); what my experiences in this study suggest though, is that even very short term interventions can be extremely helpful.

Working in a school context

Finding a school that was interested in the project was more difficult than I at first expected. My experiences of working as a learning mentor in education meant that I had contacts in several London Boroughs but only one of the five schools initially approached showed any interest in taking part. This may have been because it was a research project and a proven intervention may have been met with more enthusiasm, but I think it also reflects the fact that schools are flooded with targets and demands, and mental health and well-being projects, particularly those that are on-going rather than a one off event, fall very low on their agenda.

The reciprocal impact of joint working

It seemed that the context of having a psychologist in school (although only for a few hours a week) had a reciprocal impact both on the school and myself. To start with it was clear that there is a language barrier between education and mental health services and it was only as a result of several misunderstandings that we became familiar with how we each used the same words to mean different things and gained a better understanding of each other. With time, however, a strong collaborative relationship was built between myself and the staff in the mentoring and behaviour support unit, who were facilitating my presence in school.

In terms of the effects on the school, staff were very curious about the project and several came and watched sessions to get a better feel for what I was doing. They were also interested in the means used to measure the effects of the programme and to get feedback on how useful it had been. In some ways though, I think the greatest influence was through more informal discussions. I often spent break time or lunch time with staff from the mentoring and behaviour unit and they would regularly ask for my thoughts or ideas on particular pupils they were working with. They appreciated this additional perspective and asked about relevant courses and training programmes where they could develop knowledge of particular ways of working.

For me, despite having worked in inner city schools previously, I don't think I had fully appreciated the extent of challenging behaviour which staff have to manage without any psychological training. Some of the young people whom staff discussed with me had very difficult histories and complex current problems and yet had either never been referred to mental health services or had disengaged with them. Whilst schools do receive educational psychology input this resource is limited and focused on

under-achieving young people. I came away from this project with an overwhelming sense that Child and Adolescent Mental Health Services (CAMHS) need much better links with schools and that there would be a mutual benefit to members of CAMHS teams working within schools regularly. This does happen in some areas but seems to vary between boroughs and is not consistent. The school I worked in had an extremely bad reputation within the local CAMHS because of the types of referrals they were receiving, and yet I was thoroughly impressed by the dedication, openness and approachability of the staff with whom I worked. Feeding my thoughts back to the CAMHS team has provided them with an additional viewpoint, which may facilitate joint work in future.

These thoughts are in keeping with recent NICE guidelines on depression in young people (NICE, 2005) and on social and emotional well-being in primary education (NICE, 2008). The depression guidelines recommend that all CAMHS and Primary Care Trusts should consider introducing primary mental health workers or link workers into secondary schools, and both sets of guidelines emphasise the need for close links between schools, local authority children services and CAMHS teams to create a stepped care approach to preventing and managing mental health problems. These guidelines along with the recently published Social and Emotional Aspects of Learning Curriculum (SEAL, DfES 2005; 2007) are increasing the emphasis being placed on children's and young people's social and emotional well-being in schools; however, my experiences in running this project suggest that there is still a lot of work to be done to develop on this.

Conclusions

Despite initial teething problems, my experience of working with schools in this project was a very positive one and the experiences throughout have developed my thinking on both the prevention and treatment of child and adolescent mental health problems.

The amount of change participants described as occurring for them as a result of taking part in the study was very encouraging and the impact they felt it had on their lives has really led me to give more value to preventative interventions and to be determined to work to increase their availability. I am also aware, though, that provision of such programmes is not a straightforward issue and that more research is needed, not only into the effectiveness of different programmes, but also into how we can best identify who would benefit from them and make the programmes as appealing as possible to these groups.

The project also made me think a great deal about how mental health services in general can be made more available, accessible and approachable to young people. Schools are the one service that have regular contact with the great majority of under 16s and it seems that developing better links with them and considering offering services on their premises may be one way forward. I was also very taken by the ability of the young people in the study to share their thoughts on how to improve my intervention and would be interested in elucidating the thoughts of young people more generally on how and where mental health services might best be offered.

References

Clarke, G. N., Hawkins, W., Murphy, M., Sheeber, L. B., Lewinsohn, P. M., & Seeley, J. R. (1995). Targeted prevention of unipolar depressive disorder in an at-risk sample of high school adolescents: a randomised trial of a group cognitive intervention. *Journal of the American Academy of Child and Adolescent Psychiatry, 34,* 312-321.

DfES. (2005). Primary national strategy. Excellence and enjoyment. Social and Emotional aspects of learning. Guidance Booklet. Nottingham, DfES publications. Ref Type: Pamphlet

DfES. (2007). Secondary national strategy. Social and emotional aspects of learning for secondary schools. Guidance booklet. Nottingham, DfES publications. Ref Type: Pamphlet

Evans, D. L., Beardslee, W., Bierderman, J., Brent, D. A., Charney, D., Coyle, J. et al. (2005). Defining depression and Bipolar Disorder. In L.E.Evans, E. B. Foa, H. Hendin, C. P. O'Brien, M. E. P. Seligman, & B. T. Walsh (Eds.), *Treating and preventing adolescent mental health disorders: What we know and what we don't know.* (pp. 3-28). New York: Oxford University Press.

Hawton, K., Rodham, K., Evans, E., & Weatherall, R. (2002). Deliberate self harm in adoesecents: Self report survey in schools in England. *British Medical Journal, 325,* 1211.

King, C. A. & Kirschenbaum, D. S. (1990). An experimental evaluation of a school-based program for children at risk: Wisconsin early intervention. *Journal of Community Psychology, 18,* 167-177.

Ladson-Billings, G. (2006). It's not the culture of poverty, it's the poverty of culture: The problem with teacher education. *Anthropology and Education Quarterly, 37,* 104-109.

Lamb, J. M., Puskar, K. R., Sereika, S. M., & Corcoran, M. (1998). School-based intervention to promote coping in rural teens. *The American Journal of Maternal/Child Nursing, 23,* 187-194.

NICE. (2005). Depression in children and young people: identification and management in primary, community and secondary care. London, National Institute for Health and Clinical Excellence.

NICE. (2008). Social and emotional well being in primary education. London, National Institute for Health and Clinical Excellence.

Pope, A. W., McHale, S. M., & Crits-Christoph, P. (1998). *Self-Esteem enhancement with children and adolescents.* New York: Pergamon Press.

Roberts, C., Kane, R., Thomson, H., Bishop, B., & Hart, B. (2003). The prevention of depressive symptoms in rural school children: a randomized controlled trial. *Journal of Consulting and Clinical Psychology, 71,* 622-628.

Sheffield, J., Spence, S. H., Rapee, R., Kowalenko, N., Wignall, A., Davis, A. et al. (2006). Evaluation of universal, indicated and combined cognitive-behavioural approaches to the prevention of depression among adolescents. *Journal of Consulting and Clinical Psychology, 74,* 66-79.

Young, J. F., Mufson, L., & Davies, M. (2006). Efficacy of Interpersonal Psychotherapy - Adolescent Skills Training: an indicated preventive intervention for depression. *Journal of Child Psychology and Psychiatry, 47,* 1254-1262.

Appendices

1. Copy of ethics approval
2. Information sheets and consent forms
    - 2a. Participant information sheet
    - 2b. Parent/Guardian information sheet
    - 3a. Participant consent form
    - 3b. Parent/Guardian consent form
3. Guidelines for identifying pupils
4. Weekly session plans for intervention
5. Measures
    - 5a. Children's Depression Inventory
    - 5b. 5 Scale Test of Self-Esteem for Children
    - 5c. Forms of Self-Criticising/Attacking and Self-Reassuring Scale
    - 5d. Adolescent Social Comparison Scale Revised
    - 5e. Adolescent Submissive Behaviour Scale
6. Semi-structured interview schedule
7. Extracts of qualitative analysis
    - 7a. Initial list of codes for thematic analysis
    - 7b. Annotated transcript
8. Attrition analysis

Appendix 1: Copy of Ethics Approval

Dr Deborah Lee
Sub-Department of Clinical Health Psychology
UCL
Gower Street

08 January 2007

Dear Dr Lee

Re: Notification of Ethical Approval
Project ID/Title: 0824/001: Compassionate Mind Training in Adolescents: A Pilot Study

I am pleased to confirm that following your satisfactory response to the Committee's remarks, I am pleased to confirm that your application has been given ethical approval for the duration of the research.

Approval is subject to the following conditions:

1. You must seek Chair's approval for proposed amendments to the research for which this approval has been given. Ethical approval is specific to this project and must not be treated as applicable to research of a similar nature. Each research project is reviewed separately and if there are significant changes to the research protocol you should seek confirmation of continued ethical approval by completing the 'Amendment Approval Request Form'.

The form identified above can be accessed by logging on to the ethics website homepage: http://www.grad.ucl.ac.uk/ethics/ and clicking on the button marked 'Responsibilities Following Approval'.

2. It is your responsibility to report to the Committee any unanticipated problems or adverse events involving risks to participants or others. Both non-serious and serious adverse events must be reported.

   Reporting Non-Serious Adverse Events.
   For non-serious adverse events you will need to inform Ethics Committee Administrator ( ), within ten days of an adverse incident occurring and provide a full written report that should include any amendments to the participant information sheet and study protocol. The Chair or Vice-Chair of the Ethics Committee will confirm that the incident is non-serious and report to the Committee at the next meeting. The final view of the Committee will be communicated to you.

   Reporting Serious Adverse Events
   The Ethics Committee should be notified of all serious adverse events via the Ethics Committee Administrator immediately the incident occurs. Where the adverse incident is unexpected and serious, the Chair or Vice-Chair will decide whether the study should be terminated pending the opinion of an independent expert. The adverse event will be considered at the next Committee meeting and a decision will be made on the need to change the information leaflet and/or study protocol.

On completion of the research you must submit a brief report (a maximum of two sides of A4) of your findings/concluding comments to the Committee, which includes in particular issues relating to the ethical implications of the research.

Yours sincerely

Chair of the UCL Research Ethics Committee

Cc: Fiona McFarlane

Appendix 2: Participant Information Sheets and Consent Forms

2a: Participant Information Sheet

Information Sheet for Participants in Research Studies

You will be given a copy of this information sheet to keep.

Title of Project: **Can Groups Help Adolescents Gain Confidence?**

This study has been approved by the UCL Research Ethics Committee [Project ID Number]: 0824/001

Name, Address and Contact Details of Investigators:

Fiona McFarlane (Trainee Clinical Psychologist)
Sub Department of Clinical Health Psychology
UCL,

find out how things are for you at the moment. For example we might ask how you feel about yourself compared to others, how you rate your confidence or how happy you are.

We will then get you to fill in the questionnaires again just before the group starts. We do this because at your age a lot of things are changing pretty quickly, and we want to get an idea of how much things change without us doing anything.

When the group is finished we'll ask you to fill in the same questionnaires again so we can see whether it has helped. We'll also ask some people to take part in an interview with the researcher so she can find out more about what you thought of the group. These interviews will be taped, but only the researcher would listen to them. Three months later we'll ask you to fill in the questionnaires a final time. This helps us to see if anything has changed since the group finished.

What are the risks and benefits of taking part?

Sometimes we may talk about things which may upset you such as bullying, family difficulties or school stress. However, we have found that by the end of the group most people feel better.

The researcher will be able to support and encourage the whole group. She will always try to help you to feel better before you leave the sessions.

We can't promise what the group will do for you – this is why we need to do the research. We hope that by the end of the group it will have helped you to feel more confident.

What will happen to the results?

We hope to publish the results in a scientific journal, so that other people will know whether or not this group works. We will not put any of your names in the report, and you will get a chance to hear about the results before we publish it.

What if I have a concern or problem?

If you are unhappy with anything during the project you should first talk to Fiona McFarlane, the researcher. If you are still unhappy after this you can talk to the Chair of the UCL Research Ethics Committee, (email: or ring).

What now?
If you have any questions please ask the researcher, either when she comes into your school or using the contact details above. You might also want to discuss this with your friends or family.
Remember you do not have to take part, and even if you do, you can stop at any time and you don't have to tell us why if you don't want to.

If you do want to take part, we will ask you to sign a consent form and we will also need a parent or guardian to sign one too.

Thank you for reading this.

2b: Parent/Guardian Information Sheet

Information Sheet for Parent/Guardian

You will be given a copy of this information sheet.

Title of Project: **Can Groups Help Adolescents Gain Confidence?**

This study has been approved by the UCL Research Ethics Committee [Project ID Number]: 0824/001

Name, Address and Contact Details of Investigators:

Fiona McFarlane (Trainee Clinical Psychologist)
Sub Department of Clinical Health Psychology
UCL,

Supervised by: Dr. Deborah Lee and Dr. Pasco Fearon (Clinical Psychologists at UCL)

Your child is being invited to take part in a research project that is taking place in their school. We are trying to find out whether taking part in our groups improves self-esteem and confidence in adolescents.

This sheet explains why the research is being done and what your child would be asked to do, so that you can decide whether or not you would like them to take part. Thank you for reading this.

Details of Study

What is this study about?
Adolescence can be a difficult time for young people. This research project is looking at how well adolescents respond to a technique called Compassionate Mind Training, which has been shown to improve how adults feel about themselves. We want to see whether it helps adolescents too.

What is Compassionate Mind Training (CMT)?
CMT is a type of group work. It involves discussions, role-plays and exercises. It is a chance to look at the way we think about ourselves and how this could be different.

Why has my child been asked to take part?
Your child's school was asked to identify individuals who might benefit from the group. Approximately 30 children from year 10 were identified by the school as children who might benefit from some support in building their confidence.

Does my child have to take part?
No, nobody has to take part in research, it is up to you and your child. Even if they do agree to take part, they are free to drop out at any time and do not need to give us a reason why.

What will happen if we agree to take part?
If you and your child agree to take part, they will attend 10 one-hour sessions during the summer term. These sessions will take place during school time. The actual time of them will rotate each week so that your child does not miss the same lesson two weeks in a row. Your child will also be asked to do some practice after most sessions.

Your child will be asked to complete a number of questionnaires 10 weeks before their group starts. These will give us an idea of how things are for them at that time. For example we might ask how they feel about themselves compared to others, how they rate their confidence or how happy they are. These will be repeated at the beginning and end of the intervention and 3 months after it

has finished to see how much change has taken place and whether the change remains after the group has stopped.

Additionally we will randomly select up to 10 children to discuss with us some of their thoughts on the group and its impact on them. These discussions will be recorded but will only be available to the researcher.

What are the risks of taking part in the study?
We do not expect there to be any risks. However, we do discuss some topics that may be upsetting for some young people. For example discussing bullying or stress might be difficult for some. The researcher leading the group is experienced in supporting children when they are upset and will do her best to make sure they feel better before leaving the session.

What are the benefits of taking part?
We hope that the group will help your child to gain confidence. We also hope it will help us to learn more about how to help children during adolescence.

What happens when the research stops?
Once the study is finished, we will have no further contact with your child. If you have any concerns about them you should discuss these with your child's teacher or GP.

What happens to the information collected?
All the information collected for the research project will be kept confidentially. The results will be coded so that your child's name is not on them. The list of names and codes will be kept carefully and stored away from the questionnaires. All data will be stored in accordance with the Data Protection Act 1998.

In the unlikely event that your child's answers to the questionnaires give us concern about their well-being we will contact both you and their GP. This is so that your child can quickly receive any necessary support.

What will happen to the results?

We hope to publish the results in a scientific journal, so that other people will know whether or not this technique works. We will not put any of the children's names in the report, and you will get a chance to hear about the results before we publish it.

What if my child has a concern or problem?

If you or your child has any concerns you should first speak to the researcher, Fiona McFarlane. She will try her best to resolve them, but if you want to take the matter further you should contact the Chair of the UCL Research Ethics Committee, (email: or tel:).

What now?

If you want to take part...

- Please sign the consent form enclosed and return it to your child's school. You can keep this information sheet.
- You can still withdraw at any time, without giving a reason. Your decision will not affect your child's education in any way.

If you have any more questions...

- Fiona McFarlane will be available in your child's school on ..... and you can speak to her then or contact her on the details given above.

Thank you for reading this.

2c. Young Person Consent Form

Young Person Consent Form

Only complete this if you have decided you want to take part in the research, remember that this is your decision and no-one can tell you that you have to take part.

Title of Project: Can Groups Help Adolescents Gain Confidence?

This study has been approved by the UCL Research Ethics Committee [Project ID Number]: 0824/001

Participant's Statement – *check if you agree with these, and if you do add your name at the top and sign at the bottom.*

I ..... (name)

- have read the information sheet (C1.1) and understand about the study.
- have asked any questions I wanted to.
- understand that I only need to take part if I want to and that I am free to stop at any time, without giving a reason, and that this will not affect how I am treated at school.
- understand that the researcher may want to look at my school records to find out about my attendance or attainment and whether taking part in the project has affected this. I am happy for her to do this.
- understand that the results of the study may be published as a report, but that my name will not be in the report.
- agree to take part in the study.

Signed: Date:

Investigator's Statement

I .....

confirm that I have carefully explained the purpose of the study to the participant and outlined any reasonably foreseeable risks or benefits (where applicable).

Signed: Date:

2d. Parent/Guardian Consent Form

Parent/Carer Consent Form

Only complete this if you are happy for your child to take part in this study.

Title of Project: Can Groups Help Adolescents Gain Confidence?

This study has been approved by the UCL Research Ethics Committee [Project ID Number]: 0824/001

Parent/Carer Statement – *check if you agree with these, and if you do add your name at the top and sign at the bottom.*

I ..... (name)

- Have read the information sheet (P1.1) and understand about the study.
- Have asked any questions I wanted to.
- Understand that my child's participation is voluntary and that they are free to withdraw at any time without giving any reason. I understand that not taking part will not disadvantage them in any way.
- Understand that the researchers may wish to access some of the information the school holds on my child such as their attendance figures and attainment results. I give permission for these individuals to have access to my child's records.
- Understand that the results of the study may be published as a report, but that my child's name will not be in the report.
- Agree for my child to take part in the study.

Signed: Date:

Investigator's Statement

I .....

confirm that I have carefully explained the purpose of the study to the participant and outlined any reasonably foreseeable risks or benefits (where applicable).

Signed: Date:

Appendix 3: Guidelines for Identifying Pupils

Wave One Guidelines:

Identification Criteria for young people who Self-Esteem groups will be most relevant to:

The groups running in the school are particularly relevant to children who are considered to have low self-esteem. We know that you will probably already have ideas of who these children are, but we thought it might be helpful to highlight a number of particular characteristics which may indicate our groups would be helpful for a child. It is often easy to assume that children who act out and disruptive have low self-esteem but we are looking more for those children who have turned their difficulties inwards. Typical characteristics might include several of:

- Very quiet or withdrawn
- Appear to lack confidence in their own abilities, underestimate what they can achieve
- Appear to be very hard on themselves, speak negatively about themselves
- Seem very dejected in response to criticism
- Tend to think that others think negatively of them

Wave two guidelines

Identification Criteria for young people who Self-Esteem groups will be most relevant to:

The groups are likely to most helpful to young people who are 'internalisers' rather than 'externalisers'. Basically 'internalisers' are people who turn their problems inwards rather than outwards. As such we are looking for the kind of young people who present as worried, quiet and depressed rather than those who present as aggressive and bullying. The following indicators might be helpful to consider when identifying them:

- victims of bullying
- seem to give in rather than stand up for themselves
- appear upset or low on a regular basis
- very quiet or withdrawn
- Appear to lack confidence in their own abilities, underestimate what they can achieve
- Appear to be very hard on themselves, speak negatively about themselves

In order to make the group a 'safe place' for such young people we would ask that those who are known for bullying, disrupting groups or aggressive behaviour are NOT referred.

Appendix 4: Weekly Session Plans

CMT Adolescents

Session-by-session plan round 2.

Session 1

- Brief summary about the group – emphasis on it as a research project and our desire to constantly get their feedback on what does and doesn't feel helpful.
- Writing contract – two small groups, then bring it back together again as one. Include practicalities and rewards for turning up on time without being sent for each week!
- Ice-breakers and getting to know eachother:

  Name Discussion – what there name is, what they like to be called, anything they know about their name e.g. who gave them it, what it means, what else they might have been called etc.

  The sun shines on game....
- *If time – go through list of 'things that upset or annoy people our age' – expand and give examples, find out what it is that is particularly upsetting about such events.*

Session 2

- 'Warm-up' activity....

  Snowball – everyone writes one unique thing about themselves on a piece of paper. I read them all out – everyone writes down who they think each one is – prize for person who guesses the most correctly.
- Any feedback on last session or questions from last time
- The Three Circles – spend lots of time discussing and getting them to generate examples of what might put us in each one. (Use TV character examples if they have difficulty generating them themselves).

Threat system Discuss how we feel when we are threatened – what are the functions of these emotions? Examples of when people might feel threatened? Ancientness and strength of this system (NB careful re wording – anything implying evolution was contentious last time!).

Drive system What things get us excited? How do we feel when we are excited? What are the kind of things we do?

Soothing system Different kind of positive emotion to drive and excitement. How do we feel when someone is kind and gentle? What is it like if you feel accepted and valued? The key of this system to happiness. Lack of strength of this system in many people – for many reasons – childhood situation, but also just how society works today –focus on drive.

- Keep notes on our list of things that upset/distress people our age
- Three groups – Each draws outline of a person – on board/ round someone/ on A4 sheet. Each gets one of the three circles. Put in how we feel in this state, but also add a thought bubble and introduce the idea of self-talk.

Session 3

- Warm-up activity

Get into line in order of dates of birth then first letter of middle name (surname if don't have middle name). First one they are allowed to talk (but not to say the months of the year), second one have to do it without using voice.

- Feedback on last time – any questions?
- Re-cap – prize for anyone who can remember what the three circles are!
- The brain diagram bit

Use examples of meal, being with boyfriend/girlfriend vs. imagining being with them, Seeing burglar vs. imagining one post scary film, then link to someone criticising us vs. criticising ourselves, someone soothing us vs. soothing ourselves

- 'Self-criticism' – discussion (if time!)

What is it? Examples. When do people do it? Why do they do it? (NB – link to 3 circles, self-criticism as understandable but having unintended consequences i.e. keeps threat up)

Start sharing examples of when we've criticised ourselves – how does it make us feel?

Session 4

- Warm-up activity

Blanket Stand: Spread out blanket; whole group must get on it so that no appendages are touching the ground off the blanket. If the group completes the 'stand', have them get off the blanket and fold the blanket in half. Repeat above process for as long as possible.

- Feedback on last time, any questions
- Quick re-cap: one of them to do it
- Debate

Two teams – time to brainstorm first, then representative from each team argues case. Once done everyone to join in discussion and questions. One team represents 'self criticism is good', one represents 'self criticism is bad'.

- Discussion re debate... what are the alternatives to self-criticism? Link back to the three circles and consider how we can activate the soothing system.

Session 5

- Warm-up activity - Truth, truth, lie
- Feedback on previous session and things covered to date – do they have questions?
- Role-play

Two teams – one take on role of critic/bully, other takes on role of kind/compassionate other. Give scenario and teams work together to brainstorm ideas of what they might say in their role. Take turns to sit in the middle and 'in-role' to hear what is said by bully/kind other.

Discuss what it is like to be on the receiving end. How does each make us feel? Which is more likely to activate us into acting differently next time?

- Inner Bully -- NB warn them this exercise can be difficult

We've acted out the part of being a bully, now want to think about the part of ourselves that criticises us. Close eyes briefly and try to picture that part – what do we see?
Use Inner Bully Work sheet to record what ours might look like.

Discuss as a group

Homework – notice when bully talks to us throughout the week

Session 6

- Group discussion – what helps when we are upset? Give specific examples or general comments. Develop list.
- Role-play

Scenario –they take on role of individual who is upset. I read out 'kind other' responses. They rate how helpful each one is. At the end they generate together any other helpful responses they can think of.

Discuss together – which were the most helpful responses? What was helpful about them? What different kinds of things are helpful (e.g. understanding, acknowledgement of feelings, suggestion of what to do, caring etc.)

- Kind/compassionate friend

Explain the idea behind this – a way to switch the soothing system on.

Explain how others have found it helpful and read excerpts from examples in the compassion book.

(If time - Start with Building Compassionate Imagery Form – think back to ideas from last exercise to help us think about what kind of person we might want them to be.)

Session 7

- Quick recap for everyone who wasn't here last week – take typed summary of things that help us feel better and helpful things to say
- See if anyone will volunteer a time when they had felt sad or angry this week – the rest of us try and come up with 'kind' things to say that would help them feel better... (if not then use from their friends – or could have them write something down anonymously and gradually work our way through them – or as last resort use role play examples?) discuss with group the best way to do this.
- Building compassionate image form – recap re. what this is about
- Imagery exercise – take easy this time – they choose where to sit then we try evoking image.

Session 8

- Feedback and Questions (NB anyone tried imagery in the week? How did it work for them?
- Discuss any critical thoughts from the week which they want to share
- Go through remaining scenarios from last week – discuss again, using template for helpful responses.
- Repeat compassionate imagery exercise – this time, those who feel ready imagine something they are finding difficult or a critical thought whilst maintaining the image and seeing how they respond.
- Discuss concept of compassionate letter writing – could start just by reading an example?

Session 9

- Feedback and Questions
- Reminder about next week as last session, discuss any issues to do with this.
- Compassionate letter writing
    - Go through example highlighting the point of it, and helpful structure
    - Individually come up with a recent difficult time and write compassionate letter to self regarding this. Me to support and group to share letters at the end if they want to and there is time.

Session 10

- Recap – go through what we've done so far – start with them remembering things and I fill in the gaps
    - 3circles
    - brain diagram
    - advantages/disadvantages of self-criticism (putting yourself down)
    - things that help when we are upset
    - kind of responses which are helpful
    - relaxation exercise
    - compassionate image
    - compassionate letter writing
- Feedback – do on paper and then round in circle:
    - One thing I've like about the group or found helpful is…..
    - One thing I would have liked to be different is….
    - Something I learnt in the group that I might use in the future is….
    - I could remind myself to use this by…..
- One thing people don't know about me quiz
- Negotiate re. certificates (name for group?)
- Timings for questionnaires next week

Appendix 5: Measures

5a: Children's Depression Inventory

5b: 5 Scale Test of Self-Esteem for Children

The Five Scale Test of Self-Esteem for Children

These questions are to help us learn how boys and girls your age feel about different things.

There are no right or wrong answers. Only you know your real feelings. It is important that you answer the way you *really* feel, not how somebody else thinks you should feel.

For each statement in the left-hand column please circle the answer which best describes you in the right hand column.

1. I like most things about myself	I feel this way: Almost Always Sometimes Almost Never
2. I'm disappointed with my school grades	I feel this way: Almost Always Sometimes Almost Never
3. I am too clumsy	I feel this way: Almost Always Sometimes Almost Never
4. I am an important member of my family	I feel this way: Almost Always Sometimes Almost Never
5. I worry about other kids liking me	I feel this way: Almost Always Sometimes Almost Never
6. I do some homework every day of the week	I feel this way: Almost Always Sometimes Almost Never
7. I'm an important person	I feel this way: Almost Always Sometimes Almost Never
8. I'm good enough at reading	I feel this way: Almost Always Sometimes Almost Never
9. I like the way I look	I feel this way: Almost Always Sometimes Almost Never
10. I feel good about myself when I'm with my family.	I feel this way: Almost Always Sometimes Almost Never
11. Other kids make me feel like I'm not good enough.	I feel this way: Almost Always Sometimes Almost Never
12. I say things that are not true	I feel this way: Almost Always Sometimes Almost Never

13. I wish I were somebody else	I feel this way: Almost Always Sometimes Almost Never
14. I wish I understood more when the teacher explains things	I feel this way: Almost Always Sometimes Almost Never
15. I wish my height were more like other kids my age	I feel this way: Almost Always Sometimes Almost Never
16.I feel like running away from home	I feel this way: Almost Always Sometimes Almost Never
17. My friends listen to my ideas	I feel this way: Almost Always Sometimes Almost Never
18. It doesn't bother me when I lose a game	I feel this way: Almost Always Sometimes Almost Never
19. I have a low opinion of myself	I feel this way: Almost Always Sometimes Almost Never
20. I'm proud of the work I do in school	I feel this way: Almost Always Sometimes Almost Never
21. I have a nice face	I feel this way: Almost Always Sometimes Almost Never
22. I make my parents unhappy	I feel this way: Almost Always Sometimes Almost Never
23. I feel good about myself when I'm with my friends	I feel this way: Almost Always Sometimes Almost Never
24. If I got mad at a friend, I might call him (or her) a name.	I feel this way: Almost Always Sometimes Almost Never
25. I'm an interesting person	I feel this way: Almost Always Sometimes Almost Never
26. I'm too slow at finishing my schoolwork	I feel this way: Almost Always Sometimes Almost Never
27. I would like my weight to be different	I feel this way: Almost Always Sometimes Almost Never
28. I am a good daughter/son	I feel this way: Almost Always Sometimes Almost Never

29. I am lonely.	I feel this way: Almost Always Sometimes Almost Never
30. I make my bed in the morning without being reminded.	I feel this way: Almost Always Sometimes Almost Never
31. I am a good person.	I feel this way: Almost Always Sometimes Almost Never
32. I feel good about myself when I'm at school.	I feel this way: Almost Always Sometimes Almost Never
33. I have a nice smile.	I feel this way: Almost Always Sometimes Almost Never
34. My parents have good reason to be proud of me.	I feel this way: Almost Always Sometimes Almost Never
35. I wish I were better at making friends.	I feel this way: Almost Always Sometimes Almost Never
36. If I really want to win a game, I might break a rule.	I feel this way: Almost Always Sometimes Almost Never
37. I'm happy with the way I am.	I feel this way: Almost Always Sometimes Almost Never
38. I am dumb at school work.	I feel this way: Almost Always Sometimes Almost Never
39. I feel bad about the way I look.	I feel this way: Almost Always Sometimes Almost Never
40. I have one of the best families in the whole world.	I feel this way: Almost Always Sometimes Almost Never
41. I wish I had friend who really liked me.	I feel this way: Almost Always Sometimes Almost Never
42. I go to bed without complaining when it's my bedtime.	I feel this way: Almost Always Sometimes Almost Never
43. I'm not good at things.	I feel this way: Almost Always Sometimes Almost Never
44. I think my report cards are good enough.	I feel this way: Almost Always Sometimes Almost Never

45. I am OK at the sports and games I like to play.	I feel this way: Almost Always Sometimes Almost Never
46. My family is disappointed in me.	I feel this way: Almost Always Sometimes Almost Never
47. I can make friends when I want to.	I feel this way: Almost Always Sometimes Almost Never
48. I get angry when my parents won't let me do something I really want to do.	I feel this way: Almost Always Sometimes Almost Never
49. I feel like a failure.	I feel this way: Almost Always Sometimes Almost Never
50. I wish I were a better student.	I feel this way: Almost Always Sometimes Almost Never
51. I would like to look like somebody else.	I feel this way: Almost Always Sometimes Almost Never
52. I think my parents would be happy if I were a lot different.	I feel this way: Almost Always Sometimes Almost Never
53. I have enough friends.	I feel this way: Almost Always Sometimes Almost Never
54. I brush my teeth after every meal.	I feel this way: Almost Always Sometimes Almost Never
55. I'm not proud of anything about myself.	I feel this way: Almost Always Sometimes Almost Never
56. I'm good enough at arithmetic.	I feel this way: Almost Always Sometimes Almost Never
57. I have a nice body build.	I feel this way: Almost Always Sometimes Almost Never
58. I don't like the way I act when I'm with my family.	I feel this way: Almost Always Sometimes Almost Never
59. I am a good friend.	I feel this way: Almost Always Sometimes Almost Never
60. I would let somebody else take the blame for something I did wrong.	I feel this way: Almost Always Sometimes Almost Never

5c. Forms of Self-Criticising/Attacking and Self-Reassuring Scale

When things go wrong in our lives or don't work out as we hoped, and we feel we could have done better, we sometimes have *negative and self critical thoughts and feelings.* These may take the form of feeling worthless, useless or inferior etc. However, people can also try to be supportive of themselves. Below are a series of thoughts and feelings that people sometimes have. Read each statement carefully and circle the number that best describes how much each statement is true for you.

Please use the scale below.

Not at all like me	A little bit like me	Moderately like me	Quite a bit like me	Extremely like me
0	1	2	3	4

When things go wrong for me:

1.	I am easily disappointed with myself	0	1	2	3	4
2.	There is a part of me that puts me down	0	1	2	3	4
3.	I am able to remind myself of positive things about myself.	0	1	2	3	4
4.	I find it difficult to control my anger and frustration at myself.	0	1	2	3	4
5.	I find it easy to forgive myself.	0	1	2	3	4
6.	There is a part of me that feels not good enough.	0	1	2	3	4
7.	I feel beaten down by my own self-critical thoughts.	0	1	2	3	4
8.	I still like being me.	0	1	2	3	4
9.	I have become so angry with myself that I want to hurt or injure myself.	0	1	2	3	4
10.	I have a sense of disgust with myself.	0	1	2	3	4
11.	I can still feel loveable and acceptable.	0	1	2	3	4
12.	I stop caring about myself.	0	1	2	3	4
13.	I find it easy to like myself.	0	1	2	3	4
14.	I remember and dwell on my failings.	0	1	2	3	4
15.	I call myself names.	0	1	2	3	4
16.	I am gentle and supportive with myself.	0	1	2	3	4
17.	I can't accept failures and setbacks without feeling inadequate.	0	1	2	3	4
18.	I think I deserve my self-criticism.	0	1	2	3	4
19.	I am able to care and look after myself.	0	1	2	3	4
20.	There is a part of me that wants to get rid of the bits I don't like.	0	1	2	3	4
21.	I encourage myself for the future.	0	1	2	3	4
22.	I do not like being me.	0	1	2	3	4

5d. Adolescent Social Comparison Scale Revised

Adolescent social comparison scale

We would like you to tell us how you feel about yourself compared to your friends. Here is an example:

Compared to your friends how tall do you think you are?
Smaller 1 2 3 4 5 6 7 8 9 10 Taller

In this example, if I thought I was smaller than my friends, I would circle a number to the left of the scale. However, if I thought I was taller than my friends, I would circle a number at the right of the scale.

1. Compared to your friends how shy do you feel?
Less shy 1 2 3 4 5 6 7 8 9 10 More shy

2. Compared to your friends how clever do you think you are?
Less clever 1 2 3 4 5 6 7 8 9 10 More clever

3. Compared to your friends how popular do you think you are?
Less popular 1 2 3 4 5 6 7 8 9 10 More popular

4. Compared to your friends how different do you feel?
Less different 1 2 3 4 5 6 7 8 9 10 More different

5. Compared to your friends how attractive do you think you are?
Less attractive 1 2 3 4 5 6 7 8 9 10 More attractive

6. Compared to your friends how strong do you feel?
Less strong 1 2 3 4 5 6 7 8 9 10 More strong

7. Compared to your friends how accepted do you feel?
Less accepted 1 2 3 4 5 6 7 8 9 10 More accepted

8. Compared to your friends how quiet are you?
Less quiet 1 2 3 4 5 6 7 8 9 10 More quiet

9. Compared to your friends how confident do you feel?
Less confident 1 2 3 4 5 6 7 8 9 10 More confident

10. Compared to your friends how much do you feel left out?
Less left out 1 2 3 4 5 6 7 8 9 10 More left out

5e. Adolescent Submissive Behaviour Scale

Adolescent submissive behaviour scale

Below are a series of statements which describe how people act and feel about certain situations when they are with people in their own year at school.

When I am with people in my own year..

1. I agree that I am wrong, even when I know that I was not wrong
Never 1 2 3 4 5 Always

2. I do things because others are doing them, rather than because I want to
Never 1 2 3 4 5 Always

3. I let others criticize me or put me down without defending myself
Never 1 2 3 4 5 Always

4. I play with others even if I do not want to
Never 1 2 3 4 5 Always

5. If I try to speak and others take over, I just shut up
Never 1 2 3 4 5 Always

6. When I make a little mistake and want to apologize, I say sorry more than once
Never 1 2 3 4 5 Always

7. I stop myself from telling others when I am angry with them
Never 1 2 3 4 5 Always

8. At parties, I let others talk a lot and dominate the conversation
Never 1 2 3 4 5 Always

9. I feel uncomfortable when people look straight at me when they are talking
Never 1 2 3 4 5 Always

10. I say thank you over and over again when someone does a small favour for me
Never 1 2 3 4 5 Always

11. I avoid starting conversations at parties
Never 1 2 3 4 5 Always

12. I blush (go red) when people look at me
Never 1 2 3 4 5 Always

Appendix 6: Semi-Structured Interview Schedule

Version 2 – 3/10/06

Semi – structured Interview Schedule

At the start of the interview the interviewer will acknowledge that since she has been involved in the research they have been a part of they may feel awkward in being honest in answering some of the questions. She will begin by saying:
'I've asked you to take part in this interview in order to find out more about how you found the group you have taken part in. I realise it may feel awkward talking to me since I ran the group, but I'd like to hear as an accurate an account of your experience as possible – including any bad bits as well as any good bits.'

She will then introduce the interview by saying:
' I will be asking you some very broad questions about how you found the group you took part in. The questions are broad because I really want to hear your opinions and I want to talk very little and really allow you to tell me about your views. There are no right or wrong answers, I just want to know what you think'

1. **What was taking part in the group like?**
   was there anything you enjoyed/didn't enjoy?
   Was there anything you found difficult?

2. **Do you think being part of the group changed anything for you?**
   what has changed?
   has it had any impact on the way you relate to yourself?
   Do you see yourself differently now?

3. **If Yes….. What do you think caused these changes?**
   Was it anything in particular that we did in the group?
   Which parts of the group have been most helpful?
   Can you remember when you first noticed the change?
   If No… Do you have any thoughts on why not?
   Was there anything that you hoped might change?

4. **Is there a moment from the group that particularly stands out for you?**
   Where you felt you really learnt something about yourself?
   What was it about that that was important for you?
   Or that felt particularly uncomfortable?

5. **Were there any parts of the group that you found unhelpful or difficult?**

6. **Are there any ways in which you think we could improve the group for other young people in the future?**

7. **What do you think you will remember in particular from the group?**

8. **Is there anything you learnt in the group that you think you will continue to use in the future?**

9. **Would you recommend the group to a friend?** If so – Why? If not – Why not?

10. **Do you have any other comments?**

Appendix 7: Extracts of Qualitative Analysis

7a. Initial List of Codes for Thematic Analysis

Initial list of codes for thematic analysis

Process Issues

- Finding it boring/finding it fun
- Talk as good/talk as dull
- Wish for more activities
- Missing lessons (good/bad)
- Confusion about what group about
- Ambivalence about coming to group
- Being selected as negative
- Being selected as positive
- Stigma
- Name of group as negative
- Desire for more sessions
- Finding things difficult

Group dynamics

- Getting to know others
- Difficulties joining in
- Hesitations over sharing information
- Conflict over what to do
- Supportiveness of group
- Reduced isolation
- Difficulties with others

Change

- Understanding own emotional experience better
- Different perspective
- Learning new things
- Impact on friendships
- Impact on how quiet/shy you are
- Liking self more
- Change in self-concept
- Not caring what others think
- Standing up for self
- Change in managing feelings
- Impact on anger
- Being less aggressive
- Impact on stress
- Better at dealing with things
- Change in overall feelings – feeling better
- Able to concentrate more
- Less self-criticism
- Focusing on positives
- Feeling less alone with problems
- Ability to help/comfort others

- Others noticing change
- Change in confidence
- Change as significant

Causes of change

- Usefulness of the image
- Usefulness of relaxation
- Image vs. relaxation
- Denying the bully
- Increase in good voice
- Psychoeducation/ the three circles
- Advice from peers
- Expressing feelings
- Support seeking
- Writing things down
- Compassionate letter writing
- Uncertainty where change from
- External factors as contributing to change

7b. Annotated Transcript

FM: so what was taking part in the group like?

KM: it was really good because then you could understand what other people's problems were and what other things people are suffering and stuff. Its just like, sometimes if something goes wrong with you, yeah you think that you are the only person that anything is going wrong with, it's not no-one else, its just you – so when you hear other people's problems you don't feel good about yourself but you know that there's other people out there as well who's going through the same problems.

Social change – feeling less alone with problems

FM: So you feel a bit less like you're alone?

K: yeah and a victim kind of thing.

Change in self-concept

F: And how does that help you when you feel less alone, what difference does that make?

K: yeah cos then you know there's other people you can go out there and talk to if something is going wrong cos before I used to talk a lot but I used to be a bit of a person that keeps stuff to myself but recently cos of some stuff I've been talking to people about stuff that's been going on with me and its been making me feel much better, so its like when you talk to someone it feels much better.

Change in managing feelings – talk to peers more

Change in overall feelings – feel better

F: OK, and what do you think made you start talking to people?

K: I don't know, because once my stomach problems, I told you about the stomach problem had started and then the doctor kept on saying that you should start talking to people, I started talking to people about my feelings I just vented feelings out. I think I just kept them in too much and I wouldn't like tell anyone. So I started talking to my friends I started talking, like anything that happens I just tell people, don't keep it in me, and with your group it made me feel even much better, cos when you write stuff down its not always about talking its about writing stuff down as well and telling people.

Change attributable to both external factors and group factors.

F: So was the writing down kind of another way to get your...

K: yeah I felt that the writing things down was good and then talking about it was pretty good.

Writing things down as useful part of group

F: And what was good about writing stuff down

K: Cos I think its like sometimes when you talk about it you don't know how to talk about it and sometimes you have a feeling the person might laugh or something cos they might find it funny. When

Hesitations about sharing – fear of being laughed at

you write it down the papers not going to laugh at you or something, you know you can trust the paper, like once on a programme some lady was angry at someone so she wrote it down as a letter and it made her feel much better, so I like that Idea and then doing it in your group was much better as well.

Benefit of writing – can share things that are hard to share out loud.

F: And when you said about the writing down, do you mean the bit when we did the letters – is that the bit...

K: The letters and you know what your personality is like, when you have to guess who's who and there was one time when you know a problem, it makes you upset or something, we done it a couple of weeks ago

Compassionate letter writing as useful part of intervention.
Allowing group to share things through writing as well as speaking useful.

F: yeah

K: yeah that one, I really like that one, I think that was one of the best things we done.

F: And what was good about that one?

K: Because you were expressing how you felt, what happened to you, letting other people know that it has happened and then the advice that was given back felt pretty good.

Being able to express feelings helpful.

Advice from others helpful.

F: So it sounds like there were two things, one was the writing it down and expressing it...

K: yeah, letting it out, and the other thing was getting feedback back as well

F: and ideas from other people. And how does the feedback help?

K: Feedback was helping, because if that was to happen again I'd know what to do, it's a solution, next time it happens there's a solution out there already waiting for you.

Advice as useful for the future.

Advice as providing solutions.

Appendix 8: Attrition Analysis

Table 1 – Comparison of those who remained in the study throughout the intervention vs. those who dropped out before the time three measure: t-values, means and standard deviations.

Measure	Drop-out group (n=9)		Attenders group (n=35)		t(42)	P
	M	SD	M	SD		
Depression	12.2	8.2	11.0	7.2	0.38	0.71
Self-Esteem	66.2	17.6	68.7	16.3	0.40	0.70
Self-criticism	21.7	13.2	21.9	12.5	0.05	0.96
Self-reassurance	23.1	8.2	22.1	6.9	0.47	0.64
Social Comparison	66.6	12.6	59.3	13.2	1.49	0.15
Submissive Behaviour	25.8	8.5	30.6	8.3	1.53	0.13

Table 2 – Comparison of those who remained in the study until follow-up vs. those who dropped out at any time: t-values, means and standard deviations.

Measure	Drop-out group (n=12)		Follow-up group (n=32)		t(42)	P
	M	SD	M	SD		
Depression	12.3	7.2	10.9	7.5	0.64	0.53
Self-Esteem	68.9	15.9	70.0	16.8	0.10	0.92
Self-criticism	19.3	12.2	22.8	12.7	0.82	0.42
Self-reassurance	23.1	7.4	22.0	7.1	0.40	0.69
Social Comparison	67.2	12.9	58.4	12.8	2.02	0.05*
Submissive Behaviour	24.9	7.9	31.4	8.1	2.35	0.02*

* Significant at $p<.05$