School-Based Prevention of Anxiety and Depressive Symptoms in Children

by

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I am the author of the thesis entitled

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Conference Presentation

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Abstract

The prevalence of anxiety and depression in children, in conjunction with the challenges of treatment for these emotional health issues, has seen an increasing focus on prevention and early intervention programs. The aim of this thesis was to further our understanding of how to improve school-based early intervention and prevention programs for preventing and reducing anxiety and depression in children.

Firstly, a systematic review which included 23 studies on school-based early intervention and prevention programs for anxiety and depressive symptoms with children aged 7 to 13 years was conducted. Of the three intervention types, indicated programs were found to show consistent reductions in anxiety and/or depression, with effects largely being sustained at follow-up. For universal programs, studies which included parent involvement and booster sessions, consistently showed reductions in anxiety and depression symptoms. Support for selective programs was inconclusive, as only four studies were suitable for inclusion in this review.

One of the limitations of the prevention and early intervention programs that have been implemented and evaluated with children, is that they have not specifically focussed on children’s social and emotional factors. One factor that is related to children’s development is their use of social comparisons for self-evaluative purposes. Social comparisons play an important role in shaping children’s self-concepts (i.e., physical appearance, friends and peer relations, sporting ability, and academic achievement) and self-esteem, and influence the positive or negative feelings they have about themselves. Positive use of social comparisons can lead to high levels of self-concepts in the evaluated domains, however, if children rely too heavily on social comparisons they can develop overly negative self-concepts which may lead to internalisation of negative affect, low self-esteem and a subsequent
increased risk for developing anxiety and depression. Therefore, it is important that we build children’s resilience and equip children with strategies to identify and modify their use of social comparisons in ways that strengthen their self-concepts, and thus reduce the risk of developing mental health problems. The Comparisons Openness Peers Esteem (COPE) program was designed to address this. The COPE program is an eight-week cognitive-behavioural, universal school-based prevention and early intervention program, which specifically focusses on promoting the positive use of social comparisons, so children develop positive self-concepts and high levels of self-esteem, to reduce the risk of developing symptoms of anxiety and depression.

Study 1 was designed to evaluate the 12-month effectiveness of COPE, in preventing or reducing symptoms of anxiety and depression in children. Also examined were the moderating effects of gender and children’s risk status for anxiety or depression. Specifically, children’s symptoms of anxiety and depression, self-concepts, self-esteem, and use of social comparisons were examined. The participants were 636 children (305 girls and 331 boys) aged between 8 to 10 years, from 11 primary schools in the Melbourne metropolitan area. Schools were randomly allocated to the intervention or the wait-list control condition. Children’s symptoms of anxiety, depression, self-concepts, self-esteem and use of social comparisons were assessed at pre-intervention, post-intervention and 12-months follow-up. The COPE program was effective in improving academic self-concept for the overall sample, social comparisons friends for the girls, sport self-concept for children ‘at risk’ of anxiety, and social comparisons academic for children ‘at risk’ of depression. However, there were no effects of the intervention on anxiety or depression.
Study 2 was conducted to determine the perceived benefits of the COPE program, and how the COPE program could be further improved or developed, from the perspectives of children, parents, teachers and facilitators. In this qualitative study, semi-structured interviews using open-ended questions were conducted, with 12 children in Grades 4 and 5 (aged 9 to 11 years), five parents, three teachers and six facilitators of COPE. The interview questions were designed to elicit an in-depth understanding of the children’s experiences of the COPE program, and to gain the perspectives of the parents, teachers, and of the COPE facilitators. Using thematic analysis, findings indicated that all children enjoyed the program and found learning about positive thinking and positive coping strategies most beneficial to improving their mood, confidence and/or and self-esteem. Understanding differences in others and helping others feel better were also benefits identified by children. Parents and teachers reported on observable improvements in children’s behaviour, social skills, and that children had improved in their ability to identify and express feelings. Importantly, children, parents and facilitators all reported that children were more positive in their self-concepts and self-esteem, and were more confident overall. Implementation issues (i.e., timing of the program delivery, class sizes, and management of children’s behaviour), were identified by facilitators as areas that need improving. Suggestions which were made by both facilitators and teachers, included teacher training and school involvement. Teachers also suggested the program could be enhanced with more program resources. The key recommendation for improving COPE suggested by parents was for the inclusion of parent training.

Recommendations for improving school-based interventions are discussed. This includes a framework for strengthening the COPE program, which incorporates the elements shown to be particularly important for the success of universal
programs, which are parental involvement, booster sessions, and teacher and school involvement.
CHAPTER ONE

Introduction and Overview of Thesis

Emotional disorders, such as anxiety and depression, are pervasive and debilitating conditions which occur in paediatric and adult populations. In middle childhood (ages 8 to 11 years), occurrence rates are alarmingly high, with one in five having a diagnosable emotional health disorder (Costello, Mustillo, Erkanli, Keeler, & Angold, 2003; Mendes, de Souza Crippa, Souza, & Loureiro, 2013; Sawyer et al., 2001). Emotional disorders are manifested in a similar manner to adolescent and adult variants, and have multifaceted impacts on psychosocial functioning with impairments seen in the family system, parent-child dyads (Farrell & Barrett, 2007), and as immaturity, poor academic and school performance (Owens, Stevenson, Hadwin, & Norgate, 2012), poor peer relationships (Kistner, 2006), low self-esteem, and low social competence (Wilkinson, 2009). Long-term consequences can be life-threatening, as depression during childhood is a precursory risk for substance abuse and later suicidal behaviour (Costello, Erkanli, & Angold, 2006; Cummings, Caporino, & Kendall, 2014; Kovacs, Goldston, & Gatsonis, 1993).

The high rates and associated consequences of childhood anxiety and depression, in conjunction with the challenges of treatment for these emotional health issues (Durlak & Wells, 1997), have seen an increasing focus on prevention and early intervention programs (Barrett & Turner, 2001; Gillham et al., 2006; Kraag, Van Breukelen, Kok, & Hosman, 2009; Miller, Short, Garland, & Clark, 2010; Roberts et al., 2010). Early intervention and prevention can reduce the incidence of new or existing cases of emotional health issues in children, and subsequently, reduce the need for psychological services within the community. Research into prevention and early intervention programs focus on targeting risk
factors and enhancing protective factors (Greenberg, Domitrovich, & Bumbarger, 2001). Importantly, preventative initiatives need to be specifically designed for children and be sensitive to children’s developmental level including their cognitive, social and emotional functioning (Skouteris et al., 2007).

Chapter 2 provides an overview of anxiety and depression in children. The debilitating cognitive, emotional, behavioural, and somatic symptoms are examined. In addition, the prevalence rates, comorbidity issues, and the enduring risks emotional disorders can have on children’s mental health are examined. This chapter also examines the barriers to children seeking help and engaging in much needed treatment, and the economic costs associated with childhood anxiety and depression. Given that symptoms of anxiety and depression in children are associated with long-term mental health issues, the pressing need for prevention interventions for children is discussed.

In Chapter 3, the current research on early intervention and prevention programs for anxiety and depression in children is reviewed. Limitations and gaps in the literature are identified and discussed. Some researchers argue that middle childhood is an ideal time to target interventions (Lock & Barrett, 2003), however, a limitation in the literature is that there has been no review specifically focussing on anxiety and depressive symptoms in children. Thus, a systematic review of prevention and early intervention programs for anxiety and depression in primary-school aged children (7 to 13 years) was conducted for this thesis, and is presented in Chapter 4.

It is also important to ensure that programs take into account children’s developmental factors. During middle childhood, important developmental factors include children’s use of social comparisons, and the development of their self-
concepts. Chapter 5 examines the emergence of social comparison processes in children, and explores how these are associated with the development of self-concepts and self-esteem. Particular focus is on the consequences of children engaging in social comparisons for self-evaluation, as research with adults has established a link between negative consequences and emotional problems (Swallow & Kuiper, 1992). The concluding section provides a rationale for the development of the Comparisons, Openness, Peers and Esteem (COPE) program, which is a new early intervention and prevention program for children, which specifically targets children’s use of social comparisons.

Chapter 6 presents Study 1, which was designed to evaluate the 12-month effectiveness of the universal school-based COPE program, in preventing and reducing symptoms of anxiety and depression in children aged between 8 to 10 years. In addition, the effectiveness of the program was evaluated for its effects on improving children’s self-concepts and self-esteem, and reducing their use of social comparisons. A further aim was to examine the moderating effects of gender and children’s risk status for anxiety or depression.

In order to more fully understand how COPE could be improved and how the program was experienced by children, a qualitative follow-up of the intervention program, Study 2, was conducted and is presented in Chapter 7. Study 2 involved semi-structured interviews with open-ended questions designed to elicit an in-depth understanding of the children’s experiences of the COPE program. In addition, to further explore the perceived benefits of the COPE, and to understand how the COPE program could be further improved and developed, interviews were also conducted to gain the perspectives of parents, teachers, and the COPE facilitators.
Finally, Chapter 8 provides an overview and discussion of the findings from the systematic review, Study 1, and Study 2. Specific recommendations and suggestions for improving COPE and other programs are made, with particular emphasis on parental, teacher and school involvement. Additional issues relating to prevention vs. treatment, gender differences, and age differences are also discussed. To implement the suggested improvements and to address the limitations, a ‘whole-school approach’ framework is proposed, including a discussion of how COPE can be strengthened and enriched through adopting such an approach.
CHAPTER TWO

Emotional Health in Children

The most common emotional health disorders in children and adolescents are anxiety and depression (Rooney et al., 2013b). Emotional disorders represent a class of psychological problems which, by their nature, are largely covert. They can go unrecognised for periods of time, can be overlooked, and undertreated (In-Albon, 2012; Pine, Helfinstein, Bar-Haim, Nelson, & Fox, 2009; Reynolds, 1992). This class of disorders, also referred to in the literature also ‘internalising’ disorders, refer to inwardly directed distress and reflects the nature of the control exerted over the behaviours (Wilkinson, 2009). Conversely, disorders characterised as being directed outwardly are viewed as ‘externalising’ or behavioural disorders (i.e., non-compliance, conduct disorder, attention deficit/hyperactivity disorder) (Tandon, Cardeli, & Luby, 2009).

Symptoms of Emotional Disorders

Symptoms of emotional disorders displayed by children largely parallel those experienced by adults (Beesdo, Knappe, & Pine, 2009; Birmaher, Ryan, Williamson, Brent, & Kaufman, 1996; Tandon et al., 2009). As with adults, depressive symptoms include cognitive, emotional, behavioural, and somatic symptoms. Cognitive symptoms include negative thinking, reduced concentration, low self-esteem, feelings of worthlessness, hopelessness, inappropriate guilt, and poor memory. Emotional symptoms include a loss of enjoyment in activities, and low mood, which in adults usually manifests as sadness or hopelessness, but in children may result in irritability or difficult behaviour (Cicchetti & Toth, 1998). Behavioural symptoms may include social withdrawal, restlessness, and getting into trouble. Lastly, somatic symptoms include changes in appetite or weight, psychomotor retardation, fatigue.
and sleep disturbance (Rapee, Schniering, & Hudson, 2009; Reynolds, 1992; Wilkinson, 2009). Although there is an overlap between the symptoms of anxiety and depression, symptoms including excessive worry or distress, fear, phobia, avoidance of social situations, and somatic problems such as headaches, stomach aches, and heart palpitations are specific to anxiety disorders (Kovacs & Devlin, 1998; Wilkinson, 2009). It is usual for humans to feel emotions of sadness or worry, however, if these abovementioned symptoms are experienced in excess and for prolonged periods, then they become maladaptive to one’s functioning and daily living.

During the 1970s and 1980s the status of emotional disorders in children in terms of their prevalence, onset and course, prognosis and impact, was poorly understood (Lefkowitz & Burton, 1978; Sacco & Graves, 1984). The idea that young children were capable of demonstrating depressed affect was refuted. Pre-schoolers (i.e., children aged 3 to 6 years) were considered too immature to experience emotions such as grief and melancholy (Rie, 1966), and it was believed that these emotion were not experienced until adolescence (Cole, Peeke, Martin, Truglio, & Seroczynski, 1998). However, survey and longitudinal studies have shown that toddlers exhibit higher levels of emotional sophistication than previously thought (Denham, 1998), and that depressive disorders do occur in young children (see Kovacs, 1996; Sweeting & West, 1998).

**Prevalence**

Anxiety and depressive disorders are among the most prevalent mental health problems in childhood. For children in middle childhood, current prevalence estimates for anxiety disorders range from 7.1% to 28.2% (Bienvenu & Ginsburg, 2007; Costello, Egger, Copeland, Erkanli, & Angold, 2011; Costello et al., 2003) and
estimates for depressive disorders range from 0.4% to 2.8% (Birmaher et al., 1996; Costello et al., 2006; Costello et al., 2003). The prevalence of subclinical symptomatology is even greater, with evidence suggesting that between 21% and 40% of children suffer from distressing levels of anxiety or depressive symptomatology (Costello et al., 2003; Kashani & Orvaschel, 1990). As children enter adolescence, a spike in prevalence of mental health problems is observed. Rates of clinical anxiety and depression range between 15% and 20% (Birmaher et al., 1996; Verhulst, van der Ende, Ferdinand, & Kasius, 1997). Given this, a significant proportion of children are at a higher risk of developing more severe levels of anxiety and depression by early adolescence.

**Co-morbidity**

As noted previously, an overlap exists between the symptomatology of emotional disorders. The most common co-morbid pattern is that of anxiety and depression. Epidemiological studies have demonstrated co-morbidity rates for childhood anxiety and depression to be as high as 60% to 70% (Avenevoli, Stolar, Li, Dierker, & Ries Merikangas, 2001; Kovacs & Devlin, 1998; Wilkinson, 2009). Furthermore, in community-based studies, 25% to 32% of children and adolescents with depression also had a co-morbid anxiety disorder, and 10% to 24% of children and adolescents with an anxiety disorder, also met criteria for major depression (Angold & Costello, 2001; Angold, Costello, & Erkanli, 1999; Costello et al., 2003).

**Gender Differences**

The prevalence rates of anxiety and depression, as well as comorbidity, vary according to children’s gender and age. Prior to adolescence, there are little observable gender differences in the prevalence of anxiety and depression, with rates for boys marginally higher than girls (Conley & Rudolph, 2009). However, studies
based both on diagnostic interviews and standardised self-reports indicate that during early adolescence, at around ages 13 to 15 years and into adulthood, the increase in anxiety and depression for girls is two times that for boys (Angold & Costello, 2001; Costello, Egger, & Angold, 2005; Essau, Conradt, & Petermann, 2000; Goodyer, Herbert, Tamplin, Seeley, & Pearson, 1997). In a 16-year longitudinal study with a sample containing 773 adolescents (14 to 17 years), Essau, Lewinsohn, Seeley, and Sasagawa (2010) found that at age 30, the female participants had higher rates of depression and a greater total number of lifetime episodes than the male participants. Gender differences in the duration of depressive episodes were also found, with females having longer episodes. Importantly, a lower age of onset was predictive of more episodes in both girls and boys, however, a lower age of onset only predicted a worse course of depression for females (Essau et al., 2010).

Explanations for the gender differences have been associated with differences in ruminative coping styles, interpersonal orientations, and stressful life events (Galambos, Leadbeater, & Barker, 2004; Nolen-Hoeksema, 1994, 2001). Rumination has been shown to exacerbate negative cognitive biases. Cole (1990) suggests this is in part due to a manifestation of various depressogenic cognitive biases in preadolescent girls, that is, the tendency to underestimate personal competencies and attribute failures to lack of ability. Yet this interpretation should be regarded with caution as it was derived from post-hoc analyses in their study. These gender and age related differences during the transition from middle childhood to adolescence have also been attributed to the onset of puberty and hormonal changes, which are observed earlier in girls than boys (Conley & Rudolph, 2009).
**Developmental Course**

The high rate of co-morbidity between anxiety and depression has received attention from researchers, and various explanations have been proposed. From a developmental perspective, the onset of anxiety has been seen as a precursor to the development of depression with the view that anxiety may ‘cause’ depression (Cole, 1990). Evidence indicates that childhood anxiety symptoms and disorders often precede and tend to predict the onset of depressive disorders in adolescence and adulthood (Avenevoli et al., 2001; Mathew, Pettit, Lewinsohn, Seeley, & Roberts, 2011; Pine, Cohen, Gurley, Brook, & Ma, 1998). This has led some researchers to propose that anxiety and depression lie on a developmental continuum (Dobson, 1985). Furthermore, if left untreated, anxiety disorders can become chronic and increase the likelihood of developing mental health problems in adulthood (Costello et al., 2005; Kovacs & Devlin, 1998). In a longitudinal study of 1037 children, Caspi, Moffitt, Newman and Silva (1996) found that children who were reticent, fearful, and easily upset at age 3, were at higher risk for developing depression at age 21. Similarly, in a 9-year study with 776 youths, Pine et al. (1998) found that fears in adolescents (aged 14) led to a two- to three-fold increase in risk for later depression. Similarly, in a 21-year longitudinal study with 964 youths, Woodward and Fergusson (2001) found that adolescents with an anxiety disorder (14 to 16 years) were at a significantly greater risk for developing anxiety or depressive disorders, developing a drug addiction, and poor academic performance during early adulthood (16 to 21 years). Finally, Goodwin, Fergusson and Horwood (2004) found after controlling for confounding childhood, family and social factors (i.e., parental history of anxiety/depression; childhood abuse), 8-year-old children who exhibited anxious/withdrawn behaviours, were at an increased risk for developing anxiety and
depressive disorders in adolescence and early adulthood. These findings provide a strong rationale for pursuing interventions specifically designed to prevent and reduce the emergence of anxiety and depression in children.

Treatment

As symptoms of emotional disorders can cause dysfunction in all areas of life, children experiencing mental health problems need professional help. Yet, despite the similarities between adult and child presentations of emotional disorders, the detection of these symptoms in children is much more difficult (Tandon et al., 2009). Several reasons may contribute to the difficulty in identifying and diagnosing emotional disorders in children. Given anxiety and depressive symptoms are more internalised and less overt than other forms of distress, it is often the case that they go unrecognised until symptoms seriously impact upon one’s daily functioning (In-Albon, 2012; Pine et al., 2009; Wilkinson, 2009). As children rarely self-refer to mental health professionals, adults are relied upon to observe, identify and evaluate the inner state and feelings of a distressed child. However, even parents and teachers can misinterpret or even miss anxious or depressive behaviour in children, given that these symptoms often lead to a child being compliant and non-disruptive (Dwyer, Nicholson, & Battistutta, 2006; Holmes, Slaughter, & Kashani, 2001; Macklem, 2014). A study by Grietens et al. (2004) which compared mother, father and teacher reports, showed that for internally directed behaviours among 5- and 6-year-old children, the adult reporters had the lowest rates of concordance. Factors that may influence an adult’s perception about a child include the child’s characteristics, characteristics of the referring adult, and characteristics of the child’s environment.

Furthermore, characteristics of children may impact upon them seeking help. Until a level of cognitive maturity is reached, a child may be unable or unwilling to
talk about feelings of overwhelming sadness or worry (Pahl & Barrett, 2007; Reynolds, 1992). Children’s age and developmental stage may moderate whether a child attains much needed professional help. Such a deficiency in identifying childhood anxiety and depression, and referring for treatment, underscores the pressing need for alternative initiatives which are tailored for children.

Attempts to reduce the aggregate of suffering and burden associated with childhood emotional disorders, have heavily relied upon clinical services which provide individual psychological treatment (Miller, 2008; Offord, 1996). Despite having effective evidenced-based psychological treatment for anxiety and depression, access to these clinical services is limited due to high demand and waiting lists (Collins, Westra, Dozois, & Burns, 2004). Of those who do seek help, research indicates that only 18% to 32% of children with a diagnosable mental health disorder will receive specialist mental health treatment (Essau, 2005; Esser, Schmidt, & Woerner, 1990; Merikangas et al., 2011; Olfson, Gameroff, Marcus, & Jensen, 2003; Sawyer, Antoniou, Toogood, Rice, & Baghurst, 2000). Alarmingly, research has indicted that the only factor predicting use of mental health services in adolescents with depression was a history of a suicide attempt (Essau, 2005). Additionally, of the minority who do receive treatment, effects are modest. Many children prematurely terminate or fail to respond to the treatment offered (Barrett, Dadds, & Rapee, 1996a; Donovan & Spence, 2000; Kazdin, 1996). A failure to respond to treatment can occur if the adverse effects of the disorder have become entrenched. If left untreated, anxiety and depression usually undergo chronic relapses (Donovan & Spence, 2000; In-Albon, 2012). Given the limited reach and effectiveness of current treatment options, it is essential that evidenced-based
prevention and early interventions are accessible to children, to reduce the high prevalence rates of anxiety and depression.

**Economic Costs**

The costs of children’s mental health problems impose enormous individual and societal burdens. Such problems cause considerable distress to the young person affected, their families, and are costly to society by means of ongoing demands on health, mental health, justice, welfare, and education services (e.g., Potas, Vining, & Wilson, 1990). In Australia, during 2010 to 2011, the direct financial burden of mental disorders for health related services was estimated to be almost $6.9 billion (Australian Institute of Health and Welfare, 2012). In a recent longitudinal study of Australia children, population-level costs were found to be greatest for those with transient mental health difficulties, suggesting that prevention may be more cost-effective than treatment. Over a 4-year period, the excess cost to Medicare incurred by 0 to 7-year-old children with mental health difficulties was over $27 million (Lucas et al., 2013). These financial consequences of anxiety and depressive disorders indicate the critical importance of children’s emotional health to public health.

Given the high prevalence of anxiety and depressive disorders, the range of debilitating symptoms associated with these problems, difficulties in identification and referral for treatment, and the detrimental impacts on functioning (Ashford, Smit, van Lier, Cuijpers, & Koot, 2008; Michael & Crowley, 2002), there is a clear and important need for the development and implementation of prevention and early intervention programs. To decrease the number of children who are developing anxiety and depression disorders, interventions need to be delivered prior to the
onset of symptoms, or before symptoms escalate to a level causing significant functional impairment.
CHAPTER THREE

Prevention and Early Intervention Programs

The alarming rates and associated consequences of childhood anxiety and depression, in conjunction with the challenges of treatment for these emotional health issues (Durlak & Wells, 1997), has seen an increasing focus on prevention and early intervention programs (Barrett & Turner, 2001; Gillham et al., 2006; Kraag et al., 2009; Miller et al., 2010; Roberts et al., 2010). The primary objective of preventive interventions is to reduce the prevalence of new or existing cases of emotional health issues in children, and subsequently, reduce the need for psychological services within the community (Greenberg et al., 2001).

Over the past decade, there has been a proliferation of studies investigating whether intervening in child and adolescent years may prevent the onset of anxiety and depression, and/or reduce the incidence of symptoms and burdens associated with these emotional health issues. The majority of this research has been focussed on programs for the prevention of anxiety and depression in children and adolescents, which have been delivered within the school setting (Barrett & Turner, 2001; Bernstein, Layne, Egan, & Tennison, 2005; Cardemil, Reivich, & Seligman, 2002; Essau, Conradt, Sasagawa, & Ollendick, 2012; Lowry-Webster, Barrett, & Daddds, 2001; Roberts et al., 2010; Rooney, Hassan, Kane, Roberts, & Nesa, 2013a; Rose, Miller, & Martinez, 2009).

Levels of School-Based Interventions

Prevention programs designed to reduce and/or prevent problems associated with emotional health, have been classified according to the way the target populations are selected and include: (a) universal, (b) selective, or (c) indicated (Durlak & Wells, 1997; Mrazek & Haggerty, 1994).
Universal prevention strategies are offered to whole group populations and communities, with the aim of preventing new episodes of a mental disorder and improving the overall mental health of all the individuals in the group (Mrazek & Haggerty, 1994). Universal programs are delivered to large groups, such as within classrooms at schools, and may be offered to a year-level, or to the whole-school.

Selective programs target individuals or subgroups who are non-symptomatic, but whose risk of developing a mental disorder is considered significantly heightened due to biological, psychological and/or sociocultural factors (Mrazek & Haggerty, 1994). Selective interventions would include programs for children of parents who have anxiety or depression, and children of separating or divorcing parents.

Indicated prevention targets individuals identified as having prodromal signs and symptoms of a disorder (i.e., ‘subclinical’), or who have biological markers related to mental disorders, but who do not yet meet diagnostic criteria. Social skills or parent-interaction training for children who have early behavioural problems are examples of indicated interventions (Greenberg et al., 2001).

Prevention programs delivered at the different levels of intervention offer unique benefits, but they also have limitations, each of which warrant discussion. Universal programs can offer positive and proactive programs, as they are aimed at children’s ability to effectively cope with situations that are inevitable and an essential part of normal development. As the entire population are administered the intervention, all children have the opportunity to learn and develop skills designed to prevent and treat anxiety or depression, regardless of risk or diagnostic status (Stopa, Barrett, & Golingi, 2010). Universal programs are typically delivered within schools, and are designed for integration within the school curricula. Importantly, they also
have a higher likelihood of sustainability. From the perspective of engagement, recruitment, stigmatisation, and attrition, universal interventions are advantageous (Barrett & Ollendick, 2004).

As participation is not dependent upon risk level and pre-screening is not required, universal approaches may offer an avenue of help for children who otherwise may “fall through the cracks”, reducing suffering in children whose symptoms may go recognised until impairment is severe (Donovan & Spence, 2000; Lowry-Webster et al., 2001). In fact, for those children experiencing unrecognised subclinical symptomatology of emotional disorders, universal approaches may provide and prevent the development of significant emotional problems.

Universal approaches also offer enhanced peer support and can reduce psychosocial difficulties in the classroom promoting positive learning, both of which are important for children’s development. Skill acquisition for children and parents, who are not at risk, may be utilised successfully in a number of everyday occurrences (Donovan & Spence, 2000).

A disadvantage of universal interventions is that they are viewed as being at a lower ‘dosage’ than targeted programs, and are associated with smaller effects. Consequently, they may lack the appropriate duration and intensity to vary the developmental trajectory of children ‘at risk’ for emotional disorders (Greenberg et al., 2001).

Targeted programs (i.e., selective and indicated) may be more cost, time and labour efficient than universal approaches (Farrell & Barrett, 2007). However, several disadvantages to targeted programs are potential labelling, cost of ongoing screening, stigmatisation, and the challenge of accurate targeting (Offord & Bennett, 2002). For selective interventions, identifying children ‘at risk’ for developing
anxiety or depression based on the experience of negative life events is likely to be
easier than identifying children ‘at risk’ due to biological or other psychosocial risk
factors. The latter poses a greater challenge, as these factors require suitable
screening tools which are not readily available (Donovan & Spence, 2000). In
indicated preventions, researchers screen children for presenting symptoms through
questionnaires, and through conducting diagnostic interviews. When screening for
symptoms (indicated), as opposed to risk factors (selective), the process in
identifying level of risk is less challenging (Farrell & Barrett, 2007). A further
difficulty, however, is that it is necessary to ascertain at which points in the
developmental trajectory it is most effective to evaluate risk, and subsequently,
provide the intervention for greatest efficiency (Donovan & Spence, 2000). When,
and how often, children should be assessed becomes critical. If subclinical
symptomatology is indicative of later development of disorders, the timing of
assessments and program implementation need to be commenced prior to the onset
of a clinical disorder. Furthermore, implementation of targeted programs requires the
consent from schools, parents, and the children, to withdraw from other activities
and be involved in a preventative intervention (Farrell & Barrett, 2007).

Prevention in Schools

Schools are an exemplary environment in which to deliver mental health
services, with the scope to overcome the barriers discussed previously in Chapter 2.
School-based programs offer greater and more equal access to mental health services
for children. Universal programs are more cost effective than individual treatment,
and given all children are involved, this relieves the burden of potential
stigmatisation. Furthermore, with training, teachers are in a good position to identify
children ‘at risk’ before problems escalate or become entrenched (Beidas et al.,
Finally, research from population-based studies indicate that children and adolescents are more likely to access mental health services through schools rather than traditional mental health services (Farmer, Burns, Phillips, Angold, & Costello, 2003).

**Early Intervention and Prevention Programs for Children’s Emotional Health**

A number of universal, indicated and selective interventions have been developed to prevent the onset of anxiety and depression. The main approach used in school-based prevention and early intervention programs for anxiety and depression, is cognitive-behavioural therapy (CBT). Skill-based packages in CBT programs focus on teaching children problem-solving, psychoeducation, affect recognition, positive thinking, social skills, cognitive restructuring, relaxation, and assertiveness training (Barrett & Turner, 2001; Jaycox, Reivich, Gillham, & Seligman, 1994; Miller et al., 2010; Muñoz, Cuijpers, Smit, Barrera, & Leykin, 2010). Three meta-analyses of anxiety prevention interventions with children and adolescents, and three meta-analyses of depression prevention initiatives with children and adolescents, all identified programs utilising CBT to be an effective intervention (Fisak, Richard, & Mann, 2011; Gallegos, Beretvas, Benavides, & Linan-Thompson, 2012; Horowitz & Garber, 2006; Merry et al., 2011; Merry, McDowell, Hetrick, Bir, & Muller, 2004; Zalta, 2011), and superior to behavioural interventions (e.g., relaxation), social skills training, Eye Movement Desensitisation and Reprocessing (Gallegos et al., 2012), and educational interventions (Merry et al., 2004).

**Overview of Prevention Programs**

Several recent meta-analyses and systematic reviews have examined the growing body of empirical literature evaluating anxiety and depression prevention
programs for children and adolescents (Calear & Christensen, 2010; Corrieri et al., 2014; Fisak et al., 2011; Gallegos et al., 2012; Merry et al., 2011; Mychailyszyn, Brodman, Read, & Kendall, 2012; Teubert & Pinquart, 2011; Zalta, 2011).

**Prevention of anxiety symptoms.** Five meta-analyses and one systematic review have assessed the effectiveness of school-based programs for the prevention of anxiety in children and adolescents.

Merry et al. (2004) reviewed six high quality studies that included outcomes for anxiety for children and adolescents aged between 5 and 19 years. Four of these found reductions in anxiety (Gwynn & Brantley, 1987; Hains & Ellmann, 1994; Roberts, Kane, Thomson, Bishop, & Hart, 2003; Seligman, Schulman, DeRubeis, & Hollon, 1999), while two studies showed no difference in anxiety between the intervention group and the control group. Age effects were not examined.

Neil and Christensen (2009) conducted a systematic review evaluating 27 trials from 20 different school-based anxiety prevention programs for children and adolescents (aged 5 to 19 years). The programs produced small to moderate effect sizes, and these did not differ according to the type of intervention (e.g., CBT vs. other), program leader, or type of control group. At post-intervention, universal programs were associated with a greater proportion of significant trials with larger effect sizes than selective and indicated programs. Whereas, at longer-term follow-up, indicated programs achieved stronger effects. Additionally, intervention effect sizes were greater for studies with adolescents aged 12 and above, than for children aged 11 and under.

Fisak et al. (2011) reviewed the effectiveness of 35 programs with a primary focus on anxiety prevention in children and adolescents (up to age 18). Programs were school-based and non-school based (i.e., involving preschool children and
parents). The overall effect sizes were small at post-intervention and at follow-up (6-months). Intervention effects were larger for programs led by mental health providers, and for the FRIENDS program (i.e., F = Feeling worried? R = Relax and feel good; I = Inner thoughts; E = Explore plans; N = Nice work, reward yourself; D = Don't forget to practice; S = Stay calm). Effectiveness did not differ according to program type (i.e., universal vs. targeted), age, gender, or number of sessions.

Teubert and Pinquart (2011) assessed 65 studies aimed at preventing anxiety symptoms in children and adolescents (ages 3 to 17 years). Effect sizes were small but significant for anxiety disorders and anxiety symptoms (post-intervention and follow-up, average 8.2 months). At post-intervention, these effects were larger for indicated and selective programs, than for universal programs. At follow-up, effect sizes were larger for programs primarily focussing on anxiety prevention, for studies with children aged 11 and under than those who were older than 11 years, and for studies led by a mental health professional. Effects were smaller in studies with a higher percentage of females. Significant effects were also found for depressive symptoms, self-esteem (both at post-intervention and follow-up), and social competence (post-intervention only).

Zalta (2011) assessed 15 CBT interventions (both human-administered group interventions and individually administered media interventions), aimed at preventing anxiety symptoms in children and adults (age range not specified). The overall effect sizes at post-intervention were small to moderate for general anxiety symptoms, disorder-specific symptoms and depressive symptoms. However, overall the effects were not sustained at follow-up (6-months and 12-months follow-up). Effects were not associated with prevention type (universal vs. selective vs. selective/indicated), participant age, gender, control group, or the number or length
of intervention sessions. Individual media interventions were shown to be more effective than human-administered group intervention. However, the results of the moderator analyses need to be interpreted with caution, as the small sample of studies limited the power of the analysis.

Gallegos et al. (2012) evaluated 19 school-based studies aimed at preventing anxiety in children (ages 6 to 14 years). Overall, small to moderate effects were found. Positive effects were found for selective (post-intervention, 4-months, and 12-months follow-up), universal (post-intervention), and indicated programs (4-months follow-up). Universal and indicated program effects were larger at post-intervention, whereas effects for selective programs were larger at follow-up. However, at 24-months, the anxiety of participants in both the universal and indicated programs worsened over time. Effects for all program types were associated with the use of CBT interventions, and selective program effects were associated with social skills training. Effects were larger for universal programs implemented by mental health leaders, for child immigrants, and for children ‘at risk’ for depression. Significant effects were also found for self-concept, self-esteem, and for positive future outlook. Age differences were not assessed in this review.

**Prevention of depressive symptoms.** Eight meta-analyses and one systematic review have examined the effectiveness of school-based programs for the prevention of depressive symptoms in children and adolescents.

Jané-Llopis, Hosman, Jenkins, and Anderson (2003) reviewed 54 trials that reported an outcome measure for depressive symptoms, 11 of which compared more than one type of program, resulting in 69 programs for analysis. Participants included children, adolescents and adults. The overall effect size found was small, and this did not differ according to the different age groups or level of risk. Universal
and selective programs produced larger effects when samples contained a higher portion of male participants. The effects were stronger in programs which included three or more intervention methods, which focused on enhancing competence rather than using behavioural techniques. Larger effects were also found for programs containing eight or more sessions, of 60 to 90 minutes in length, and when selective and indicated programs were led by a mental health professional.

Merry et al. (2004) identified 21 high quality studies examining depression prevention programs with children and adolescents aged between 5 and 19 years. Only 13 of these studies provided data appropriate for inclusion in the meta-analysis. As with the earlier review (Jané-Llopis et al., 2003), effect sizes were small. Evidence was found for short-term (post-intervention) effectiveness of targeted programs to reduce depressive symptoms, but there was no support for the effectiveness of the universal programs. Merry et al. (2004) also reported small but significant effects for universal and targeted interventions (post-intervention), as there was a lower incidence of depressive disorder. A significantly lower incidence of depressive disorder was found at 1-year follow-up (but not at 3- or 6-months follow-up), only for the targeted interventions. The overall effects of gender were unclear due to significant heterogeneity in the subgroup analysis of gender. The variability indicated that both girls and boys responded differently to different programs. Specifically, at post-intervention, the depression scores (i.e., symptoms) for boys, but not for girls, were reduced. Whereas at follow-up (3-months, 6-months, 12-months, and 24-months), no gender effects were shown. In contrast, the results on depressive disorders indicated that at post-intervention, programs were effective for girls rather than boys. Similar to the depressive symptoms, there were no gender differences at follow-up for depressive disorder. Age effects were not examined.
Horowitz and Garber (2006) assessed 30 studies aimed at preventing depressive symptoms in children and adolescents (up to age 20). In contrast to Jané-Llopis et al. (2003), effect sizes were small for universal programs, and moderate for both selective and indicated programs, at post-intervention and at follow-up (average length 6-months). Selective programs were more effective than universal programs post-intervention, whereas at follow-up, both selective and indicated programs were superior to universal programs. Post-intervention effect sizes were significantly greater for studies with older adolescents (age not specified), and for samples with more females. Program effects were not associated with length of program or length of follow-up.

Stice et al. (2009) reviewed 47 trials that evaluated 32 prevention programs with children and adolescents aged between 10 and 19 years. Overall, the programs produced small effect sizes, with 13 significantly reducing depressive symptoms, and four significantly reducing risk for future onset of depressive disorder. Evidence was found for the effectiveness of selective programs (post-intervention and 12-month follow-up) and universal programs (12-month follow-up only) in reducing depressive symptoms. Selective programs with ‘high risk’ youth produced significantly larger effects than universal programs. Intervention effects were significantly larger for programs targeting ‘high risk’ individuals with more female participants, and for adolescents over 13.5 years.

Brunwasser, Gillham and Kim (2009) specifically reviewed 17 evaluations of the Penn Resiliency Program, which is the most widely researched depression prevention program. Participant ages ranged from 8 to 18 years. The overall effect sizes for reductions in depressive symptoms were small. Consistent with the previous review (Stice et al., 2009), evidence was found for the effectiveness of
targeted programs (post-intervention and 12-month follow up) and universal programs (12-month follow up only) when compared with a no intervention control. Yet, when compared with active control conditions, the intervention group was not superior at either post-intervention or 6- to 8-month follow-up. Program effects did not differ according to program leader (i.e., mental health professionals, teachers or community providers), risk status, or gender. Age differences were not examined.

Kavanagh et al. (2009) examined the effectiveness of 17 school-based CBT depression preventions programs, with participants aged 11 to 19 years. Based on the synthesis of 13 studies, small effect sizes were found for reducing depressive symptoms for up to 3-months post-intervention. Longer interventions were associated with larger effects for interventions at 3-months post-intervention, however, these effects were not significant at 6-months or 12-months follow-up. As with the previous reviews, larger effects were found for indicated programs (vs. universal programs), which included participants with existing symptoms, or those ‘at risk’ of depression (6-months follow-up). Six of the studies showed greater effectiveness for students from middle to high socioeconomic status. Age effects were not examined.

Venning, Kettler, Eliott, and Wilson (2009) evaluated 11 CBT studies (school-based and community-based) aimed at preventing the onset of depression in participants aged 10 to 16 years. In contrast to previous reviews, no overall support for the CBT interventions were found. However, a subgroup analysis with six programs found support for the CBT programs which assessed depression using the Children’s Depression Inventory (6-month and 12-month follow-up), and for CBT programs deemed to contain three ‘hopeful elements’ of positive functioning (i.e.,
coping skills, goal-setting, or change negative thinking). No other moderators were assessed (i.e., age or program type).

Calear and Christensen (2010) conducted a systematic review evaluating 42 trials, from 28 different school-based depression prevention programs with children and adolescents (aged 5 to 19 years). Half of these programs showed significant reductions, with small to moderate effect sizes. At post-intervention and follow-up, indicated programs were associated with a greater proportion of significant trials than universal or selective approaches. Additionally, interventions led by teachers and those employing an attention control condition were associated with fewer significant effects. No age differences were found.

In an update to their earlier review, Merry et al. (2011) assessed the effectiveness of 68 high-quality school and non-school based depression interventions, which involved children and adolescents (aged 5 to 19 years). The programs produced small effect sizes. Evidence was found for the effectiveness of targeted programs (post-intervention to 12-months follow-up) and universal programs (post-intervention to 9-months follow-up), in significantly reducing the incidence of depressive disorders and depressive symptoms, when compared with no intervention. Programs with participants who were ‘high risk’ were more effective than those with ‘low risk’ participants. Gender was not associated with outcomes and the effects of age were not examined.

**Prevention of anxiety and depressive symptoms.** In addition, two meta-analyses and one systematic review have examined school-based programs aimed at preventing symptoms of both anxiety and depression in children and adolescents.

Neil and Christensen (2007) conducted a systematic review of 24 trials from nine Australian school-based prevention and early intervention programs for anxiety
and depression. Age of participants was not provided so age effects could not be examined. Effect sizes were small to moderate in reducing anxiety and depression in schools for both indicated and universal approaches. At post-intervention, indicated programs targeting anxiety were associated with a greater proportion of significant trials than universal programs or depression studies.

Mychailyszyn et al. (2012) evaluated 63 cognitive-behavioural school-based interventions (grades K through 12), for the prevention of anxiety and depressive symptoms. Effect sizes were moderate for anxiety and small for depressive symptoms (post-intervention only). These effect sizes were significantly greater for selective and indicated programs, when compared to universal programs, and for treatment studies rather than prevention studies. The effects did not differ according to length of intervention, program leader (i.e., school or research staff), gender, or participant age.

Corrieri et al. (2014) reviewed 28 school-based anxiety and depression prevention interventions in children and adolescents (aged 7 to 19 years). Depressive outcomes were evaluated in 24 studies, and anxiety outcomes were assessed in 15 studies. Effect sizes for depressive symptoms were small (post-intervention and 12-months follow-up), and there was no difference between program types (i.e., universal vs. indicated programs). Effects for anxiety symptoms were also small, for both indicated programs (post-intervention, 6-months, and 12-months follow-up) and universal programs (post-intervention to 6-months follow-up). The effects of age were not examined.

**Summary of Reviews**

**Type of program.** Sixteen of the reviews investigated the effectiveness according to type of intervention program. The findings of five reviews on anxiety
prevention demonstrated that universal, selective and indicated intervention approaches were all effective in reducing anxiety symptoms in children and adolescents (Fisak et al., 2011; Gallegos et al., 2012; Neil & Christensen, 2009; Teubert & Pinquart, 2011; Zalta, 2011), yet there were inconsistencies in the effectiveness of the program types in the short-term (post-intervention) and long-term (follow-up). While two reviews reported no differences between universal, selective and indicated programs (Fisak et al., 2011; Zalta, 2011), one review on the prevention of anxiety in children and adolescents demonstrated at post-intervention, that the program effects were larger for indicated and selective programs (Teubert & Pinquart, 2011). Similarly, a review evaluating Australian school-based prevention of both anxiety and depression, found indicated programs which targeted anxiety resulted in a higher proportion of significant trials when compared to universal programs, and depression studies (Neil & Christensen, 2007). In contrast, another anxiety prevention review evaluating school-based prevention programs showed universal programs to be more effective at post-intervention, while at follow-up, indicated programs had stronger effects (Neil & Christensen, 2009). Furthermore, another school-based anxiety review showed universal and indicated program effects were larger at post-intervention, whereas effects for selective programs were larger at follow-up (Gallegos et al., 2012). This latter review also found negative effects for both universal and indicated programs at 24-months follow-up, indicating that participants in the intervention group worsened over time. Given that this finding has not been not reported in any other reviews, it needs to be verified.

In contrast to the findings for anxiety prevention reviews, findings of the depression prevention reviews suggest that child and adolescent depression prevention programs produce significantly stronger effects when interventions were
offered to ‘high risk’ participants, either as selective or indicated (i.e., targeted) interventions (Calear & Christensen, 2010; Horowitz & Garber, 2006; Kavanagh et al., 2009; Merry et al., 2011; Merry et al., 2004; Stice et al., 2009). The finding that targeted programs were more effective, was also shown in a review on school-based interventions aimed at preventing both anxiety and depressive symptoms (Mychailyszyn et al., 2012). However, in two other reviews examining depression prevention (Brunwasser et al., 2009; Jané-Llopis et al., 2003), and one investigating anxiety and depression prevention (Corrieri et al., 2014), no differences between universal, selective and indicated programs were found, indicating programs were equally effective for all children and adolescents regardless of risk status.

**Age differences.** Nine of these reviews examined age differences with five showing no age effects (Calear & Christensen, 2010; Fisak et al., 2011; Jané-Llopis et al., 2003; Mychailyszyn et al., 2012; Zalta, 2011). Three reviews showed that programs were more effective for adolescents than children. One review showed that school-based prevention and early intervention programs for anxiety were more effective for adolescents who were aged 12 and older than for children aged younger than 12 years (Neil & Christensen, 2009). One review showed that depression prevention programs were more effective for participants above 13.5 years (Stice et al., 2009), whereas in another depression prevention review, programs were more effective for older adolescents (age was not specified, however participants up to age 20 were included in the review) (Horowitz & Garber, 2006). In contrast, a more recent review has shown that programs for the prevention of anxiety symptoms were more effective for participants aged 11 and under than those who were older than 11 years (Teubert & Pinquart, 2011).
Further evidence that earlier preventive interventions may be more advantageous than later interventions comes from a study of the school-based FRIENDS intervention for anxiety and depression. In the universally delivered program, Lock and Barrett (2003) directly examined developmental differences in children in Grade 6 (9 to 10 years) and Grade 9 (14 to 16 years). Findings indicated that prior to the intervention and at post-intervention, Grade 6 children reported significantly greater levels of anxiety, however, at 12-months follow-up the intervention group had greater reductions in anxiety (compared to their age-matched controls) as well as lower levels of anxiety and depression compared to the Grade 9 children. These anxiety reductions were maintained in the younger group across time at 24- and 36-month post-intervention (Barrett, Farrell, Ollendick, & Dadds, 2006), whereas there were no group differences for the older children.

**Gender.** Ten of the anxiety and/or depression prevention reviews examined the moderating effects of gender. Five of these reviews showed no gender differences (Brunwasser et al., 2009; Fisak et al., 2011; Merry et al., 2011; Mychailyszyn et al., 2012; Zalta, 2011). However, findings of gender differences from the other reviews yielded mixed results. Two depression prevention reviews had the same result, showing that prevention programs were more effective when delivered to samples containing a higher portion of females (Horowitz & Garber, 2006; Stice et al., 2009). Conversely, two other reviews examining anxiety prevention (Teubert & Pinquart, 2011) and depression prevention (Jané-Llopis et al., 2003), showed programs produced larger effects when samples contained a higher portion of male participants (Jané-Llopis et al., 2003; Teubert & Pinquart, 2011). Whereas, in another depression prevention review, both boys and girls responded differently to different programs. Specifically, where at post-intervention, programs
were effective in reducing depression symptoms for boys only, the results for depressive disorders indicated that at post-intervention, programs were effective for girls rather than boys. However, at follow-up there were no gender differences for depressive symptoms or depressive disorder (Merry et al., 2004).

**Program leader.** Seven of the anxiety and/or prevention reviews investigated the impact of program leaders, with findings showing fairly consistent results. In three anxiety prevention reviews (Fisak et al., 2011; Gallegos et al., 2012; Teubert & Pinquart, 2011) and two depression reviews (Calear & Christensen, 2010; Jané-Llopis et al., 2003), interventions led by mental health professionals produced greater effects, than when led by teachers. One of these school-based anxiety prevention reviews found universal programs were more effective when led by mental health professionals (Gallegos et al., 2012). In contrast, a depression prevention review with children, adolescent and adults, showed both selective and indicated programs were more effective when led by mental health professionals (Jané-Llopis et al., 2003). Two studies found no difference in the effectiveness of the program according to the program leader (Mychailyszyn et al., 2012; Neil & Christensen, 2009).

**Other variables.** Four of the reviews examined the effects of different control groups. Two anxiety prevention reviews found there was no difference according to type of control group (Neil & Christensen, 2009; Zalta, 2011), however, in the two other reviews, findings were shown to be consistent. One review evaluating school-based depression prevention programs, showed that programs with an attention control were less effective than those with a no intervention control group (Calear & Christensen, 2010). Similarly, in another depression prevention review, interventions
were shown to no longer be effective when compared to an active control, as opposed to a no intervention control group (Brunwasser et al., 2009).

Five of the reviews examined intervention length (i.e., number of sessions and/or session length). In four reviews, no difference was shown according to length of intervention (Fisak et al., 2011; Horowitz & Garber, 2006; Mychailyszyn et al., 2012; Zalta, 2011), or length of sessions (Zalta, 2011). However, one anxiety prevention review found programs were more effective when they contained a minimum of eight sessions of 60 to 90 minute duration (Jané-Llopis et al., 2003). In another review, depression prevention interventions which were longer were shown to be more effective at 3-months follow-up, however, these programs were no longer effective beyond this duration (Kavanagh et al., 2009).

**Conclusions**

Most of the reviews showed that selective or indicated programs that targeted depression were more effective than universal programs. On the other hand, most of the reviews that targeted anxiety showed variability for the outcomes in the short- and long-term (e.g., post-intervention or follow-up), according to type of program, and this was found to be inconsistent across the reviews. Another factor showing some consistency was that programs were found to be more effective when led by mental health professionals, yet in the reviews which examined the interaction between program leader and program type, differences were shown. In addition, age and gender differences were not consistently found across the reviews.

It is also important to note that all the reviews have included both children and adolescents. A review specifically focusing on children is needed as this will more specifically address the effectiveness of prevention and intervention programs
for this age groups, and how program effects may be moderated by factors such type of program and gender.
CHAPTER FOUR

The Prevention and Early Intervention of Anxiety and Depression in Children: A Systematic Review of School-Based Programs

The aim of this systematic review was to evaluate the effectiveness of school-based early intervention and prevention programs for anxiety and depression, which specifically focused on children in primary or elementary school who were aged between 7 and 13 years. The programs were examined according to three types of programs (i.e., universal, indicated and selective interventions), risk status, gender differences, risk of bias, program content, evaluation control group, program leader, program and session length, and sample size.

Method

Identification of Studies

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (Moher, Liberati, Tetzlaff, & Altman, 2009) guided the process and reporting of this review. A systematic search of five electronic databases (PsychINFO, PsychARTICLES, ERIC, PubMed and Google Scholar) was conducted on 3 August 2012. Articles from 1980 to August 2012 were included. A professional librarian assisted with developing search strategies for each database. A simultaneous combination of the following search terms included: (prevent* OR intervent* OR early-intervention) AND (school* OR school-based) AND program* AND (anxi* OR depress* OR internalizing OR internalising) AND (child* OR youth). In stage one of the literature review, the titles and abstracts of identified articles were screened and assessed for relevance and possible inclusion in the systematic review. Articles identified as being completely irrelevant were excluded at this stage, and relevant studies retained for the full-text examination. The second
stage involved reading through reference lists of review papers to identify other relevant studies.

**Criteria for Inclusion**

Two authors assessed the eligibility of studies based on the following criteria: (a) study participants were children aged 7 to 13 years in primary or elementary school; (b) the primary aim was to reduce or prevent the subclinical symptoms of anxiety and/or depression (i.e., children not diagnosed with an anxiety and/or depressive disorder); (c) the intervention was school-based and delivered either during or after school hours; (d) a primary outcome measure was anxiety and/or depressive symptomatology, evaluated at pre-intervention, post-intervention, and at any included follow-up period; (e) the research design involved randomly controlled trials (RCT), including cluster RCTs; (f) the design included a non-intervention comparison group (i.e., wait-list control, usual curriculum, monitoring group); and (g) the study was published in an English language peer-reviewed journal. Studies which have been excluded from this review and reasons for exclusion are included in Appendix A.

**Risk of Bias Assessment**

The quality ratings of studies were calculated as poor quality studies can overestimate prevention and intervention effects (Moher et al., 1998). The methodology of all included studies were evaluated using the validated scale developed by Jadad et al. (1996). Assessment for each study was performed against the Jadad Scale key criteria, which included: randomisation, double blinding, and reports of withdrawals and drop-outs for the trials (see Appendix B). This included the following questions: (1) Was the study described as randomised (including the use of words such as randomly, random, and randomisation)? (2) Was the study
described as double-blind? and (3) Was there a description of withdrawals and dropouts? Each question was scored on a 2-point scale, and either given 1 point for “yes” or 0 points for “no”. An additional point was given for question 1 if the method to generate the sequence of randomisation was described, and the method was appropriate (e.g., table of numbers computer generated, etc.), and/or for question 2, an additional point was given if the method of double-blinding was described, and it was appropriate (e.g., identical placebo, active placebo, dummy, etc.). A point was deducted for question 1 if the method of randomisation was described, and it was inappropriate, and/or for question 2, a point was deducted if the method of double-blinding was described, but it was inappropriate (e.g., comparison of tablet vs. injection with no double dummy) (Jadad et al., 1996). Each study could receive an overall score between 0 and 5. A Jadad Score of 0 to 2 indicates the study quality is low, and a score of 3 to 5 indicates the study quality is high. Three studies were assessed as having selective outcome reporting bias (i.e., having incomplete or inadequate reporting of results) and were excluded from this review (see Appendix A).

Overall, the quality of studies was ‘poor’ with no studies achieving a rating of 3 or above (see Appendix B). However, it is uncommon for school-based intervention and prevention programs to receive a score above 3, as studies are unable to meet the double-blind criteria or full randomisation criteria (Neil & Christensen, 2009).

**Results**

Twenty-three eligible studies were identified. One paper (Cardemil et al., 2002) included two studies with different samples (Cardemil et al., 2002, study 1;
Cardemil et al., 2002, study 2). The flow of studies through the review process is summarised in Figure 1. Details of each study, including the participants, the intervention, and findings for universal, indicated, and selective programs, are presented in Tables 1, 2 and 3, respectively.

**Program Content**

All programs except for two (Gwynn & Brantley, 1987; Kraag et al., 2009), were focused on CBT, three of which included a psychoeducation component (Berger, Pat-Horenczyk, & Gelkopf, 2007; Mifsud & Rapee, 2005; Miller et al., 2010). The CBT-based programs primarily focused on the development ofproblem-solving and social skills, cognitive restructuring, relaxation, and assertiveness training. Nine of the studies implemented the FRIENDS for Life program (FRIENDS), a program developed in Australia designed to prevent anxiety and depression in children and youth through teaching cognitive-behavioural principles, developing social skills, and fostering emotional resilience (Barrett & Turner, 2001).

Nine of the studies utilised the Penn Prevention Program (PENN), a depression prevention program developed by researchers at the University of Pennsylvania (Jaycox et al., 1994; Pattison & Lynd-Stevenson, 2001), or its variants, the Penn Resiliency Program (PRP; Cardemil et al., 2002, study 1; Cardemil et al., 2002, study 2; Gillham et al., 2006), the Penn Optimism and Life Skills Program (OLS; Quayle, Dziurawiecz, Roberts, Kane, & Ebsworthy, 2001), the Positive Thinking Program (PTP; Rooney et al., 2006), and the Aussie Optimism Program (AOP; Roberts et al., 2010; Roberts et al., 2003). Other CBT programs were Overshadowing the Threat of Terrorism (OTT; Berger et al., 2007), the Taming Worry Dragons program (TWD; Miller et al., 2010), and the Cool Kids program
Figure 1. Flow of studies through the phases of the systematic review

(CKP; Mifsud & Rapee, 2005). The other two programs were Learn Young, Learn Fair, a stress management program, focusing on stress awareness and coping skills (LYLF; Kraag et al., 2009), and an untitled program which involved an educational support group and focused on psychoeducation, emotional expression, and problem-solving (Gwynn & Brantley, 1987). Ten studies included a parent component (Barrett & Turner, 2001; Berger et al., 2007; Bernstein et al., 2005; Cooley-Strickland, Griffin, Darney, Otte, & Ko, 2011; Essau et al., 2012; Gillham et al., 2006; Lock & Barrett, 2003; Lowry-Webster et al., 2001; Mifsud & Rapee, 2005; Siu, 2007). These involved one to nine parent psychoeducation sessions, which reinforced and complemented components of the school-based program. In addition,
<table>
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<tr>
<th>Study Country</th>
<th>Program name</th>
<th>Target symptoms</th>
<th>N</th>
<th>Participants</th>
<th>Conditions</th>
<th>Intervention:</th>
<th>Quality rating</th>
<th>Findings</th>
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<tbody>
<tr>
<td>Barrett and Turner (2001) Australia</td>
<td>FRIENDS</td>
<td>Anxiety and Depression</td>
<td>489</td>
<td>10-12 years, M = 10.75, 48.5% female, Grade 6, 4 x primary schools and 6 x extended primary-secondary schools, Metropolitan area.</td>
<td>1. FRIENDS psychologist-led (PL) intervention, 2. FRIENDS teacher-led (TL) intervention, 3. NI control</td>
<td>10 x weekly, 75-minute sessions + 2 booster sessions, CBT (e.g., identifying feelings and thoughts, coping, cognitive restructuring, problem-solving, social skills and attentional training). FRIENDS. Designed to prevent child anxiety and depression and build resilience. Teaches children coping and problem solving skills and includes relaxation, cognitive restructuring, attentional training, parent-assisted exposure, and family and peer support. Parents: 4 x psychoeducation sessions on FRIENDS, parenting, and reinforcement strategies.</td>
<td>2</td>
<td>Significant reductions in anxiety symptoms in PL and TL intervention groups compared to control group, with no differences between intervention groups. TL intervention group had significantly more depressive symptoms compared to PL intervention and control group, with no differences between latter two groups. However, mean depressive scores for the TL intervention group remained within the non-clinical range. Gender: Girls had significantly higher levels of anxiety than boys at pre- and post-intervention.</td>
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<tr>
<td>Study</td>
<td>Country</td>
<td>Program name</td>
<td>Target symptoms</td>
<td>Primary Outcome Measures</td>
<td>Participants</td>
<td>Conditions Leaders</td>
<td>Intervention: Length</td>
<td>Theoretical framework Summary</td>
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<tr>
<td>Lowry-Webster et al. (2001);</td>
<td>Australia</td>
<td>FRIENDS</td>
<td>Anxiety and Depression</td>
<td>SCAS; RCMAS; CDI</td>
<td>10-13 years</td>
<td>Teacher</td>
<td>10 x weekly, 60-minute sessions + 2 booster sessions. CBT. FRIENDS.</td>
<td>Parent Component</td>
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<tr>
<td>Lowry-Webster, Barrett, and</td>
<td>Australia</td>
<td>FRIENDS</td>
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<td>Lock (2003)</td>
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<tr>
<td>Pattison and Lynd-Stevenson</td>
<td>Australia</td>
<td>Penn Prevention Program (PPP)</td>
<td>Depression</td>
<td>CDI; STAIC</td>
<td>9-12 years</td>
<td>MHP</td>
<td>11 x weekly, 2-hour sessions. Attention Control: 12 x 2-hour sessions over 11 weeks. CBT. PPP. Cognitive (e.g., learning to think flexibly and challenge negative beliefs) and social problem-solving skills (e.g., learning about goal setting, decision making, and coping skills). Effectiveness trial comparing universal school-based CBT-based interventions with an active control group that switched the order of topics. Parents: None.</td>
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<td>Study</td>
<td>Country</td>
<td>Program name</td>
<td>Target symptoms</td>
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<td>Quayle et al. (2001)</td>
<td>Australia</td>
<td>Optimism and Life Skills (OLS)</td>
<td>Depression</td>
<td>47</td>
<td>Age (years)</td>
<td>1. OLS intervention 2. WL control</td>
<td>8 x weekly, 80-minute sessions. CBT. 1. OLS. Based on PRP. Cognitive (e.g., learning to think flexibly and challenge negative beliefs) and social problem-solving skills (e.g., learning about goal setting, decision making, and coping skills).</td>
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<tr>
<td>Lock and Barrett (2003); Barrett et al. (2006)</td>
<td>Australia</td>
<td>FRIENDS</td>
<td>Depression and Anxiety</td>
<td>336</td>
<td>Age (years)</td>
<td>1. FRIENDS intervention 2. WL control</td>
<td>10 x 45-minute sessions + 2 booster sessions. CBT. FRIENDS. Parents: 4 x psychoeducation sessions on FRIENDS, parenting, and reinforcement strategies.</td>
<td>2</td>
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<tr>
<td>Study Country Program name</td>
<td>Target symptoms</td>
<td>N</td>
<td>Participants</td>
<td>Conditions</td>
<td>Intervention:</td>
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<td>Findings</td>
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<td><strong>Rooney et al. (2006)</strong> Australia Positive Thinking Program (PTP)**</td>
<td>Depression &amp; Anxiety</td>
<td>120</td>
<td>• 8-9 years • M = 9.1 • 43% female • Grade 4 4 x metropolitan State primary schools, low SES area Risk status: Depressive disorder (CDI ≥ 17 + DICA interview).</td>
<td>1.PTP intervention 2.NI control Leaders: MHP 8 x weekly, 60-minute sessions. CBT. PTP. Designed to prevent depressive symptoms and disorders. Promotes optimistic thinking styles, emotional regulation and social competence by teaching techniques to identify thoughts and feelings, relaxation, regulations of negative mood, and solving interpersonal conflicts. Parents: None.</td>
<td>2</td>
<td>Significant reductions in depressive symptoms in intervention group compared to control group. Gender: Girls reported significantly higher anxiety scores than boys at baseline. Risk: At 9-months, the proportion of children who had developed depressive disorders was significantly greater in the control group compared to the intervention group.</td>
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<td><strong>Berger et al. (2007)</strong> Israel Overshadowing the Threat of Terrorism (OTT)</td>
<td>Anxiety</td>
<td>142</td>
<td>• NR • M = 10 • 43.77% female • Grades 2-6 1 x public elementary school Sample: Children exposed to risk of terrorism</td>
<td>1. OTT intervention 2. WL control Leaders: Teacher 8 x weekly, 90-minute sessions CBT + Psychoeducation OTT. Designed to help children cope better with the threat and the exposure to terrorism. Includes psychoeducation about stress and trauma, feeling identification, management of somatic symptoms, cognitive restructuring and</td>
<td>2</td>
<td>Significant reductions in anxiety symptoms and impairment in intervention group compared to control group. Gender: Girls reported significantly higher anxiety scores than boys at baseline. None.</td>
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<tr>
<td>Study Country Program name</td>
<td>Target symptoms Primary Outcome Measures</td>
<td>N</td>
<td>Participants</td>
<td>Conditions Leaders</td>
<td>Intervention: Length Theoretical framework Summary Parent Component</td>
<td>Quality rating</td>
<td>Findings</td>
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<tr>
<td>Mostert and Loxton (2008) South Africa FRIENDS</td>
<td>Anxiety SCAS</td>
<td>46</td>
<td>• 12 years • M = 12.5 • 37% female • Grade 6</td>
<td>1. FRIENDS intervention Leaders: NR</td>
<td>10 x bi-weekly, 2-hour sessions CBT FRIENDS. Study evaluating the effectiveness of FRIENDS among South African children. Parents: None.</td>
<td>1</td>
<td>No significant group differences. Gender: No gender differences. 4- and 6-months: No significant group differences.</td>
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<tr>
<td>Kraag et al. (2009) The Netherlands Learn Young Learn Fair (LYLF)</td>
<td>Anxiety and Depression STAIC; SDIC</td>
<td>1364</td>
<td>• 8-9 years • M = 10.3 • 49.9% female • Grades 5-6</td>
<td>1. LYLF intervention Leaders: Classroom teacher (trained)</td>
<td>8 x weekly, 60-minute sessions + 5 x weekly 60-minute booster sessions. LYLF: Stress awareness program designed to decrease stress, anxiety and depression and to increase stress awareness</td>
<td>2</td>
<td>No significant group differences. After controlling for stress awareness as a mediator, significant reductions in anxiety symptoms in intervention group compared to control group. 9-months: No significant group differences. Gender: Girls had significantly more anxiety and depression than boys at 9-month follow-up.</td>
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<td>Study Country</td>
<td>Program name</td>
<td>Target symptoms</td>
<td>Primary Outcome Measures</td>
<td>N</td>
<td>Participants</td>
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<tr>
<td>Rose et al. (2009) Canada</td>
<td>FRIENDS</td>
<td>Anxiety</td>
<td>MASC</td>
<td>52</td>
<td>• 8-9 years</td>
<td>1.FRIENDS intervention</td>
<td>8 x weekly, 60-minute sessions. CBT. FRIENDS.</td>
<td>1</td>
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<tr>
<td>Miller et al. (2010) Canada</td>
<td>Taming Worry Dragons (TWD)</td>
<td>Anxiety</td>
<td>MASC</td>
<td>116</td>
<td>• 7-12 years</td>
<td>1.TWD intervention</td>
<td>8 x weekly sessions. CBT. TWD.</td>
<td>2</td>
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Notes:
- **Participants**
  - • Age (years)
  - • Mean
  - • % female
  - • Grade

- **Conditions**
  - Sample
  - Sample Conditions
  - Leaders

- **Intervention:**
  - Length
  - Theoretical framework
  - Summary
  - Parent Component

- **Quality rating**

- **Findings**
  - Gender: Girls had significantly more anxiety and depression than boys at baseline and post-intervention.
  - Risk: Children in the intervention group with moderate to severe anxiety scores pre-intervention (‘At Risk’ and Clinical) reported significant reductions in anxiety symptoms (MASC).
<table>
<thead>
<tr>
<th>Study Country Program name (year)</th>
<th>Target symptoms</th>
<th>N</th>
<th>Participants</th>
<th>Conditions</th>
<th>Intervention:</th>
<th>Quality rating</th>
<th>Findings</th>
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<tbody>
<tr>
<td>Roberts et al. (2010) Australia Aussie Optimism Program (AOP)</td>
<td>Anxiety and Depression</td>
<td>496</td>
<td>11-13 years • M = 11.99 • 57.6% female • Grade 7</td>
<td>1. AOP Intervention Leaders: Classroom teacher (trained)</td>
<td>20 x weekly, 60-minute sessions. CBT. AOP. Teaches methods to change cognitions, emotions and behaviors relevant to anxiety and depression. Involves two components: Optimistic Thinking Skills which targets cognitive vulnerabilities (e.g., attribution style, thoughts, feelings, decatastrophising), and Social Life Skills which targets interpersonal risks (e.g., problem-solving, creating networks, coping, communication).</td>
<td>2</td>
<td>No significant group differences. 6- and 18-months: No significant group differences.</td>
</tr>
<tr>
<td>Essau et al. (2012) Germany FRIENDS</td>
<td>Anxiety and Depression</td>
<td>628</td>
<td>9-12 years • M = 10.91 • 45.77% female • NR</td>
<td>1. FRIENDS intervention Leaders: Grad</td>
<td>10 x weekly, 60-minute sessions. + 2 booster sessions. CBT. FRIENDS. Modified to be appropriate for German children (i.e., ‘snake’ was replaced with ‘bear’). Parents: 4 x psychoeducation sessions on FRIENDS, parenting, and reinforcement strategies.</td>
<td>2</td>
<td>Children aged 9-10 years had significant reductions in depressive symptoms in intervention group compared to control group. 6-months: Children aged 11-12 years had significant reductions in depressive and anxiety symptoms (on SCAS subscales: obsessive-compulsive, and specific phobia) in intervention group compared to control group. 12-months: Children aged 11-12 years had significant reductions in depressive and anxiety symptoms. (on SCAS total scores, and SCAS subscales: separation</td>
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Table 1 (cont.)

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<tr>
<th>Study Country</th>
<th>Program name</th>
<th>Target symptoms</th>
<th>Primary Outcome Measures</th>
<th>N Participants</th>
<th>Conditions Leaders</th>
<th>Intervention: Length</th>
<th>Theoretical framework</th>
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Note: ADIS-C = Anxiety Disorders Interview Schedule for Children; BASC-PRS-IR = Behavior Assessment System for Children-Parent Rating Scale (Internalising Composite); CBT = Cognitive behavioral therapy; CDI = Children's Depression Inventory; DICA = Diagnostic Interview for Children and Adolescents; Grad = graduate student; MASC = Multidimensional Anxiety Scale for Children; MHP = mental health professional; NI = no intervention control; NR = not recorded; RCADS = Revised Child Anxiety and Depression Scale; RCMAS = Revised Children's Manifest Anxiety Scale; SCARED = Screen for Child Anxiety Related Emotional Disorders; SCAS = Spence Children's Anxiety Scale; SDIC = Short Depression Inventory for Children; SES = socio-economic status; STAIC = State-Trait Anxiety Inventory for Children; UCLA PTSD Index = UCLA PTSD index for DSM-IV (child version); WL = wait-list control.

a Adapted from the Penn Prevention Program (Jaycox et al., 1994).
b This analysis included results for both Grade 6 and Grade 9 students (ages 9-16 years).
c This intervention is a downward extension of programs based on theories and concepts discussed in the Penn Prevention Program.
d The control group received the intervention at 4-months after completing the SCAS, therefore at 6-months follow-up both groups had received the intervention limiting results to within group analysis.
e ‘Stress Awareness’ assessed by two questions (Spearman’s rho = .77): ‘Do you feel stressed every now and then?’ and ‘Have you felt stressed during the past four weeks?’ See Kragg et al. (2009) for details.

<table>
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<tr>
<th>Study Country</th>
<th>Program name</th>
<th>Target symptoms</th>
<th>Primary Outcome Measures</th>
<th>N Participants</th>
<th>Conditions Leaders</th>
<th>Intervention: Length</th>
<th>Theoretical framework</th>
<th>Summary</th>
<th>Quality rating</th>
<th>Findings</th>
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Note: ADIS-C = Anxiety Disorders Interview Schedule for Children; BASC-PRS-IR = Behavior Assessment System for Children-Parent Rating Scale (Internalising Composite); CBT = Cognitive behavioral therapy; CDI = Children's Depression Inventory; DICA = Diagnostic Interview for Children and Adolescents; Grad = graduate student; MASC = Multidimensional Anxiety Scale for Children; MHP = mental health professional; NI = no intervention control; NR = not recorded; RCADS = Revised Child Anxiety and Depression Scale; RCMAS = Revised Children's Manifest Anxiety Scale; SCARED = Screen for Child Anxiety Related Emotional Disorders; SCAS = Spence Children's Anxiety Scale; SDIC = Short Depression Inventory for Children; SES = socio-economic status; STAIC = State-Trait Anxiety Inventory for Children; UCLA PTSD Index = UCLA PTSD index for DSM-IV (child version); WL = wait-list control.

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### Table 2

**Indicated Prevention Programs**

<table>
<thead>
<tr>
<th>Study Country Program Name</th>
<th>Target symptoms</th>
<th>Primary Outcome Measures</th>
<th>N</th>
<th>Participants</th>
<th>Conditions</th>
<th>Intervention: Length Theoretical framework Summary</th>
<th>Quality rating</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jaycox et al. (1994); Gillham, Reivich, Jaycox, and Seligman (1995); Gillham and Reivich (1999) USA Penn Prevention Program (PPP)</td>
<td>Depression</td>
<td>CDI; RCDS; RADS</td>
<td>143</td>
<td>10-15 years • Age (years) • 4f = 11.4 • 46.2% female • Grades 5-6 7 x suburban public schools. Sample: Elevated levels of depressive symptoms and parental conflict (z-scores on CDI + CPQ &gt; 0.50). Depressive symptoms: Moderate (CDI &lt;15); Moderate to Severe (CDI ≥ 15).</td>
<td>1. Cognitive 2. Social problem-solving 3. Combined (both interventions) 4. WL control 5. No participation control</td>
<td>Leaders: Grad 12 x weekly, 90-minute sessions CBT. PPP. Cognitive (e.g., learning to think flexibly and challenge negative beliefs) and social problem-solving skills (e.g., learning about goal-setting, decision making, and coping skills). Parents: None.</td>
<td>2</td>
<td>Post-intervention Follow up 6-months: Significant reductions in depressive symptoms in the combined intervention group compared to control groups. 12-, 18- and 24-months: Results maintained. Combined intervention group was significantly less likely to report symptoms in the moderate to severe range than controls. Initially symptomatic children in intervention group reported significantly fewer symptoms, than controls. 36-months: Results not maintained as no significant group differences.</td>
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<tr>
<td>Study Country Program Name</td>
<td>Target Symptoms</td>
<td>Primary Outcome</td>
<td>Outcome Measures</td>
<td>N Participants</td>
<td>Conditions</td>
<td>Intervention: Length Theoretical framework Summary Parent Component</td>
<td>Quality rating</td>
<td>Findings</td>
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<tr>
<td>Roberts et al. (2003); Roberts, Kane, Bishop, Matthews, and Thomson (2004) Australia Aussie Optimism (AOP)</td>
<td>Depression and Anxiety</td>
<td>CDI; RCMAS</td>
<td>Parent: CHIL</td>
<td>189 • 11-13 years</td>
<td>1. AOP intervention 2. UC control 3. NI comparison Leaders: MHP</td>
<td>12 x weekly, 2-hour sessions. CBT AOP. Same as PPP with minor changes for an Australian sample (i.e., spelling and place names). Parents: None.</td>
<td>2</td>
<td>Significant reductions in anxiety symptoms in intervention group compared to control group. 18-months: No significant group differences. 30-months: Significant reductions in anxiety symptoms in intervention group and NI comparison group. Intervention children with low anxiety symptoms had significantly lower anxiety scores than controls group.</td>
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</table>
| Bernstein et al. (2005); Bernstein, Bemut, Victor, and Layne (2008) USA FRIENDS | Anxiety | MASC | Clinician: Composite clinical severity ratings, from ADIS-P (CSR) | 61 • 7-11 years | 1. FRIENDS child + parent training intervention (child + parent) 2. FRIENDS child-only intervention (child-only) 3. WL control Leaders: MHP | 9 x weekly, 60-minute sessions + 2 booster sessions. FRIENDS. Parents: 9 x 60 minute sessions. Content and activities developed to address parental anxiety, stress management, to help parents understand child's anxiety and the effects on family relationships. Included homework activities and materials | 2 | The combined intervention groups (‘child + parent’ and ‘child-only’) had significant reductions in anxiety on CSR, MASC-P and SCARED-P; the child + parent group had significant reductions in anxiety on MASC-P and SCARED-P; and, the child-only group had significant reductions in anxiety on SCARED-P compared to control group. 3-months: The combined intervention group had significant reductions in anxiety on MASC-P and SCARED-P; and, the child + parent group and child-only group had significant reductions in anxiety on SCARED-P compared to control group. 6-months: The combined intervention group had significant reductions in anxiety on MASC-P and SCARED-P; the child +
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<tr>
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<th>Findings</th>
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<tbody>
<tr>
<td>Australia Cool Kids Program (CKP)</td>
<td>Anxiety SCAS Parent: SCAS-P</td>
<td>91</td>
<td>8-11 years • M = 9.5 • 59% female • Grades 4-5 9 x schools, low SES Sample: Children with elevated levels of anxiety symptoms (RCMAS ≥ 18).</td>
<td>DSM-IV diagnosis (or ≥ 1 criteria) of SAD, GAD, &amp;/or SP and ADIS-P CSR of 2-6. teaching behavioral contracting.</td>
<td>2 After including age as a covariate, there were significant reductions in anxiety symptoms in the intervention group compared to control group.</td>
<td>4-months: Results maintained.</td>
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<tr>
<td>Mifsud and Rapee (2005)</td>
<td>Anxiety SCAS</td>
<td>91</td>
<td>8-11 years • M = 9.5 • 59% female • Grades 4-5 9 x schools, low SES Sample: Children with elevated levels of anxiety symptoms (RCMAS ≥ 18).</td>
<td>DSM-IV diagnosis (or ≥ 1 criteria) of SAD, GAD, &amp;/or SP and ADIS-P CSR of 2-6. teaching behavioral contracting.</td>
<td>2 After including age as a covariate, there were significant reductions in anxiety symptoms in the intervention group compared to control group.</td>
<td>4-months: Results maintained.</td>
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| Gillham et al. (2006) USA Penn Resiliency Program (PRP)* | Depression and Anxiety | CDI; RCMAS | 44 | • 11-13 years  
• M = 11.91  
• 28.5% female  
• Grades 6-7 | 1. PRP intervention  
2. WL control  
Leaders: MHP and Researcher | 8 x weekly, 90-minute sessions  
Leaders: MHP and Researcher | | | | 2 | No significant group differences. |
| Siu (2007) Hong Kong FRIENDS | Depression and Anxiety | RCDS; SCARED | 47 | • 7-10 years  
• M = 8.4  
• 46.8% female  
• Grades 2-4 | 3 x government primary schools  
Sample: Children with elevated symptoms of internalizing problems (High risk: CBCL Internalizing t-score ≥ 13) | 1. FRIENDS intervention  
2. WL control  
Leaders: Grad | 8 x weekly sessions.  
Leaders: Grad  
FRIENDS. Adapted for a Hong Kong sample. Parents: 2 x 1-hour sessions. | | | | 2 | Significant reductions in depressive and anxiety symptoms in intervention group compared to the control group.

6- and 12-months: Significant reductions in depressive and anxiety symptoms in intervention group compared to the control group. At 6-months, intervention children with initial high levels of anxiety were significantly less likely than controls to report clinically relevant levels of anxiety. Results not maintained at 12-months.
Note: ADIS-P = Anxiety Disorders Interview Schedule for Children-Parent Version; CBCL = Child Behavior Checklist; CBT = cognitive behavioral therapy; CDI = Children's Depression Inventory; CPQ = Child's Perception Questionnaire; CSR = clinician severity rating; GAD = Generalized Anxiety Disorder; Grad = graduate students; MASC = Multidimensional Anxiety Scale for Children; MASC-P = Multidimensional Anxiety Scale for Children-Parent Version; MHIP = mental health professional; NR = not reported; RADS = Reynolds Adolescent Depression Scale; RCDS = Reynolds Child Depression Scale; RCMAS = Revised Children's Manifest Anxiety Scale; SAD = Separation Anxiety Disorder; SCARED = Screen for Child Anxiety Related Emotional Disorders; SCARED-P = Screen for Child Anxiety Related Emotional Disorders-Parent version; SCAS = Spence Children's Anxiety Scale; SCAS-P = Spence Children's Anxiety Scale-Parent version; SES = socio-economic status; SP = Social Phobia; UC = usual care control; WL = wait-list control.

a Adapted from the Penn Prevention Program (Jaycox et al., 1994).
b The usual care control condition was the usual health education class.
c At 30-month follow-up, a sample a 114 children from an additional 18 rural primary schools was recruited to form a no-intervention comparison group.
d Due to a low return rate of data by parents, the authors did not include these results in statistical analyses.
<table>
<thead>
<tr>
<th>Study</th>
<th>Country</th>
<th>Program Name</th>
<th>Target symptoms</th>
<th>N</th>
<th>Participants</th>
<th>Conditions</th>
<th>Intervention:</th>
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<td>Primary Outcome</td>
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<td>Measures</td>
<td>Leaders</td>
<td>Length</td>
<td>Post-intervention Follow up</td>
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<tr>
<td>Gwynn and Brantley (1987) USA</td>
<td>Anxiety &amp; Depression STAIC; WITF; CDI</td>
<td>60</td>
<td>9-11 years</td>
<td>NR</td>
<td>50% female</td>
<td>8 x weekly sessions</td>
<td>1. Education support group intervention 2. WL control</td>
<td>0</td>
<td>Significant reductions in depressive and anxiety symptoms (except state anxiety) in intervention group compared to control group. Gender: No significant differences. 8-weeks: Results maintained.</td>
</tr>
<tr>
<td>Cardemil et al. (2002, study 1); Cardemil, Reivich, Bevers, Seligman, and James (2007) USA Penn Resiliency Program (PRP)</td>
<td>Depression CDI</td>
<td>49</td>
<td>NR</td>
<td>M = 11.35</td>
<td>45.5% female</td>
<td>1 x suburban middle school, low SES.</td>
<td>12 x weekly, 90-minute sessions. CBT, PRP content was modified to make it more relevant for low-income Latino children. Parents: None</td>
<td>2</td>
<td>Significant reductions in depressive symptoms in intervention group compared to control group. High symptomatic children in intervention group reported significantly fewer depressive symptoms than control group. 3-months: Results maintained. 6-months: Results maintained. High and Low symptomatic children in intervention group reported significantly fewer depressive symptoms that control group. 24-months: All results maintained.</td>
</tr>
<tr>
<td>Study</td>
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<tr>
<td>Cardemil et al. (2002, study 2); Cardemil et al. (2007) USA Penn Resiliency Program (PRP)*</td>
<td>USA</td>
<td>PRP</td>
<td>Depression</td>
<td>CDI</td>
<td>103</td>
<td>• NR</td>
<td>1. PRP Intervention 2. Parent Component Leaders: Grad 12 x weekly, 90-minute sessions. CBT PRP content was modified to make it more relevant for low-income African-American children. Parents: None</td>
<td>2</td>
<td>No significant group differences.</td>
</tr>
<tr>
<td>Cooley-Strickland et al. (2011) USA FRIENDS</td>
<td>USA</td>
<td>FRIENDS</td>
<td>Anxiety</td>
<td>RCMAS</td>
<td>93</td>
<td>• 6-12 years</td>
<td>1. FRIENDS Intervention 2. WL Control Leaders: Grad 13 x bi-weekly, 60-minute sessions. CBT: FRIENDS. Adapted to be culturally and contextually appropriate for ethnically diverse urban American children, particularly African Americans. Parents: 1 x parent session. Parents were taught child-management skills, and about the skills the children were acquiring in the FRIENDS program, and how to encourage their children to use these skills</td>
<td>2</td>
<td>No significant group differences.</td>
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Table 3 (cont.)

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<thead>
<tr>
<th>Study Country</th>
<th>Program Name</th>
<th>Target symptoms</th>
<th>Primary Outcome</th>
<th>Measures</th>
<th>Sample</th>
<th>Conditions Leaders</th>
<th>Intervention: Length</th>
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<th>Findings</th>
<th>Post-intervention</th>
<th>Follow up</th>
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Note: CBT = cognitive behavioral therapy; CDI = Children’s Depression Inventory; CREV = Children’s Report of Exposure to Violence; Grad = graduate students; NI = no intervention control; NR = not reported; RCMAS = Revised Children’s Manifest Anxiety Scale; SES = socio-economic status; STAIC = State-Trait Anxiety Inventory for Children; WITF = What I Think and Feel; WL = wait-list control.

*Adapted from the Penn Prevention Program (Jaycox et al., 1994).
the FRIENDS programs included two booster sessions for the children which were implemented 1- and 3-months following the initial intervention (e.g., Barrett & Turner, 2001), and the Learn Young Learn Fair program included five-weekly booster sessions which followed the regular sessions (Kraag et al., 2009).

**Program Sessions**

With the exception of two studies, sessions were weekly. In the two exceptions the sessions were bi-weekly (Cooley-Strickland et al., 2011; Mostert & Loxton, 2008). The length of programs ranged from eight to 20 sessions, with the length of sessions varying from 45-minutes to 2-hours, with the majority having a session length of 60-minutes.

**Evaluation Sample Size and Follow-Up**

Sample sizes varied considerably, ranging from 44 (Gillham et al., 2006) to 1364 participants (Kraag et al., 2009). The median sample size was 103 participants.

Six studies only evaluated the program at post-intervention and included no other follow-up (Barrett & Turner, 2001; Berger et al., 2007; Cooley-Strickland et al., 2011; Miller et al., 2010; Rose et al., 2009; Siu, 2007). The other studies included follow-up periods that ranged from eight-weeks (Gwynn & Brantley, 1987) to 36-months (Barrett et al., 2006; Gillham & Reivich, 1999).

**Universal Programs**

**Overall outcomes.** Eight of the 13 (62%) universal programs showed significant reductions in anxiety and/or depressive symptoms at post-intervention or at follow-up. Six of the 13 (46%) demonstrated significant reductions in the intervention group compared to control group at post-intervention. Four of these studies showed reductions in anxiety symptoms (Barrett & Turner, 2001; Berger et
Five studies 
al., 2007; Kraag et al., 2009; Lowry-Webster et al., 2001), and two studies showed
reductions in depressive symptoms (Essau et al., 2012; Rooney et al., 2006).

Nine of the 13 (69%) universal programs included a follow-up assessment for
one or more time periods, with the duration of follow-ups ranging from 4-months to
36-months. Four (44%) studies showed a least one significant reduction in the
intervention group compared to control group at follow-up. One study (Lock &
Barrett, 2003) demonstrated reductions in anxiety symptoms at 12-months, which
were maintained at the 24-month and 36-month follow-ups (Barrett et al., 2006).
Another study demonstrated reductions in depressive symptoms at 6-months (Quayle
et al., 2001). Two studies showed reductions in both anxiety and depressive
symptoms; in one study, these reductions were found at 6-months and were
maintained at 12-months (Essau et al., 2012), and in the other study the reductions
were found at 12-months (Lowry-Webster et al., 2003). In another study at 9-
months, the proportion of children who developed depressive diagnoses was
significantly greater in the control group than the intervention group (Rooney et al.,
2006).

**Risk status.** The effectiveness of the programs analysed by ‘risk status’ (i.e.,
children with elevated symptoms on pre-intervention measures ‘at risk’ of
developing a diagnosable disorder), was assessed in five studies (Lock & Barrett,
2003; Lowry-Webster et al., 2001; Miller et al., 2010; Quayle et al., 2001; Rooney et
al., 2006). Of these, three (60%) indicated significant reductions in symptoms and
risk. One study showed that children in the intervention group with elevated anxiety
scores at pre-intervention (‘high risk’), had significantly lower scores than ‘high risk’
children in the control group at post-intervention (Miller et al., 2010). Interestingly,
another study showed that children in the intervention group who were ‘high risk’
based on their pre-intervention anxiety scores, had significant reductions in levels of depressive symptoms post-intervention (Lowry-Webster et al., 2001). The third study showed a significantly lower prevalence of depressive disorder in the intervention group at post-intervention, compared to the control group (Rooney et al., 2006).

**Gender.** Gender differences were assessed in seven of the 13 (54%) universal programs. Two studies indicated that girls had significantly higher anxiety symptoms compared to boys pre-intervention (Berger et al., 2007), and at pre- and post-intervention (Barrett & Turner, 2001). One study showed girls had significantly higher anxiety and depressive symptoms pre- and post-intervention (Kraag et al., 2009). Another study showed that girls had significantly greater reductions in anxiety symptoms than boys at post-intervention (Lock & Barrett, 2003). In addition, this study showed that at 24-months significantly more girls were ‘high risk’ compared to the boys within the control group (Lock & Barrett, 2003). This study also demonstrated that girls in the intervention group had significantly less anxiety than girls in the control group at 12-months, and 24-months, but this was not maintained at 36-month follow-up (Barrett et al., 2006).

**Risk of bias assessment.** Ten of the 13 (77%) universal studies received a quality rating of 2, of which eight (80%) had significant reductions on at least one outcome. Three studies (13%) received a quality rating of 1, but none of these demonstrated significant reductions. No studies received a score of 0 or 3.

**Program content.** Six of the 13 (46%) universal programs were the FRIENDS program, of which four (80%) were associated with reductions on at least one measure. Four (31%) of the programs were PENN program variants, of which two (50%) were associated with significant reductions (i.e., OLS and PTP). The
remaining three (23%) studies were independent programs, of which two (67%) were associated with significant reductions (i.e., OTT and LYLF). Four of the FRIENDS universal programs included both booster sessions and a parental component, and all of these demonstrated significant reductions on at least one outcome measure (Barrett & Turner, 2001; Essau et al., 2012; Lock & Barrett, 2003; Lowry-Webster et al., 2001). On the other hand, the two FRIENDS programs which did not include either a booster or parent component, showed no significant reductions on any of the outcomes (Mostert & Loxton, 2008; Rose et al., 2009). One other universal program which included only a booster component (i.e., LYLF), while another which included only a parent component (i.e., OTT), also demonstrated significant reductions on at least one outcome measure.

**Evaluation control group.** Nine of the 13 (69%) universal programs compared the prevention program with a wait-list control condition, of which six (67%) demonstrated significant reductions. Three (23%) of the universal programs compared the prevention program to a no-intervention condition or “usual care” monitoring group, of which two (67%) showed significant reductions. One (8%) universal program included two control conditions, and compared the intervention with a no-intervention control and an attention control, however, there were no significant differences among the groups (Pattison & Lynd-Stevenson, 2001).

**Program leader.** Six of the 13 (46%) universal programs were led by teachers, of which three (50%) were associated with significant reductions. Three (23%) of the universal programs were led by mental health professionals, of which two (67%) demonstrated significant reductions. Two (15%) of the universal programs were led by graduate students, of which two (100%) demonstrated significant reductions. One (8%) of the universal programs was led by mental health
professionals and teachers, and this was associated with a significant reduction. The one (8%) remaining universal program did not include details of the program leader but there were no significant differences between the intervention and control group (Mostert & Loxton, 2008).

**Other variables.** Length of programs for universal programs ranged from eight- to 20 sessions, and session lengths ranged from 45 to 120 minutes. Six of the 13 (46%) universal programs had eight-weekly sessions of which four (67%) demonstrated significant findings. Four (31%) of the universal programs had 10-weekly sessions and all (100%) demonstrated significant reductions. One (8%) of the universal programs had 10-biweekly sessions, one (8%) had 12-weekly sessions, and another one (8%) had 20-weekly sessions, which were not associated with significant reductions.

Six of the 13 (46%) universal programs had session lengths of 60-minutes, of which four (67%) showed significant reductions. Two (15%) universal programs had session lengths of 120-minutes, but neither found significant results. Other programs had session lengths of 45-minutes (8%), 75-minutes (8%), 80-minutes (8%), and 90-minutes (8%), and all demonstrated significant findings. One program did not record session length, and it was not associated with significant reductions (Miller et al., 2010).

Sample size ranged from 46 to 1364 for the universal programs. Nine of the 13 (69%) programs had sample sizes above 100, of which seven (78%) demonstrated significant findings. Four programs (31%) had samples sizes below 100, but only one (25%) showed significant reductions.
**Indicated Programs**

**Overall outcomes.** All six of the indicated programs showed significant reductions in anxiety and/or depressive symptoms at post-intervention or at follow-up. Five of the six (83%) showed significant reductions in the intervention group compared to the control group conditions at post-intervention. Three of these studies demonstrated reductions in anxiety symptoms (Bernstein et al., 2005; Mifsud & Rapee, 2005; Roberts et al., 2003), one showed reductions in depressive symptoms (Jaycox et al., 1994), and one demonstrated reductions in both anxiety and depressive symptoms (Siu, 2007).

Five of the six (83%) indicated programs included a follow-up assessment which ranged from 3-months to 36-months. All five showed significant reductions in the intervention group compared to the control group at follow-up assessment. In one study, reductions in anxiety symptoms were found at 3-months follow-up and these were maintained at 6-months and 12-months (Bernstein et al., 2008). In another study, the reductions were maintained at 4-months follow-up (Mifsud & Rapee, 2005). In one study, significant group differences in anxiety were found at 6-months follow-up (Roberts et al., 2003) but the longer term follow-up results were inconsistent, as the results were not significant at the 18-months follow-up (Roberts et al., 2003), but significant reductions in anxiety symptoms were reported at 30-months follow-up (Roberts et al., 2004). One study showed reductions in depressive symptoms at 6-months follow-up and these results were maintained at 12-months, 18-months and 24-months (Gillham et al., 1995), but not at 36-months (Gillham & Reivich, 1999). In one study, there were no differences at post-intervention, but at 6-months and 12-months follow-up, the intervention group showed significant
reductions in anxiety and depressive symptoms compared to controls (Gillham et al., 2006).

**Gender.** None of the indicated programs evaluated gender differences.

**Risk of bias assessment.** All six indicated studies received a quality rating of 2.

**Program content.** Three of the six (50%) indicated programs were the PENN program variants (i.e., PPP, PRP and AOP). Two (33%) were FRIENDS. The other was an independent program (i.e., CKP). Four (67%) of the six indicated programs included a parent component. Finally, one (17%) of the indicated programs included booster sessions.

**Evaluation control group.** Four of the six (67%) indicated programs compared the prevention program with a wait-list control condition, one (17%) compared the prevention program to a wait-list control and a no participation control, and one (17%) included a usual care control and at 30-months follow-up, a second non-intervention control group was recruited from a different sample (Roberts et al., 2004).

**Program leader.** Three of the six (50%) indicated programs were led by mental health professionals. Two (33%) were led by graduate students, and one (17%) was led by mental health professional and a researcher.

**Other variables.** Three of the six (50%) indicated programs had 8-weekly sessions, two (33%) had 12-weekly sessions, and one (17%) had 9-weekly sessions. Two (33%) programs had session lengths of 90-minutes, two (33%) were 60-minutes and one (17%) was 120-minutes. One program did not record session length (Siu, 2007). Sample size ranged from 47 to 143 for the indicated programs.

Selective Programs
**Overall outcomes.** Two of the four (50%) selective programs were associated with significant reductions either at post-intervention or at follow-up. Two of the four (50%) selective trials demonstrated significant differences between the intervention and control conditions at post-intervention, with one study showing reductions in depressive symptoms (Cardemil et al., 2002, study 1), and the other showing reductions in both anxiety and depressive symptoms (Gwynn & Brantley, 1987).

Three of the four (75%) selective programs included a follow-up evaluation, ranging from 8-weeks to 24-months. Two (50%) of these demonstrated at least one significant difference between the intervention and control condition. One of these studies showed reductions in depressive symptoms at 3-months, 6-months (Cardemil et al., 2002, study 1) and at 24-months follow-up (Cardemil et al., 2007), and the other study demonstrated reductions in anxiety and depressive symptoms at 8-weeks (Gwynn & Brantley, 1987).

**Gender.** Two of the four (50%) programs assessed for gender differences in symptoms, but no differences were found (Cooley-Strickland et al., 2011; Gwynn & Brantley, 1987).

**Risk of bias assessment.** One of the four (25%) selective studies received a quality rating of 0, and this study demonstrated significant reductions. The other three (75%) studies received a quality rating of 2, and one (33%) demonstrated significant reductions on at least one evaluated outcome.

**Program content.** Two of the four (50%) selective programs were the PENN program, of which one (50%) was associated with a successful outcome (i.e., PRP). One (25%) selective program was an unnamed independent program which
demonstrated significant reductions (Gwynn & Brantley, 1987). One (25%) of the programs was the FRIENDS program but no significant results were found.

One (25%) selective program included a parent component, however, no significant reductions were found. None of the selective programs included booster sessions.

**Evaluation control group.** Two of the four (50%) selective programs compared the prevention program with a wait-list control condition, and one (50%) demonstrated significant reductions. Two (50%) selective programs compared the prevention program to no-intervention/usual care control group, and one (50%) demonstrated significant reductions.

**Program leader.** Three of the four (75%) selective programs were led by graduate students, of which one (33%) was associated with significant reductions. The remaining one (25%) program which did not record the program facilitator, also demonstrated significant reductions (Gwynn & Brantley, 1987).

**Other variables.** Program length for the selective programs ranged from eight- to 13-sessions, and session lengths were 60 or 90-minutes. Two of the four (50%) selective programs had 12-weekly sessions of which one (50%) demonstrated significant reductions. One (25%) of the selective programs had eight-weekly sessions and this was associated with significant reductions. One (25%) program had 13 bi-weekly sessions, however no significant reductions were found.

Two of the four (50%) selective programs had 90-minute sessions of which one (50%) demonstrated significant reductions. One (25%) selective program had 60-minute sessions, however no significant differences were found. The remaining (25%) program, which did not record session length, demonstrated significant reductions (Gwynn & Brantley, 1987).
Sample size ranged from 49 to 103 for the selective programs. Three of the four programs (75%) had samples sizes below 100, of which two (50%) showed significant reductions. The remaining study (25%), which had a sample size below 100, did not find significant reductions.

**Discussion**

The findings of the review provide strong support for the effectiveness of indicated programs, but only modest support for universal programs. The results for selective programs are inconclusive due to only four evaluated studies.

The effectiveness of indicated programs is in concordance with previous reviews which have included both children and adolescents, and have targeted anxiety (Mychailyszyn et al., 2012; Teubert & Pinquart, 2011) and depression (Brunwasser et al., 2009; Clear & Christensen, 2010; Horowitz & Garber, 2006; Kavanagh et al., 2009; Stice et al., 2009). As indicated programs are given to children who are already displaying subclinical symptoms of anxiety and/or depression, it is likely that symptom levels at baseline assessment will be higher than that of other program types (Offord & Kraemer, 2000). Consequently, this approach may also lead to greater increases in symptoms in the untreated control group. As such, it may be expected that indicated programs will produce more significant results than the universal and selective program types (Offord & Kraemer, 2000).

There was modest support for the effectiveness of universal programs at both post-intervention and follow-up. As universal programs do not select children on the basis of symptom levels or vulnerabilities, these programs are often designed to enhance general emotional health and build resiliency (Barrett & Turner, 2001). Therefore, it is not surprising that these programs may not be as effective as selective programs. Many children participating in universal programs will not develop
emotional health problems, and thus cannot benefit from an intervention in the short term. It is also important to assess children’s ‘risk status’ within universal programs, as three out of the five studies that evaluated children’s ‘risk status’ demonstrated significant reductions in mental health symptoms.

Longer-term follow-ups are needed in order to more fully evaluate potential prevention effects. Without longer-term follow-ups, potential prevention effects could be missed, leading to an under-estimation of the effectiveness of programs (Neil & Christensen, 2009). However, only three quarters of the studies included in this review reported follow-up periods and the duration of the follow-ups ranged considerably, spanning 8-weeks (Gwynn & Brantley, 1987) to 36-months (Barrett et al., 2006; Gillham & Reivich, 1999).

A ‘prevention effect’ was found for the universal and indicated programs, where effectiveness was first observed at the follow-up period of 6-months (Essau et al., 2012; Quayle et al., 2001), and at 12-months (Lowry-Webster et al., 2003). This is consistent with findings from a review of child and adolescent depression prevention programs (Stice et al., 2009), whereby effects of universally delivered interventions were not significant at post-intervention, but became significant across the long-term follow-up. This finding at 12-months has been reported in other reviews (Brunwasser et al., 2009; Horowitz & Garber, 2006; Merry & Spence, 2007). In addition, Brunwasser et al. (2009) showed that the Penn Resiliency Program’s effects increased over time and were stronger at 12-months follow-up than at post-intervention. These delayed, or “sleeper” effects, may be due to children taking time to internalise and implement the program skills into their everyday lives. Additionally, children may need to go through a period of elevated risk for the preventative effects to emerge (Gillham, Shatté, & Reivich, 2001). As this may
coincide with the development and emergence into adolescence, follow-up points are needed to track this. Further, longer follow-up periods are also important when considering booster sessions, as a suitable timeframe is needed to allow the beneficial effects of booster sessions to be appreciated (Gillham et al., 2001; Horowitz & Garber, 2006). It is imperative that further research include long-term follow-up assessment of at least 12-months, so intervention and prevention effects can be more fully assessed.

All of the universal programs that were found to be effective included booster sessions and/or parental involvement. The importance of booster sessions have also been highlighted in the discussions of two other reviews (Neil & Christensen, 2007, 2009). These reviewers also noted that programs such as FRIENDS, which included booster sessions, reported positive outcomes at 12-months follow-up. However, no studies have directly compared programs with the addition of booster sessions, in comparison to programs without booster sessions. Without this kind of study, it is not possible to attribute the positive outcomes to the booster sessions.

The importance of including a parental component has been highlighted by previous researchers (e.g., Barrett, Rapee, Dadds, & Ryan, 1996b; Bernstein et al., 2005; Fukushima-Flores & Miller, 2011; Wood, Piacentini, Southam-Gerow, Chu, & Sigman, 2006). Parental involvement is critical as new skills can be reinforced beyond the school-setting, and brought into the child’s home life. Enabling children to practice the newly learnt social and emotional skills in multiple environments will assist with consolidation and integration which cannot be achieved solely in the classroom. In addition, booster sessions may provide children with the opportunity to revise and refine the concepts, skills, and techniques taught during the intervention program, which may help to maintain program effects past post-intervention (Neil &
Christensen, 2009). The combination of parental involvement and booster sessions are complementary, as both serve to reinforce concepts for children beyond what is being taught within the program. In the current review, the only program which included booster sessions and parent components was FRIENDS. Future research should focus on including these factors in program designs.

The findings for selective programs were inconclusive as only four studies were suitable for inclusion in this review. In other reviews involving both children and adolescents, results have been mixed. One review involving school-based prevention of depression in children and adolescents found that half of the selective programs were effective (Calear & Christensen, 2010). In another review of school-based anxiety prevention, only three selective programs were included, and two were with adolescent samples (Neil & Christensen, 2009). Several other reviews on the prevention of anxiety and depression with children and adolescents have combined the selective and indicated programs into a ‘targeted’ prevention, and compared this to universal programs (Brunwasser et al., 2009; Fisak et al., 2011; Merry et al., 2011; Merry et al., 2004; Mychailyszyn et al., 2012; Teubert & Pinquart, 2011; Venning et al., 2009). More studies involving school-based selective programs for the prevention of anxiety and depression in children are needed to evaluate the effectiveness of this approach.

Other program components evaluated in the present review were program leaders, control group, study quality, gender, program and session length, and sample size. Although program effectiveness did not appear to be influenced by these factors, important conclusions can still be drawn.

Interestingly, in a direct comparison of teacher-led and psychologist-led FRIENDS program by Barrett and Turner (2001), no significant differences were
found. Consequently, this supports the facilitation of the programs by teachers and will enable the program to be more easily embedded within the school curriculum. This is also beneficial as elements of the program may be brought into other classes by teachers, providing greater opportunity for the children to practice and apply their skills. Future research is needed with other programs to determine the utility and effectiveness of teacher-led programs.

The majority of studies in this review utilised a no-intervention waiting list control group. As an absence of having an attention control condition may inflate the intervention effects (Calear & Christensen, 2010), further research is needed to ascertain the full effects of an attention control group in comparison with the intervention group. By controlling this variable, a more accurate evaluation of the intervention program can be ascertained.

On the whole, the quality of studies were quite poor as no study received a quality rating above 2. For the universal programs, higher quality studies were associated with more positive outcomes. However, this finding was not consistent across all program types as a selective study with significant results received a quality rating of 0 (Gwynn & Brantley, 1987).

Gender differences were primarily examined in universal programs but the results were mixed. Three studies showed that girls already had higher levels of anxiety and/or depression than boys at pre-intervention. In addition, another study showed that girls in the intervention benefitted more than boys. Given the paucity of studies examining gender differences, no clear conclusions can yet be drawn as to whether the interventions are more effective for girls than boys. Further examination of the developmental trends and gender differences is warranted. Importantly, future
research needs to examine gender differences across all program types, and across all follow-up assessment points.

Another important factor is sample size, as the majority of universal programs with sample sizes greater than 100 were found to be effective. This suggests that the power in some studies may be too low to detect an intervention effect. Finally, the length of program and session lengths were variable across studies. For the universal programs, there was some indication that programs with 8- to 10-weekly sessions, of 60-minute duration were associated with more positive outcomes. However, this finding needs to be interpreted with caution as this was not consistent across all universal programs of these lengths.

Conclusion

Overall, results of the current review provide some support for the implementation of short- and longer-term school-based prevention and early intervention programs. Indicated programs were found to show consistent reductions in anxiety and/or depression across all studies. In addition, these reductions, on the whole, were maintained at the examined follow-up assessments. Important factors for the success of universal programs were the inclusion of a parent component and booster sessions. As there were only four selective program studies, it was not possible to draw conclusions about these. More research into selective programs for this age group needs to be conducted. Other recommendations include the provision of teacher-training, the evaluation of teacher-led programs in comparison to researcher-led programs, the inclusion of attention control groups, and follow-up assessments of at least 12-months.
CHAPTER FIVE

Children’s Social Comparisons and the Prevention of
Anxiety and Depressive Symptoms

The research reviewed in Chapter 2 highlights the need to further develop prevention work to reduce the occurrence of emotional health disorders in children. Findings that prevention efforts are more effective with older adolescents than with children (Horowitz & Garber, 2006; Stice et al., 2009), may relate to their more sophisticated emotional and cognitive capacities (Baskin et al., 2010), which could indicate that the current cognitively oriented programs are not developmentally suitable for children in the middle childhood age group. A limitation of programs that have a CBT focus is that much of the content and approach has not been specifically designed for children aged as young as 8 years.

Middle childhood is an important developmental period where there is an increase in the incidence of anxiety and depressive symptoms in children. The prevalence of children aged between 8 and 11 years who display depressive and anxiety symptoms is high (Chavira, Stein, Bailey, & Stein, 2004; Garber & Horowitz, 2002), and these symptoms substantially increase from 10 to 15 years (e.g., Ashford et al., 2008). Given this, it is crucial that intervention programs specifically target the younger age group, to prevent or reduce the impacts of these problems before they become entrenched and persist into adolescence and/or adulthood. Importantly, this period is also a critical time for children’s cognitive, social and emotional development, and a number of developmental challenges and psychosocial stressors often arise (Berk, 2009; Eccles, 1999). Longitudinal studies suggest that the development of anxiety and depressive symptoms in middle childhood may be attributable to a child’s stage of social, emotional, and cognitive...
development, and also to their capacity to cope with emerging psychosocial stressors (Snyder et al., 2009). Furthermore, children’s social, emotional, and cognitive developmental level, may actually limit their ability to cope with psychosocial stressors, which consequently increases their vulnerability for developing symptoms of anxiety and depression (Snyder et al., 2009).

It is critical that prevention initiatives are sensitive to children’s age, stage of development, and are designed specifically with account to their level of cognitive, social and emotional development (Skouteris et al., 2007). Important developmental changes which occur during middle childhood are children’s use of social comparisons for self-evaluation purposes (Berk, 2009; Eccles, 1999). Social comparisons are a critical part of self-development, and enable children to have greater accuracy in their view of the world and themselves. These social comparisons play an important role in shaping children’s self-esteem, their self-concepts, and influence the positive or negative feelings they have about themselves (Butler, 1998; Pomerantz, Ruble, Frey, & Greulich, 1995).

The following sections will examine the emergence of social comparison processes in children and the development of their self-concepts and self-esteem, as these have been found to be associated with anxiety and depressive symptoms in children (Leary, Schreindorfer, & Haupt, 1995; Sowislo & Orth, 2013; Spilt, Lier, Leflot, Onghena, & Colpin, 2014; Swallow & Kuiper, 1988).

**Children’s Self-Concepts, Social Comparisons and Self-Esteem**

The *self-concept* is the accumulation of knowledge about the ‘self’, such as beliefs regarding personality traits, physical characteristics, abilities, values, goals, and roles (Harter, 1998; Manning, Bear, & Minke, 2006). This multi-dimensional construct includes not only a person’s overall self-evaluation and level of self-
esteem, but also their self-evaluation of particular aspects of functioning, such as physical appearance and skills, academic competence, and social-emotional functioning.

Beginning in infancy, children acquire and organise information about themselves as a way to facilitate their understanding of the relationship between the self and their social world. As children develop their sense of self, they also begin to construct a self-concept, which is a multifaceted image or picture of how they view themselves (Harter, 1999; Harter, 2012). This developmental process is a direct consequence of children's emerging cognitive skills and their social relationships with both family and peers (Eccles, 1999).

During early childhood, children's self-concepts are centred on concrete and observable characteristics, such as physical attributes, possessions, and skills, which are a direct reflection of their social, emotional and cognitive developmental level. In addition, during this period, young children’s self-concepts are positively biased (Eccles, 1999; Eccles, Wigfield, Harold, & Blumenfeld, 1993; Marsh, 1989), and they hold over-inflated views of the self (Robins, Trzesniewski, Tracy, Gosling, & Potter, 2002).

During middle childhood, children’s self-concepts become more integrated and differentiated. By engaging in social comparisons, which involves a comparison of the self to others, children more clearly perceive the self as consisting of internal, psychological characteristics, and they develop a capacity for self-evaluation (Harter, 1998, 2012). As children’s cognitive abilities develop, they begin to rely on social comparisons and external feedback to evaluate themselves, and consequently form a more balanced and accurate appraisal of their appearance, academic competence, social skills and other attributes (Robins & Trzesniewski, 2005). This enables
children to learn about their appearance, abilities, and behaviours, and also about individual differences (Buunk & Gibbons, 2007; Dijkstra, Kuyper, van der Werf, Buunk, & van der Zee, 2008; Suls, Martin, & Wheeler, 2002). The self-enhancing biases apparent in early childhood, give way to more realistic self-perceptions, where both positive and negative attributes of the self are acknowledged (Eccles, 1999; Harter, 1998; Kistner, 2006). Throughout later childhood and adolescence, the self-concepts become more abstract, complex, and hierarchically organised into cognitive mental representations or self-schemas, which direct the processing of self-relevant information (Harter, 1985, 1998; Pomerantz et al., 1995).

In middle childhood, important domains of the self-concept for children include physical appearance, peer relations, sporting ability, and academic achievement (Harter, 1985). As these domains are particularly salient to children, they are also the areas in which they are most likely to engage in when practising social comparisons (Marsh, 1989). Physical appearance self-concept refers to the child’s perception of their physical attractiveness and body image, and how others perceive them. Peer relations, friends, or the social self-concept, refers to how popular a child is with their peers, how easily they make friends, and how desirable their friendship is for peers. Physical ability self-concept refers to a child’s skill in physical activities, sports, games, and their physical strength. Lastly, school or academic achievement self-concept refers to a child’s ability, enjoyment, and interest in school subjects (Marsh, 1989, 1990a).

Self-esteem also develops in middle childhood. While self-concept refers to one’s knowledge of the self and perception of competency in different domains of functioning, self-esteem is the evaluative aspect of the self-concept, and involves
judgements about one’s own worth and the feelings one has in relation to those judgements (Berk, 2013; Manning et al., 2006).

During the transition from early to middle childhood (i.e., the period when children engage in self-evaluative social comparisons for the refinement of their self-concepts), developmental trends indicate children experience a drop in self-esteem (Burnett, 1996; Eccles et al., 1989; Robins et al., 2002; Twenge & Campbell, 2001), and low self-esteem is associated with a heightened risk of developing symptoms of anxiety and depression (Leary et al., 1995)

**Social Comparisons and Children’s Emotional Health**

The transition from early to middle childhood sees an improvement in children’s cognitive ability and in the accuracy to take abstract perspectives of the self (Eccles, 1999; Marsh, 1989; Robins et al., 2002). Whereas during early childhood children evaluate themselves primarily according to standards of individual effort and concrete expectations, during middle childhood, children develop the cognitive capacity to effectively take on the perspectives of others, recognise others’ abilities, and conceptualise themselves in reference to others. In different contexts, however, children vary in the criteria used to make referential social comparisons (Butler, 1998; Ruble & Dweck, 1995). From a cognitive-developmental perspective, the ability to use social comparison information toward the goal of self-evaluation requires that the child has the ability, which is not sufficiently developed at younger ages, to relate one concept to another simultaneously (Marsh, 1990a). Although this ability to take abstract perspectives of the self does not necessarily cause a decrease in self-esteem, it does allow children to consider themselves from a social perspective. Thus, social comparisons, the referencing of one’s self to others for the purpose of self-evaluation, is also
considered a process that individuals tend to internalise during middle childhood (Harter, 1998, 2012; Ruble & Dweck, 1995).

A number of studies during the 1970s and 1980s presented evidence which revealed middle childhood as the developmental period where children began to comparatively assess with peers to facilitate self-evaluation. Although evidence suggests that children as young as preschool are able to compare themselves with their peers (Chafel, 1984; Masters, 1968), studies have consistently shown that children’s proclivity to use ability-related self-evaluations of social comparisons is not fully established until the ages of 7 or 8 (Keil, McClintock, Kramer, & Platow, 1990; Ruble, Boggiano, Feldman, & Loebl, 1980; Veroff, 1969). In one study, Ruble et al. (1980) investigated the role of social comparisons in self-evaluation in relation to task completion in 104 first (6-year-old) and second grade (7-year-old) children. They found only a few second grade children made use of available social comparison information about peers’ performance in assessments of their own performance. These findings suggest that children do not fully begin to utilise social comparison practices for self-evaluation until they enter middle childhood.

In a second study by Ruble et al. (1980), 90 children from kindergarten (5-years-old), second (7-years-old) and fourth grade (9-years-old), were asked to predict later successes under conditions of task success or failure relative to other children, and were rewarded for making accurate performance evaluations on the basis of social comparison information. Despite the attractiveness of rewards, only children in fourth grade consistently used social comparison information to predict their future performance and were able to use this information differentially in a predictive manner. Consistent with the previous study, findings indicate that the fourth grade children utilised social comparison information to make a competence-
based decision. Furthermore, these findings were replicated and extended in a study by Keil et al. (1990) who reported that 42% of second grade children used social comparison information to make self-evaluations, whereas the rates were higher for older children and increased as children matured. The rates for fourth, sixth and eighth grade children who made these evaluations, were 56%, 68%, and 76% respectively. These findings suggest that social comparison information is used to predict success by the older children, and that children younger than 8 to 9 years of age do not make use of social comparison information for self-evaluations.

The association between children’s self-perceived competencies in the self-concept domains and depression has been examined by Seroczynski, Cole and Maxwell (1997). Children receiving aversive feedback across multiple self-concept domains were at a heightened risk for developing depressive symptoms. Measures of academic competence, social acceptance, sports competence, physical attractiveness, and behavioural conduct, were taken from 1063 children in Grade 3 and Grade 6. Additionally, measures of depressive symptoms were derived from parents, teachers, peers, and self-reports. Findings showed that children with perceived competence in multiple domains had lower levels of depressive symptoms than children with only one domain of competence, whilst children with negative self-evaluations in multiple domains exhibited higher levels of depressive symptoms than children with negative evaluations in only one domain.

While Seroczynski et al. (1997) illustrate the importance of children developing self-competence across multiple self-concept domains, the impact of children using self-evaluative social comparisons within one self-concept domain (or one setting) can also be deleterious. For example, Keil et al. (1990) argue that the emphasis on social comparison standards and procedures in educational settings may
be detrimental to children who consistently perform more poorly than their peers. After repeated lack of improvement in their academic performance, children may experience less confidence in their abilities, lose motivation for academic tasks, and experience lowered feelings of self-worth, consequently leading to lower academic achievement. Firstly, this demonstrates that making upward social comparisons (i.e., with a ‘better-off’ other), can have negative effects on children if the gap between them and the target of comparison never closes. Secondly, if a child is low in self-competence in even one self-concept domain, frequent use of social comparisons can reinforce this negative feedback and seriously impact their functioning. Given children have different levels of abilities in different domains, it is likely that there are others who are more skilled (i.e., ‘better off’). Thus, children need to learn how to use social comparison practices in a positive way, and not rely on these comparisons for self-evaluative purposes.

**Summary and Rationale for the Development of a New Program**

It is crucial that social comparisons are recognised as an integral part of children’s social, emotional and cognitive development. Social comparisons are a method for learning about abilities and individual differences. Thus, preventive and early intervention efforts need to focus on helping children learn to use social comparisons in a positive and balanced way.

The COPE program is a newly developed eight-week, universal school-based prevention and early intervention program for anxiety and depression in children which specifically targets children’s use of social comparisons (Siakavelis, 2011). COPE incorporates age-appropriate CBT-based activities which take into account children’s level of social, emotional, and cognitive development. Particular emphasis is placed on children’s use of social comparisons, and on teaching children to use
comparisons in a positive and balanced way, to strengthen their self-concepts and
develop high levels of self-esteem, thus, reducing the risk of developing anxiety and
depression.
CHAPTER SIX

Study 1. A 12-month Evaluation of the COPE Program for Preventing and Reducing Anxiety and Depressive Symptoms in Children

The present study builds upon Siakavelis (2011), which evaluated the short-term effectiveness of the COPE program at 1-month and 6-months follow-up with children aged between 8 to 10 years. Results of this study revealed no group differences between children’s anxiety or depression scores at the short-term follow-up periods of 1-month or 6-months. Findings indicated that children in both the intervention and wait-list control group demonstrated significant reductions in symptoms of anxiety and depression, more positive self-concepts, higher levels of self-esteem, and less frequent social comparisons, at post-intervention, 1-month follow-up and 6-months follow-up. Further analyses revealed that all children (irrespective of group condition), showed improvements in self-concepts, use of social comparisons, and self-esteem over time, and this was associated with reductions in symptoms of anxiety and depression.

Research into the effectiveness of prevention programs for anxiety and depression in children, consistently show the need for longer follow-up periods (Fisak et al., 2011; Gillham et al., 2001). Importantly, results from the systematic review presented in Chapter 4, highlight the importance of long-term follow-ups when evaluating the effectiveness of universal programs1. For some universal programs, a delayed or ‘sleeper’ effect has been shown, where effectiveness of the intervention did not appear until the 12-month follow-up (Lock & Barrett, 2003). For other programs, the intervention effects were shown to improve over time and were

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1 The systematic review (Chapter 4) also found that important factors associated with the effectiveness of universal programs were the inclusion of parent sessions and booster sessions. However as Study 1 was implemented prior to conducting the systematic review, these program components were not able to be included in the design of the COPE program.
strongest at 12-months follow-up (Brunwasser et al., 2009). Without long-term follow-ups, program effects may not be detected and this may lead to an underestimation of the effectiveness of programs.

**Aims and Hypotheses**

The aim of the present study was to evaluate the 12-month effectiveness of the universal school-based COPE program in preventing or reducing symptoms of anxiety and depression, in children aged between 8 to 10 years. Specifically, children’s symptoms of anxiety and depression, self-concepts, self-esteem, and use of social comparisons, were examined. The program effectiveness was evaluated at the completion of the program (post-intervention), and also at a 12-month follow-up period. It was hypothesised that children who participated in the program would demonstrate significantly lower levels of anxiety and depressive symptoms than children in a wait-list control group. It was further hypothesised that children who participated in the program would demonstrate significantly more positive self-concepts, higher self-esteem, and lower levels of social comparisons than children in a wait-list control group.

A further aim was to examine if the effectiveness of the program was moderated by gender. Some of the reviews examined in Chapter 3 have shown that prevention programs are more effective for girls (Horowitz & Garber, 2006; Stice et al., 2009), whereas other reviews have shown programs to be more effective for boys (Jané-Llopis et al., 2003; Teubert & Pinquart, 2011).

A final aim of the study was to evaluate the program effects with children identified as being ‘at risk’ for developing anxiety, or ‘at risk’ for developing depression. Based on previous studies (Lock & Barrett, 2003; Lowry-Webster et al., 2001; Quayle et al., 2001), children with elevated and subclinical levels of anxiety or
depressive symptoms at pre-intervention were identified as ‘at risk’ for developing either anxiety or depression. It was hypothesised that children ‘at risk’ in the intervention condition would evidence greater reductions in anxiety and depression, more positive self-concepts, higher self-esteem and lower levels of social comparisons than children in the wait-list control group.

**Method**

**Participants**

The participants were 636 children in Grades 3 and 4 (aged 8 to 10 years), recruited from four State Primary Schools and seven Catholic Primary Schools in the Melbourne metropolitan area. The schools were selected to reflect the diverse socioeconomic and cultural backgrounds of children in Melbourne. Schools were randomly assigned, either to the program intervention group, or to a wait-list control group. This assignment led to the intervention group comprising of two State Primary Schools and three Catholic Primary Schools, and the wait-list control group comprising of two State Primary Schools and four Catholic Primary Schools. The intervention group consisted of 335 children (173 boys and 162 girls), and the wait-list control group consisted of 301 children (158 boys and 143 girls). The mean age of children was 9.00 ($SD = 0.70$).

**Measures**

The following measures which have been developed and validated for children aged 8 to 10 years were used to assess anxiety symptoms, depressive symptoms, self-concepts (including self-esteem), and social comparisons (see Appendix C). *Revised Children’s Manifest Anxiety Scale (RCMAS; Reynolds & Richmond, 1985)*. The RCMAS is a 37-item self-report measure designed to assess the level and nature of anxiety in children aged 6 to 19 years. The RCMAS consists
of 28 anxiety items measuring physiological anxiety, worry/oversensitivity, and fear/concentration, and nine lie items (i.e., social desirability). In the present study, the modified RCMAS was used excluding the nine Lie items, to keep the questionnaire at a manageable length for the children. For each item, children were required to respond with “yes” or “no” (e.g., “I worry about what is going to happen to me” and “I wriggle in my seat a lot”). A score of 1 is given for a “yes” response. Scores on each item were summed to obtain a total anxiety score ranging from 0 to 28. Higher scores indicate greater levels of anxiety symptomatology. A cut-off score of 17 was used in the present study to indicate children with subclinical levels of anxiety, or those ‘at risk’ of anxiety (Reynolds & Richmond, 1978). The RCMAS has demonstrated high internal consistency (Cronbach’s $\alpha = .81$) (Ryngala, Shields, & Caruso, 2005), test-retest reliability (Wisniewski, Genshaft, Mulick, & Coury, 1987), and adequate concurrent, convergent and discriminant validity (Seligman, Ollendick, Langley, & Baldacci, 2004). The baseline internal consistency found in the current study was high (Cronbach’s $\alpha = .87$).

*Children’s Depression Inventory (CDI; Kovacs, 1992).* The CDI is a 27-item self-report measure designed to assess cognitive, affective, somatic, and behavioural symptoms of depression for children aged 7 to 17 years. In the present study, Item 9, which relates to suicide ideation, was removed due to sensitivity concerns. Research has shown that removal of the suicide item does not significantly alter CDI scores (Weiss et al., 1991). For each item, children were presented with three statements (e.g., “I am sad once in a while”, “I am sad many times”, “I am sad all the time”), and were required to select the statement that reflects their experience over the past two weeks. Statements within each item range in severity (i.e., absence of symptom, mild symptom, or severe symptom), and were scored either 0, 1 or 2
accordingly. The total depression score was calculated by summing the scores for each item. In the present study, the total score ranged from 0 to 52, with higher scores representing more severe depressive symptoms. A cut-off score of 13, suggested by Kovacs (1992) to indicate mild to severe levels of depressive symptoms, was used in the present study to denote subclinical levels of depressive symptoms, or those ‘at risk’ of depression. The CDI has demonstrated high internal consistency (Cronbach’s $\alpha = .86$), good test-retest reliability, construct and discriminant validity (Carey, Faulstich, Gresham, Ruggiero, & Enyart, 1987), with both non-clinical and clinical populations (Saylor, Finch, Spirito, & Bennett, 1984; Weiss & Weisz, 1988; Weissman, Orvaschel, & Padian, 1980). Internal consistency for baseline in the current study was high (Cronbach’s $\alpha = .89$).

**Self-Description Questionnaire I (SDQ-I; Marsh, 1990b).** The SDQ-I is a self-report measure designed to assess self-concepts and self-esteem in children aged 6 to 12 years. The SDQ-I contains five subscales in the domains of physical appearance, peer relations, physical activity and sport, academic achievement, and self-esteem. Each subscale consists of eight items (e.g., “I am good looking”, “I have lots of friends”, “I can run fast”). Children were required to respond to each item on a 5-point Likert scale: “False” (1), “Mostly false” (2), “Sometimes false/sometimes true” (3), “Mostly true” (4), “True” (5), with scores on each subscale ranging from 8 to 40. Higher scores are indicative of positive self-concepts and lower scores are indicative of negative self-concepts. The internal consistency for the SDQ-I has been demonstrated as high (Cronbach’s $\alpha$: physical appearance = .90; relationships with peers = .86; physical activity and sport = .85; academic achievement = .88; and self-esteem = .83), with good convergent and discriminant validity estimates (Marsh, 1990a, 1990b). It has good construct validity and systematically relates to external
criteria (e.g., sex, socio-economic status, academic achievement, responses to other self-concept instruments) (Ricciardelli, McCabe, Holt, & Finemore, 2003). In the current study, the baseline internal consistency was .89 for physical appearance, .89 for relationships with peers, .87 for physical activity and sport, .90 for academic achievement, and .87 for self-esteem.

**Social Comparison Scale (Holt & Ricciardelli, 2002).** Children’s use of social comparisons was assessed using the Social Comparison Scale, which is a self-report measure adapted from Holt and Ricciardelli (2002), and two other validated scales, the Body Comparison Scale (Fisher & Thompson, 1998) and the Social Comparison Questionnaire (Schutz, Paxton, & Wertheim, 2002). The adapted measure included four subscales, which examined the frequency of which children compare themselves with other children, in the domains of physical appearance (four items; e.g., “I compare myself on my looks to other children my age”), relationships with peers (three items; e.g., “I compare myself on how many friends I have to other people my age”), physical activity and sport (three items; e.g., “I compare myself on how fast I run to other children my age”), and academic achievement (three items; e.g., “I compare myself on how good I am at maths to other children my age”).

Children were required to respond to each item on a 5-point Likert scale: “Never” (1), “Almost never” (2), “Sometimes” (3), “Often” (4), and “Very often” (5). Scores ranged from 4 to 20 on the physical appearance subscale, and from 3 to 15 on the other subscales. Higher scores indicate more frequent use of social comparisons. Although a new scale, the reliability upon which the Social Comparison Scale is based is high. The overall internal consistency of the Body Comparison Scale is high at .96 (Fisher & Thompson, 1998). Test-retest reliability of the Social Comparison Questionnaire is also high, with coefficients ranging from .82 to .91 (Schutz et al.,
2002). In addition, the internal consistency for Holt and Ricciardelli’s (2002) Social Comparisons Scale with children aged between 8 to 10 years was found to be high for both boys (.86) and girls (.83). In the current study, the baseline internal consistency for each subscale was .71 for physical appearance, .82 for relationships with peers, .74 for physical activity and sport, and .76 for academic achievement.

**Procedure**

Ethics approval was obtained from the Deakin University Human Research Ethics Committee, the Department of Education and Early Childhood Development, and the Catholic Education Office (Appendix D). Twenty primary schools were sent information packages about the study which included an invitation to take part in the study. In total, principals from 11 schools agreed to participate. Once approval was obtained from the principals, Plain Language Statements and Informed Consent Forms were sent to the parent/s or legal guardian/s of all Grade 3 and Grade 4 children (Appendix E). Children were only invited to participate in the study if they had returned their signed consent form. Children who did not return their consent forms did a class activity with a teacher in a different room. The overall consent form response rate was 53%.

Baseline assessments were conducted, then schools were randomly allocated to either the intervention condition (receiving the program at the start of the assessment) or the wait-list control condition (receiving the program after 12-months). Participants in both the intervention and control conditions completed a baseline assessment prior to the implementation of the prevention program (pre-intervention). One week after completion of the pre-intervention assessments, children in the intervention condition began the eight-session prevention program, administered for one hour per week over eight consecutive weeks. At the completion
of the prevention program, participants from both the intervention condition and the control condition again completed the assessment measures (i.e., post-intervention), and again at 1-month, and six-months after program completion (Siakavelis, 2011). Finally, in order to assess the long-term prevention effects of the COPE intervention program, participants in both the intervention and control conditions also completed the assessment measures 12-months after the completion of the prevention program. Figure 2 provides a CONSORT (Consolidated Standards of Reporting Trials) flow chart of the recruitment and allocation of children to the intervention and control conditions (Moher et al., 2010).

Assessments were conducted by two research assistants, with groups of 20 to 36 children in a classroom during school hours. Children were given a questionnaire booklet with an introductory letter (Plain Language Statement) outlining the purpose of the study and confidentiality of their responses (Appendix F). It was explained that the questionnaire was not a test as there were no right or wrong answers, and, that their identity and responses were anonymous. The questionnaire booklets were coded by a number and only the facilitator possessed a list matching the code to the children’s names. Children were asked to respond to each question as honestly as possible. They were further told they could cease participation at any time by moving to another classroom.

Each questionnaire item was read aloud to facilitate the children’s understanding, and allow for any questions. More difficult words (e.g., compare) were defined to ensure comprehension. The scales were presented in the following order: RCMAS, CDI, SDQ-I, and Social Comparison Scale (see Appendix C). The testing sessions took between 45 and 60 minutes. Upon completion children were
Twenty schools were invited to participate

Eleven schools agreed to participate. Parental consent for children attending these schools was sought.

Schools were randomly assigned to the intervention condition or the wait-list control condition

Allocated to intervention group: n = 335
Boys: n = 173
Girls: n = 162

Completed pre-intervention assessment: n = 332
Boys: n = 170
Girls: n = 162
Lost (absent or left school): n = 3 (0.9%)
Boys: n = 3
Girls: n = 0

Completed post-intervention assessment: n = 324
Boys: n = 166
Girls: n = 158
Lost (absent or left school): n = 11 (3.3%)
Boys: n = 7
Girls: n = 4

Completed 12-month follow-up assessment: n = 262
Boys: n = 137
Girls: n = 125
Lost (absent or left school): n = 73 (21.8%)
Boys: n = 36
Girls: n = 37

Allocated to control group: n = 301
Boys: n = 158
Girls: n = 143

Completed pre-intervention assessment: n = 293
Boys: n = 155
Girls: n = 138
Lost (absent or left school): n = 8 (2.7%)
Boys: n = 3
Girls: n = 5

Completed post-intervention assessment: n = 291
Boys: n = 153
Girls: n = 138
Lost (absent or left school): n = 10 (3.3%)
Boys: n = 5
Girls: n = 5

Completed 12-month follow-up assessment: n = 259
Boys: n = 136
Girls: n = 123
Lost (absent or left school): n = 42 (14.0%)
Boys: n = 22
Girls: n = 20

Figure 2. Flow chart of recruitment, allocation, and attrition of children during the intervention phases.
thanked for their participation. The COPE program was implemented during the 2009 academic year, at a time when the schools were available. Pre-intervention evaluations were conducted between April and September 2009, post-intervention evaluations were between June and November 2009, and 12-month follow-up evaluations were between June and November 2010.

A teacher was present during each assessment, and during the intervention sessions to ensure duty of care, but they had no role in the delivery of COPE. The teacher sat in the back of the room doing their own work. There were a total of six facilitators involved in the study who had completed a minimum of an undergraduate Bachelor of Psychology (gender: female = 5, male = 1; age range: 22-36 years). Each assessment (i.e., pre-, post- and follow-up), and the COPE sessions were run by two facilitators. Each facilitator received two hours training on the COPE program from the research team, and met weekly with the project co-ordinator. Weekly intervention sessions were run over an eight-week period with the whole class in their usual classroom, at designated times that were most convenient for the schools.

**The COPE Program**

The COPE program consisted of eight-weekly, 1-hour sessions. The content incorporated age-appropriate CBT-based activities which took into account children’s level of social, emotional, and cognitive development. Particular emphasis was placed on children’s use of social comparisons, and teaching children to use comparisons in a positive and balanced way to strengthen their self-esteem and other self-concepts.

The program included a facilitator’s manual, which contained implementation notes, learning outcomes, classroom activities, and the resources required for the session’s activities, such as storybooks and games. Also included
were children’s workbooks, which contained program information, activities, games, and worksheets for the children to complete at various stages during the program. The program also contained certificates which stated the main learning aim of each session.

The sessions commenced with an introduction to the session topic, and a review from the previous week/s (aside from Session 1). The association between the session concepts were highlighted. During the sessions, children participated in group discussions and in various activities which helped teach them about the concepts involved in the weekly session. Each session concluded by providing children with an overview of the main points from the session, followed by a distribution of the corresponding certificate for that session. A description of the eight-sessions in the COPE program follow.

**Session 1: “Uniqueness”**. Session 1 introduced children to the COPE program by providing an overview of the session content, activities, and format. The children were distributed their nametags. The session was designed to help children identify and appreciate individual differences in themselves and in others, across a range of domains. Emphasis was on describing and observing differences, and on highlighting why these differences were important (i.e., what make us unique, teamwork), so children do not strive to be the same as others, and to assist them to feel better about being who they are. This was crucial so children could establish a sound basis for the use of social comparisons to enhance self-esteem. Children were encouraged to practice acknowledging one’s own uniqueness and individual contributions.

The session was also designed to teach children to identify their strengths, and recognise how they can lead to positive thoughts and feelings. This was an
important step to consolidate before children could use social comparisons in a balanced way. As social comparisons may draw attention to children’s weaknesses, helping children to develop positive self-concepts can act as a buffer against negative social comparisons.

In this session, children were also taught to recognise and acknowledge strengths in others without making a comparison to themselves. Children were also taught to recognise that strengths and weaknesses in the self were not fixed, but existed on a continuum, and that they could be changed. The session also introduced children to the concept of CBT, and that thoughts influence feelings.

Session 1 included three activities: (1) Why I’m special; (2) All About Me; and (3) I’m Special, I’m Me (storybook). Details of these activities and the materials used in the session are provided in Appendix G.

**Session 2: “What We Like About Ourselves”.** Session 2 was designed to teach children to recognise and acknowledge strengths and other positive attributes of the self, and to help them think positively about themselves by using evidence to support those positive beliefs. Children were also encouraged to consider how those beliefs were associated with their feelings. Children practiced giving and accepting compliments in this session.

Session 2 included three activities: (1) *The Wrong Stone* (storybook); (2) Compliments Game, and (3) Strengths Cards. Appendix G provides details of these activities and the materials used in Session 2.

**Session 3: “Social Comparisons”.** In the third session, children were introduced to the concept of social comparisons, and taught to understand the negative effects of social comparisons. They were taught that comparing themselves to others, rather than focusing on their own strengths and individual differences,
could have negative effects. Children were also taught CBT-based techniques and strategies to reduce the impact of negative comparisons, and were encouraged to practice using those strategies. The strategy ‘yeah, but...’ was taught, which involved replacing an unhelpful self-evaluative social comparison with a personal strength (e.g., ‘Annabelle is so much better than me at swimming’... ‘yeah, but I am very good at running’).

Session 3 included four activities: (1) The Short and Incredibly Happy Life of Riley (storybook); (2) Famous Skills, (3) Comparisons (Yeah, but...); and (4) Yeah, but…. (worksheet). Appendix G provides further details.

Session 4: “Thoughts and Feelings”. In Session 4, children were taught to identify the difference between positive and negative thoughts about the self. Children were also taught to understand the association between those thoughts and feelings (i.e., that thoughts influence feelings), and to understand that negative thoughts could be changed into positive thoughts and that by doing this, this enabled one to feel better about the self. Children were encouraged to practice changing negative thoughts into positive thoughts to feel better.

Session 4 contained four activities: (1) The Short and Incredibly Happy Life of Riley (storybook re-read); (2) Two Truths and One Lie; (3) Thoughts and Feelings; and (4) I Changed My Mind! Details of these activities are provided in Appendix G.

Session 5: “Thoughts, Feelings and Actions”. The focus of Session 5 was on how positive thoughts could lead to positive feelings, and positive actions. In Session 5, children were taught to recognise that thoughts about the self could impact feelings, and also actions. They were taught to recognise that engaging in social comparisons could make one feel bad about the self, which may impact upon
their ability to engage in positive actions. It was emphasised that this was an unhelpful way of establishing one’s potential and self-worth. To help children manage in such situations and overcome negative feelings, they were taught CBT-based techniques (cognitive restructuring and reframing), to challenge negative beliefs about the self. Specifically, those involved in changing negative thoughts into positive thoughts, and helping them to understand that this strategy would help them feel better about themselves.

Children were introduced to the association between thoughts and behaviours/actions and were taught to understand how feelings lead to certain behaviours. In addition, children were taught coping strategies to promote self-esteem and resilience (i.e., positive self-talk and active coping-strategies). It was emphasised that changing negative thoughts into positive thoughts could lead to positive feelings, which in turn could lead to positive behaviour.

Session 5 contained four activities: (1) *Giraffes Can’t Dance* (storybook); (2) Snakes and Ladders; (3) My Feelings Made Me Do It!; and (4) My Feelings Made Me Do It! (worksheet). Further details of these activities and the materials used in the session are provided in Appendix G.

**Session 6: “Being Positive”**. In Session 6 children were encouraged to practice identifying the types of feelings which often arose in situations involving social comparisons, as well as changing the way they thought so they could feel better about themselves. Children were taught additional cognitive restructuring and reframing techniques to promote the development of positive self-concepts and self-esteem. Children were also taught positive self-talk and active coping skills.
Session 6 contained three activities: (1) How Do I Feel; (2) I Can’t Do It; and (3) Solutions for Sad. Details of these activities and the materials used in the session are provided in Appendix G.

Session 7: “What I’ve Achieved”. In Session 7, children were provided with an additional strategy to help remember one’s strengths when faced with negative social comparisons (e.g., think of five personal strengths and allocate a strength to each finger on one hand). Children were also given the opportunity to review and practice the skills learnt in the program. In addition, children wrote and prepared a play to present to others, demonstrating skills learnt in the program to help one cope more effectively with social comparison practices in in the appearance, friends, sport, and academic domains of functioning.

Session 7 contained four activities: (1) We’ve Got It!; (2) One Thing I Learnt…; (3) Prepare Play; and (4) I Can Remember My Strengths. Further details of these activities and the materials used in Session 7 are provided in Appendix G.

Session 8: “Advocating to Others”. Session 8 was the final COPE session. In this session children practiced the skills they had learnt in the program and shared them with others. The program concluded with the children presenting a short play they had written, where they enacted scenarios of the social comparisons skills they had learnt from the program.

Session 8 involved rehearsal and performance of the plays. An example of a script used for one of the plays is provided in Appendix G.

Data Analysis

The research design included one random effect (school), and three fixed effects: Group (intervention, control), Gender (boy, girl), and Time (pre-intervention, post-intervention, 12-months). The design generated a hierarchical data structure
where time was nested within child, and child was nested within the school. The intra-class correlations (ICCs) for the school effect ranged between .00 and .11 across the outcomes at pre-intervention ($M = .03$). The ICCs which are non-zero indicate intra-school dependencies in the data. To accommodate for these dependencies, a multi-level statistical model was adopted.

Each of the 11 outcome measures (i.e., anxiety, depression, appearance self-concept, friends self-concept, sport self-concept, academic self-concept, self-esteem, social comparisons appearance, social comparisons friends, social comparisons sport, and social comparisons academic), were analysed with multi-level mixed effects linear regression models (Bryk & Raudenbush, 1987), which were implemented through SPSS’s Generalised Linear Mixed Models (GLMM; SPSS Version 22) procedure. In order to increase the likelihood of convergence, a separate GLMM analysis for each of the outcome measures was performed. In addition, given there were 11 outcome measures, in order to reduce the probability of a Type 1 error, 0.01 was used as the significance level instead of the conventional alpha level of 0.05 (Tabachnick & Fidell, 2013).

In each analysis, GLMM assumed a normal probability distribution for the outcome measures and linked it to the fixed effects (i.e., Group × Time × Gender, Group × Time, Group × Gender, Gender × Time, Group, Time, and Gender), with an identity function. All parameter estimates were calculated using robust statistics and estimated unstructured covariance matrixes, to account for any violations in normality and to improve the model’s fit to the data.

A second set of GLMM analyses were conducted with children ‘at risk’ of anxiety (i.e., RCMAS ≥ 17). A binary variable was created for ‘At Risk’ Anxiety (0 = not at risk, 1 = at risk). This variable was included in the GLMM model as a
separate categorical fixed effect variable. The set of GLMM analyses for ‘at risk’ anxiety (i.e., Group × Time × At Risk Anxiety, Group × Time, Group × At Risk Anxiety, Time × At Risk Anxiety, Group, At Risk Anxiety, and Time) was conducted with each of the 11 outcome measures.

Lastly, a third set of GLMM analyses were run with children ‘at risk’ of depression (i.e., CDI ≥ 13). Another binary variable was created for ‘At Risk’ Depression (0 = not at risk, 1 = at risk), and was included in the GLMM model as a separate categorical fixed effect. The set of GLMM analyses ‘at risk’ depression (i.e., Group × Time × At Risk Depression, Group × Time, Group × At Risk Depression, Time × At Risk Depression, Group, At Risk Depression, and Time), was conducted with each of the 11 outcome measures.

The GLMM method was used because unlike repeated measures analysis of variance (ANOVA), multivariate analysis of variance (MANOVA), or analysis of covariance (ANCOVA), missing data can be tolerated as the multi-level mixed effects regression model is not dependent upon participants providing data at each assessment time point (i.e., pre-intervention, post-intervention, and 12-months follow-up). The GLMM method uses all the data at each assessment point which reduces the impact of subject attrition on statistical power. Furthermore, GLMM is also robust and is able to deal with unbalanced designs, with both unequal group sizes, and with unequally spaced data collection points. In addition, GLMM is designed to deal with unequal variances at each time point or equal covariances between all pairs of time points (i.e., sphericity), and it is able to account for correlations among repeated measures (Bolker et al., 2009; Tabachnick & Fidell, 2013).
Results

Attrition

Overall, 636 children received consent from their parents to participate in the study. The number of children who completed each session were: 625 children at pre-intervention (1.8% attrition rate), 615 children at post-intervention (3.3% attrition rate), and 521 children at the 12-month follow-up (17.9% attrition). Attrition was due to children being absent from school, attendance at an extra-curricular class (i.e., music lesson), or due to children changing schools. No children withdrew from the study.

Chi-square tests for independence were conducted to assess whether attrition rates differed significantly across the intervention and control groups. There were no differences in attrition rates at pre-intervention $\chi^2 (1) = 2.90, p = .089$, or at post-intervention $\chi^2 (1) = 0.00, p = .978$. However, at 12-months follow-up, there was a higher attrition rate in the intervention group (21.8%), compared to the control group (14%), $\chi^2 (1) = 6.58, p < .01$. The 12-month follow-up evaluation time points for schools randomised to the intervention condition, were close to school holidays so this would explain why a larger number of children were away for the final testing session.

To investigate for differences between children who were present and those who were absent during program evaluations, a one-way between groups MANOVA was performed on all pre-intervention outcome measures (i.e., anxiety, depression, appearance self-concept, friends self-concept, sport self-concept, academic self-concept, self-esteem, social comparisons appearance, social comparisons friends, social comparisons sport, and social comparisons academic), for the control group and for the intervention group. At post-intervention, there were no significant
differences on the pre-intervention outcomes between children who were present and those who were absent, in the control group (Pillai’s Trace = .02; $F(11, 262) = .44, p > .05$), or the intervention group (Pillai’s Trace = .03; $F(11, 286) = .83, p > .05$). At 12-months follow-up, there were no differences in the control group on the pre-intervention outcomes between the children who were present and those who were absent (Pillai’s Trace = .03; $F(11, 262) = .64, p > .05$). However, at 12-months follow-up there was an overall significant difference in the intervention group between children who were present and those who were absent (Pillai’s Trace = .07; $F(11, 286) = 2.06, p < .05$). Specific differences were found on appearance self-concept ($F(1, 296) = 6.85, p < .01$) and social comparisons appearance ($F(1, 296) = 6.85, p < .01$). An inspection of the mean scores of children who were absent indicated that the intervention group were lower in their appearance self-concept ($M = 28.14, SD = 0.87$) compared with the control group ($M = 31.42, SD = 1.17$), but they made fewer social comparisons appearance ($M = 7.38, SD = 0.47$) than the control group ($M = 9.18, SD = 0.68$ respectively).

**Missing Data**

Missing data on the pre-intervention measures varied between 0% for anxiety and 3.2% for appearance self-concept, with the majority of missing data being 1.2% (see Appendix H). Given this is a low rate, and that GLMM tolerates missing data, no imputation method was used (Tabachnick & Fidell, 2013).

**Assumption Checks**

Prior to the main analysis, the data were screened to ensure they met the assumptions of multivariate analysis. This included assessing for outliers, normality, linearity, homogeneity of variance, homogeneity of variance-covariance matrices, and multicollinearity (Tabachnick & Fidell, 2013).
Univariate outliers were identified by calculating z-scores $> \pm 3.3$, and by examining box plots. Overall, 54 univariate outliers were identified across groups for the three assessment points. Twelve univariate outliers were found in the intervention condition for girls, on outcome measures pertaining to depression (pre-intervention: $n = 1$; post-intervention: $n = 2$), appearance self-concept (post-intervention: $n = 2$), sport self-concept (pre-intervention: $n = 1$; post-intervention: $n = 1$; 12-month follow-up: $n = 1$), academic self-concept (12-month follow-up: $n = 1$), and self-esteem (pre-intervention: $n = 1$; post-intervention: $n = 2$). Eight univariate outliers were found in the intervention condition for boys, on measures pertaining to depression (pre-intervention: $n = 1$; post-intervention: $n = 1$), friends self-concept (pre-intervention: $n = 1$), sport self-concept (pre-intervention: $n = 1$; post-intervention: $n = 1$), and self-esteem (pre-intervention: $n = 2$; post-intervention: $n = 1$). Nineteen univariate outliers were found in the control condition for girls, on outcome measures pertaining to depression (pre-intervention: $n = 1$; post-intervention: $n = 3$; 12-month follow-up: $n = 4$), appearance self-concept (12-month follow-up: $n = 1$), friends self-concept (pre-intervention: $n = 1$; 12-month follow-up: $n = 1$), sport self-concept (pre-intervention: $n = 2$; post-intervention: $n = 1$), academic self-concept (12-month follow-up: $n = 1$), and self-esteem (pre-intervention: $n = 1$; post-intervention: $n = 1$; 12-month follow-up: $n = 2$). Fifteen univariate outliers were found in the control condition for boys, on outcome measures pertaining to depression (pre-intervention: $n = 1$; 12-month follow-up: $n = 1$), appearance self-concept (post-intervention: $n = 1$; 12-month follow-up: $n = 2$), friends self-concept (pre-intervention: $n = 1$; post-intervention: $n = 2$; 12-month follow-up: $n = 2$), sport self-concept (12-month follow-up: $n = 2$), academic self-concept (12-month follow-up: $n = 1$), and self-esteem (post-intervention: $n = 1$; 12-
month follow-up: n = 1). Each univariate outlier was recoded to within z-scores < ± 3.3 (Tabachnick & Fidell, 2013).

Skewness and kurtosis were examined by groups for each outcome measure at each time point. Calculations of skew for the majority of outcome measures were either normal or mildly skewed (see Appendix I), with the majority of the children displaying low levels of anxiety and depression, but high self-concepts. Given that these distributions would be expected in a school-based sample, no transformations of the outcome measures were performed.

To assess for multivariate outliers, a Mahalanobis Distance criterion of $\chi^2 (33) = 63.87$ was calculated. For the intervention group, six multivariate outliers were identified and deleted. Three cases were girls, and three cases were boys. There were no multivariate outliers in the control group. Cook’s distance was less than one for all cases, indicating there were no influential data points. The standardised residuals were examined for values which exceeded ± 3.3 (Tabachnick & Fidell, 2013). One case in the intervention condition for boys was identified as exceeding this value and was subsequently deleted. There were no excessive standardised residual values in the control group.

Multicollinearity and singularity was assessed for each the 11 outcome measures, for each program condition group, using collinearity diagnostics, variance inflation factors (VIF) scores, and tolerance (SPSS Version 21). These did not meet the criteria for multicollinearity or singularity, that is, a conditioning index greater than 30 for a given dimension coupled with variance proportions greater than .50 for at least two different outcome measures (Tabachnick & Fidell, 2013). In addition, all VIF scores were less than ten, further indicating no problems with multicollinearity.
Homogeneity of variance and covariance as analysed by Box’s M was not violated \( (p = .002) \). Levene’s assumption of homogeneity of variance was not significant for any of the 11 outcome measures at any of the three evaluation time points (i.e., pre-intervention, post-intervention or 12-months follow-up), at the \( p < .05 \) level.

**Descriptive Data**

A summary of descriptive data, including means and standard deviations, for the intervention group and control group, for all outcome measures at each time point are provided in Table 4. Analysis for the present study was performed with 619 children. However, due to attrition and missing data, the number of children who completed the outcome measures at the different time points varied. This is also indicated in Table 4.

**Outcome Measures**

A summary of each of the effects for the 11 outcome measures is provided in Table 5. Where significant, the interaction effects were interpreted first, as the main effects are embedded within the interaction. For two of the outcome variables, social comparisons friends and social comparisons sport, there was a significant three-way interaction so the interpretation was focused on these effects. For academic self-concept there was a Group × Time and a Group × Gender effect, so the interpretation was focused on these effects.

**Group × Time × Gender.** As shown in Table 5, the Group × Time × Gender interaction effect was significant for social comparisons friends and social comparisons sport. Fisher’s least significant differences (LSD) post-hoc pairwise comparisons were utilised to further examine these interaction effects, using the corrected alpha level. For social comparisons friends, LSD post-hoc contrasts of the
### Table 4

**Means and Standard Deviations of Outcome Measures at Pre-intervention, Post-intervention and 12-Month Follow-Up for Intervention and Control Groups**

<table>
<thead>
<tr>
<th>Measures and Group</th>
<th>Pre-intervention</th>
<th>Post-intervention</th>
<th>12-month follow-up</th>
</tr>
</thead>
<tbody>
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<td>Control</td>
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*Note:* RCMAS = Revised Children’s Manifest Anxiety Scale; CDI = Children’s Depression Inventory; SDQ-I = Self-Description Questionnaire I.
Table 5
Interaction Effects and Main Effects for Group, Time and Gender on Outcomes Measures

<table>
<thead>
<tr>
<th>Measures</th>
<th>Group × Time × Gender</th>
<th>Group × Time</th>
<th>Group × Gender</th>
<th>Gender × Time</th>
<th>Group</th>
<th>Gender</th>
<th>Time</th>
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<td>RCMAS</td>
<td>(2, 1712) = 0.76, p &gt; 0.01</td>
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<td>(2, 1712) = 14.74, p &lt; 0.001</td>
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<tr>
<td>CDI</td>
<td>(2, 1710) = 0.16, p &gt; 0.01</td>
<td>(1, 1710) = 0.13, p &gt; 0.01</td>
<td>(1, 1710) = 0.08, p &gt; 0.01</td>
<td>(1, 1710) = 0.08, p &gt; 0.01</td>
<td>(2, 1710) = 77.38, p &lt; 0.001</td>
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<tr>
<td>SDQ-I</td>
<td>(2, 1672) = 0.55, p &gt; 0.01</td>
<td>(2, 1672) = 0.48, p &gt; 0.01</td>
<td>(2, 1672) = 0.13, p &gt; 0.01</td>
<td>(2, 1672) = 0.07, p &gt; 0.01</td>
<td>(2, 1672) = 13.96, p &lt; 0.001</td>
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<tr>
<td>Appearance</td>
<td>(2, 1691) = 0.90, p &gt; 0.01</td>
<td>(2, 1691) = 2.97, p &gt; 0.01</td>
<td>(2, 1691) = 1.25, p &gt; 0.01</td>
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<td>(2, 1691) = 18.03, p &lt; 0.001</td>
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<td>(2, 1692) = 6.72, p &lt; 0.01</td>
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<td>(2, 1695) = 0.44, p &gt; 0.01</td>
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<td>(2, 1702) = 4.41, p &gt; 0.01</td>
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</table>

Note: RCMAS = Revised Children’s Manifest Anxiety Scale; CDI = Children’s Depression Inventory; SDQ-I = Self-Description Questionnaire I. Significant results indicated in bold text.
three-way interaction highlighted a significant difference for girls in the intervention condition, who demonstrated reductions in social comparisons friends from post-intervention ($M = 6.12$) to 12-months follow-up ($M = 4.98$), $t(1694) = 4.17, p < .001$. There were no differences for girls in the control group from post-intervention ($M = 6.44$) to 12-months follow-up ($M = 5.81$), $t(1694) = 2.60, p > .01$. Unexpectedly there was a significant difference for boys in the control group, indicating reductions in social comparisons friends from pre-intervention ($M = 7.90$) to post-intervention ($M = 7.08$), $t(1694) = 4.25, p < .001$. There were no differences in social comparisons friends for boys in the intervention group from pre-intervention ($M = 6.80$) to post-intervention ($M = 6.83$), $t(1694) = 0.04, p > .01$.

For social comparisons sport, LSD post-hoc comparisons of the interaction highlighted a significant difference for girls in the control group, indicating a reduction in social comparisons in the sport domain from pre-intervention ($M = 8.50$) to 12-months follow-up ($M = 7.55$), $t(1700) = 3.48, p < .01$, and from post-intervention ($M = 8.46$) to 12-months follow-up ($M = 7.55$), $t(1700) = 3.08, p < .01$. There were no significant differences in social comparisons sport for girls in the intervention group, from pre-intervention ($M = 8.09$) to 12-months follow-up ($M = 6.76$), $t(1700) = 2.14, p > .01$, or from post-intervention ($M = 7.32$) to 12-months follow-up ($M = 6.76$), $t(1700) = 2.23, p > .01$. However, the post-hoc comparisons did highlight a significant difference at post-intervention, indicating that girls in the intervention group ($M = 7.32$) were significantly lower in social comparisons sport than girls in the control group ($M = 8.46$) $t(1700) = 2.94, p < .01$.

**Group × Time.** As shown in Table 5, the Group × Time interaction effect was significant for academic self-concept. LSD post-hoc comparisons of the interaction highlighted a difference for children in the intervention group, indicating
a significant increase in academic self-concept from pre-intervention ($M = 29.44$) to post-intervention ($M = 30.54$), $t(1692) = 7.16, p < .01$. Inspection of mean scores indicated the effect was maintained at 12-months follow-up ($M = 30.83$). There were no differences in academic self-concept for the control group from pre-intervention ($M = 28.92$) to post-intervention ($M = 29.09$), $t(1692) = 0.70, p > .01$.

**Group × Gender.** As shown in Table 5, the Group × Gender interaction effect was significant for academic self-concept. LSD post-hoc comparisons of the interaction highlighted a difference for girls in the intervention group ($M = 31.50$), indicating they were significantly higher in their academic self-concept than girls in the control group ($M = 29.09$), $t(1692) = 4.36, p < .01$. There was no difference in academic self-concept between boys in the intervention group ($M = 29.04$) and boys in the control group ($M = 29.22$), $t(1692) = 0.47, p > .01$. In addition, the contrasts also highlighted that girls in the intervention group ($M = 31.50$) were significantly higher in their academic self-concept than boys in the intervention group ($M = 29.04$), $t(1692) = 4.80, p < .01$. No differences were shown between girls ($M = 29.09$) and boys ($M = 29.22$) in the control group, $t(1692) = 0.22, p > .01$.

**Gender × Time.** As shown in Table 5, the Gender × Time interaction effect was not significant for any of the outcome measures.

**Group effects.** As shown in Table 5, the Group main effect was significant for academic self-concept, however, this effect has been discussed earlier in the context of the significant interaction effects (e.g., Group × Time). The Group main effect was not significant for any of the other outcome measures.

**Gender effects.** As shown in Table 5, the Gender main effect was significant for anxiety, sport self-concept, and social comparisons appearance. LSD post-hoc comparisons indicated that girls ($M = 10.15$) were significantly higher in anxiety
than boys \( (M = 8.27), t(1712) = 3.96, p < .01 \), that girls \( (M = 31.44) \) were significantly lower in sport self-concept than boys \( (M = 35.41), t(1690) = 8.82, p < .01 \), and that girls \( (M = 8.27) \) made significantly less social comparisons appearance than boys \( (M = 9.38), t(1691) = 5.22, p < .01 \). The Gender main effect was also significant for academic self-concept, social comparisons friends and social comparisons sport, however, these effects have been discussed previously in the context of the significant interaction effects (e.g., Group × Time × Gender, Gender × Time).

**Time effects.** As shown in Table 5, the main effect of Time was significant for anxiety, depression, appearance self-concept, friends self-concept, sport self-concept, self-esteem, and social comparisons academic. All indicated that both the intervention and control groups changed at the same rate across time on these outcome measures. For anxiety, LSD post-hoc comparisons indicated that both the intervention and control groups showed significant decreases in anxiety symptoms from pre-intervention \( (M = 10.78) \) to post-intervention \( (M = 9.54), t(1712) = 4.65, p < .01 \), from pre-intervention \( (M = 10.78) \) to 12-months follow-up \( (M = 7.31), t(1712) = 15.14, p < .01 \), and from post-intervention \( (M = 9.54) \) to 12-months follow-up \( (M = 7.31), t(1712) = 7.51, p < .01 \). Similarly for depression, LSD post-hoc comparisons indicated that depressive symptoms decreased significantly for the intervention and control groups, from pre-intervention \( (M = 8.93) \) to post-intervention \( (M = 7.70), t(1710) = 4.74, p < .01 \), from pre-intervention \( (M = 8.93) \) to 12-months follow-up \( (M = 5.87), t(1692) = 12.40, p < .01 \), and from post-intervention \( (M = 7.70) \) to 12-months follow-up \( (M = 5.87), t(1710) = 6.70, p < .01 \).

For appearance self-concept, LSD post-hoc comparisons indicated that both groups significantly increased in appearance self-concept from pre-intervention \( (M =
30.29) to post-intervention ($M = 31.44$), $t(1672) = 5.28$, $p < .01$, and from pre-intervention ($M = 30.29$) to 12-months follow-up ($M = 31.58$), $t(1672) = 3.64$, $p < .01$. Similarly, for friends self-concept, LSD post-hoc comparisons indicated both intervention and control groups significantly increased in friends self-concept from pre-intervention ($M = 30.71$) to post-intervention ($M = 31.86$), $t(1691) = 5.44$, $p < .01$, and from pre-intervention ($M = 30.71$) to 12-months follow-up ($M = 32.34$), $t(1691) = 3.79$, $p < .01$. For sport self-concept LSD post-hoc comparisons indicated both groups significantly increased in sport self-concept from pre-intervention ($M = 33.16$) to post-intervention ($M = 33.63$), $t(1690) = 4.41$, $p < .01$. For self-esteem, LSD post-hoc comparisons indicated that both groups showed significant increases in self-esteem from pre-intervention ($M = 32.73$) to post-intervention ($M = 33.83$), $t(1695) = 5.76$, $p < .01$, and from pre-intervention ($M = 32.73$) to 12-months follow-up ($M = 34.27$), $t(1695) = 5.12$, $p < .01$.

Finally, LSD post-hoc comparisons indicated that both the intervention and control groups significantly decreased in social comparisons academic from pre-intervention ($M = 8.06$) to 12-months follow-up ($M = 6.95$), $t(1702) = 3.22$, $p < .01$, and from post-intervention ($M = 7.58$) to 12-months follow-up ($M = 6.95$), $t(1702) = 4.16$, $p < .01$. The main effect of Time was also significant for academic self-concept, social comparisons friends and social comparisons sport, however, these effects have been discussed earlier in the context of the significant interaction effects.

### ‘At Risk’ Anxiety Analyses

Additional analyses were conducted, where children were stratified into groups based on their pre-intervention anxiety scores, and were either ‘not at risk’ (RCMAS < 17) or ‘at risk’ (RCMAS ≥ 17) for anxiety. In the intervention group,
17.8% \((n = 58)\) of children were identified as ‘at risk’ of anxiety, and 82.2% \((n = 267)\) were identified as ‘not at risk’ of anxiety. In the control group, 19.8% \((n = 58)\) of children were identified as ‘at risk’ of anxiety, and 80.2% \((n = 235)\) were identified as ‘not at risk’ of anxiety. A summary of each of the ‘at risk’ of anxiety effects for the 11 outcome measures is provided in Table 6.

**Group × Time × At Risk.** As shown in Table 6, the Group × Time × At Risk interaction was significant for sport self-concept, self-esteem and social comparisons sport. For sport self-concept, LSD post-hoc comparisons of the three-way interaction highlighted a difference for children ‘at risk’ of anxiety in the intervention group, indicating there was a significant increase in sport self-concept from pre-intervention \((M = 28.92)\) to post-intervention \((M = 31.85)\), \(t(1690) = 4.68, p < .01\). There was no difference in sport self-concept in children ‘at risk’ of anxiety in the control group from pre-intervention \((M = 29.35)\) to post-intervention \((M = 30.15)\), \(t(1690) = 1.86, p > .01\).

For self-esteem, LSD post-hoc comparisons of the three-way interaction highlighted a difference for children in the intervention group ‘at risk’ of anxiety, indicating a significant increase in self-esteem from pre-intervention \((M = 28.74)\) to post-intervention \((M = 31.88)\), \(t(1695) = 4.53, p < .001\). There was no difference in self-esteem for children ‘at risk’ of anxiety in the control group from pre-intervention \((M = 29.51)\) to post-intervention \((M = 30.15)\), \(t(1695) = 1.86, p > .01\). Also highlighted was a difference for children in the control group ‘at risk’ of anxiety, indicating a significant increase in self-esteem from post-intervention \((M = 31.02)\) to 12-months follow-up \((M = 32.80)\), \(t(1695) = 3.00, p < .01\). There was no difference in self-esteem for children ‘at risk’ of anxiety in the intervention group from post-intervention \((M = 31.88)\) to 12-months follow-up \((M = 31.57), t(1695) =
### Table 6

Interaction Effects and Main Effects for Group, Time and 'At Risk' Anxiety on Outcomes Measures

<table>
<thead>
<tr>
<th>Measures</th>
<th>Group × Time × At Risk</th>
<th>Group × Time</th>
<th>Group × At Risk</th>
<th>Time × At Risk</th>
<th>Group</th>
<th>At Risk</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCMAS</td>
<td>F(2, 1712) = 2.46, p &gt; .01</td>
<td>F(2, 1712) = 1.43, p &gt; .01</td>
<td>F(1, 1712) = 0.10, p &gt; .01</td>
<td>F(2, 1712) = 44.49, p &lt; .001</td>
<td>F(1, 1712) = 1.36, p &gt; .01</td>
<td>F(1, 1712) = 774.08, p &lt; .001</td>
<td>F(2, 1712) = 84.61, p &lt; .001</td>
</tr>
<tr>
<td>CDI</td>
<td>F(2, 1710) = 2.67, p &gt; .01</td>
<td>F(2, 1710) = 2.18, p &gt; .01</td>
<td>F(1, 1710) = 0.02, p &gt; .01</td>
<td>F(2, 1710) = 58.41, p &lt; .001</td>
<td>F(1, 1710) = 1.50, p &gt; .01</td>
<td>F(1, 1710) = 244.40, p &lt; .001</td>
<td>F(2, 1710) = 111.30, p &lt; .001</td>
</tr>
<tr>
<td>SDQ-I</td>
<td>F(2, 1672) = 1.35, p &gt; .01</td>
<td>F(2, 1672) = 0.43, p &gt; .01</td>
<td>F(1, 1672) = 1.86, p &gt; .01</td>
<td>F(2, 1672) = 4.41, p &gt; .01</td>
<td>F(1, 1672) = 1.26, p &gt; .01</td>
<td>F(1, 1672) = 37.37, p &lt; .001</td>
<td>F(2, 1672) = 15.09, p &lt; .001</td>
</tr>
<tr>
<td>Appearance</td>
<td>F(2, 1691) = 2.37, p &gt; .01</td>
<td>F(2, 1691) = 2.23, p &gt; .01</td>
<td>F(1, 1691) = 0.34, p &gt; .01</td>
<td>F(2, 1691) = 5.85, p &lt; .01</td>
<td>F(1, 1691) = 0.07, p &gt; .01</td>
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<td>Friends</td>
<td>F(2, 1690) = 3.14, p &gt; .01</td>
<td>F(2, 1690) = 0.06, p &gt; .01</td>
<td>F(1, 1690) = 9.75, p &lt; .001</td>
<td>F(2, 1690) = 4.08, p &gt; .01</td>
<td>F(1, 1690) = 0.08, p &gt; .01</td>
<td>F(1, 1690) = 48.48, p &lt; .001</td>
<td>F(2, 1690) = 27.97, p &lt; .001</td>
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<tr>
<td>Academic</td>
<td>F(2, 1692) = 1.50, p &gt; .01</td>
<td>F(2, 1692) = 1.50, p &gt; .01</td>
<td>F(1, 1692) = 1.37, p &gt; .01</td>
<td>F(2, 1692) = 2.50, p &gt; .01</td>
<td>F(1, 1692) = 0.85, p &gt; .01</td>
<td>F(1, 1692) = 36.50, p &lt; .001</td>
<td>F(2, 1692) = 5.86, p &lt; .01</td>
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<tr>
<td>Self-esteem</td>
<td>F(2, 1695) = 5.52, p &lt; .001</td>
<td>F(2, 1695) = 2.65, p &gt; .01</td>
<td>F(1, 1695) = 0.31, p &gt; .01</td>
<td>F(2, 1695) = 13.03, p &lt; .001</td>
<td>F(1, 1695) = 0.06, p &gt; .01</td>
<td>F(1, 1695) = 52.58, p &lt; .001</td>
<td>F(2, 1695) = 22.55, p &lt; .001</td>
</tr>
<tr>
<td>Social Comparison Scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>F(2, 1691) = 2.37, p &gt; .01</td>
<td>F(2, 1691) = 5.23, p &lt; .01</td>
<td>F(1, 1691) = 0.78, p &gt; .01</td>
<td>F(2, 1691) = 11.54, p &lt; .001</td>
<td>F(1, 1691) = 5.27, p &gt; .01</td>
<td>F(1, 1691) = 25.25, p &lt; .001</td>
<td>F(2, 1691) = 0.52, p &gt; .01</td>
</tr>
<tr>
<td>Friends</td>
<td>F(2, 1694) = 3.55, p &gt; .01</td>
<td>F(2, 1694) = 2.90, p &gt; .01</td>
<td>F(1, 1694) = 0.53, p &gt; .01</td>
<td>F(2, 1694) = 11.46, p &lt; .001</td>
<td>F(1, 1694) = 1.39, p &gt; .01</td>
<td>F(1, 1694) = 67.40, p &lt; .001</td>
<td>F(2, 1694) = 26.40, p &lt; .001</td>
</tr>
<tr>
<td>Sport</td>
<td>F(2, 1700) = 2.52, p &gt; .01</td>
<td>F(2, 1700) = 0.02, p &gt; .01</td>
<td>F(1, 1700) = 0.99, p &gt; .01</td>
<td>F(2, 1700) = 2.06, p &gt; .01</td>
<td>F(1, 1700) = 0.09, p &gt; .01</td>
<td>F(1, 1700) = 5.51, p &gt; .01</td>
<td>F(2, 1700) = 5.51, p &gt; .01</td>
</tr>
<tr>
<td>Academic</td>
<td>F(2, 1702) = 1.46, p &gt; .01</td>
<td>F(2, 1702) = 0.25, p &gt; .01</td>
<td>F(1, 1702) = 5.04, p &gt; .01</td>
<td>F(2, 1702) = 17.24, p &lt; .001</td>
<td>F(1, 1702) = 4.48, p &gt; .01</td>
<td>F(1, 1702) = 63.55, p &lt; .001</td>
<td>F(2, 1702) = 25.42, p &lt; .001</td>
</tr>
</tbody>
</table>

Note: RCMAS = Revised Children’s Manifest Anxiety Scale; CDI = Children’s Depression Inventory; SDQ-I = Self-Description Questionnaire I. Significant results indicated in bold text.
0.46, *p > .01*. The contrasts further highlighted a difference for children in the intervention group ‘not at risk’ of anxiety, indicating a significant increase in self-esteem from pre-intervention (*M* = 33.39) to post-intervention (*M* = 34.48), *t*(1695) = 3.05, *p < .01, and from pre-intervention (*M* = 33.39) to 12-months follow-up (*M* = 34.98), *t*(1695) = 3.35, *p < .01. There was no difference for children ‘not at risk’ of anxiety in the control group from pre-intervention (*M* = 33.70) to post-intervention (*M* = 34.28), *t*(1695) = 2.07, *p > .01, or from pre-intervention (*M* = 33.70) to 12-months follow-up (*M* = 34.46), *t*(1695) = 1.69, *p > .01.

For social comparisons sport, LSD post-hoc contrasts of the three-way interaction indicated at pre-intervention that children ‘at risk’ of anxiety in the control group (*M* = 9.77), were significantly higher in social comparisons sport than children ‘at risk’ of anxiety in the intervention group (*M* = 8.04) *t*(1690) = 4.68, *p < .01. The contrasts also highlighted a significant difference for control group children ‘at risk’ of anxiety, indicating reductions in social comparisons sport from pre-intervention (*M* = 9.77) to 12-months follow-up (*M* = 8.65), *t*(1700) = 3.97, *p < .001. There were no differences in social comparisons sport for intervention group children ‘at risk’ of anxiety, from pre-intervention (*M* = 8.04) to 12-months follow-up (*M* = 7.66), *t*(1700) = 0.54, *p > .01.

**Group × Time.** As shown in Table 6, the Group × Time interaction was significant for social comparisons appearance. LSD post-hoc contrasts of the two-way interaction highlighted a difference for the control group, indicating children had significant reductions in social comparisons appearance from pre-intervention (*M* = 9.97) to post-intervention (*M* = 9.45), *t*(1691) = 12.30, *p < .001. There was no difference in social comparisons appearance for children in the intervention group from pre-intervention (*M* = 8.77) to post-intervention (*M* = 8.97), *t*(1691) = 0.31, *p
The Group × Time interaction was not significant for any of the other outcome measures.

**Group × At Risk.** As shown in Table 6, the Group × At Risk interaction was not significant for any of the outcome measures.

**Time × At Risk.** As shown in Table 6, the Time × At Risk interaction was significant for anxiety, depression, friends self-concept, social comparisons appearance, social comparisons friends, and social comparisons academic. LSD post-hoc comparisons of the two-way interaction highlighted a difference for children ‘at risk’ of anxiety, indicating a significant reduction in anxiety from pre-intervention (\(M = 20.38\)) to post-intervention (\(M = 15.85\)), \(t(1712) = 9.81, p < .01\). There was no change in anxiety for children ‘not at risk’ of anxiety, from pre-intervention (\(M = 8.48\)) to post-intervention (\(M = 7.99\)), \(t(1712) = 2.29, p > .01\).

For depression, LSD post-hoc comparisons of the two-way interaction highlighted a difference for children ‘at risk’ of anxiety, indicating a significant reduction in depression from pre-intervention (\(M = 18.38\)) to post-intervention (\(M = 13.72\)), \(t(1710) = 9.53, p < .01\). There were no differences in depression for children ‘not at risk’ of anxiety from pre-intervention (\(M = 6.66\)) to post-intervention (\(M = 6.21\)), \(t(1710) = 2.645, p > .01\).

For friends self-concept, LSD post-hoc comparisons of the interaction highlighted a difference for children ‘at risk’ of anxiety, as there was a significant increase in friends self-concept from pre-intervention (\(M = 26.43\)) to post-intervention (\(M = 28.90\)), \(t(1691) = 5.97, p < .01\). There was no difference in friends self-concept for children ‘not at risk’ of anxiety, from pre-intervention (\(M = 32.53\)) to post-intervention (\(M = 33.06\)), \(t(1691) = 2.31, p > .01\).
For social comparisons appearance, LSD post-hoc comparisons of the interaction highlighted a difference for children ‘not at risk’ of anxiety, indicating a significant increase in social comparisons appearance from post-intervention ($M = 8.27$) to 12-months follow-up ($M = 8.70$), $t(1691) = 3.05, p < .01$. No differences were observed for children ‘at risk’ of anxiety from post-intervention ($M = 10.15$) to 12-months follow-up ($M = 9.58$), $t(1691) = 2.55, p > .01$.

For social comparisons friends, LSD post-hoc comparisons of the two-way interaction highlighted a difference for children ‘not at risk’ of anxiety, as there was a significant reduction in social comparisons friends from pre-intervention ($M = 6.91$) to 12-months follow-up ($M = 5.74$), $t(1694) = 3.35, p < .01$. In addition, a difference was highlighted for children ‘at risk’ of anxiety, indicating a significant reduction in social comparisons friends from post-intervention ($M = 8.14$) to 12-months follow-up ($M = 6.52$), $t(1694) = 8.66, p < .001$. No differences in social comparisons friends were shown for children ‘at risk’ of anxiety from pre-intervention ($M = 7.68$) to 12-months follow-up ($M = 6.52$), $t(1694) = 2.12, p > .01$, or for children ‘not at risk’ of anxiety from post-intervention ($M = 6.27$) to 12-months follow-up ($M = 5.74$), $t(1694) = 2.69, p > .01$.

For social comparisons academic, LSD post-hoc comparisons of the two-way interaction highlighted a significant difference for children ‘not at risk’ anxiety, showing a significant decrease in social comparisons academic from pre-intervention ($M = 7.97$) to 12-months follow-up ($M = 6.78$), $t(1702) = 3.21, p < .01$. Furthermore, a difference was also highlighted for children ‘at risk’ of anxiety, indicating a significant decrease in social comparisons academic was shown by this group from post-intervention ($M = 8.97$) to 12-months follow-up ($M = 7.64$), $t(1702) = 6.61, p < .001$. No changes were shown between pre-intervention ($M = 8.43$) to 12-months
follow-up ($M = 7.64$), $t(1702) = 1.92$, $p > .01$ for children ‘at risk’ of anxiety, and no changes were observed for children ‘not at risk’ of anxiety, from post-intervention ($M = 7.26$) to 12-months follow-up ($M = 6.78$), $t(1702) = 2.28$, $p > .01$. The Time × At Risk interaction was also significant for sport self-concept and self-esteem, however, these effects have been discussed earlier in the context of the significant three-way interaction effects for these outcomes measures (i.e., Group × Time × At Risk).

**Group effects.** As shown in Table 6, the Group main effect was not significant for any of the outcome measures.

**At Risk effects.** As shown in Table 6, the At Risk of anxiety main effect was significant for appearance self-concept and academic self-concept. For appearance self-concept, LSD post-hoc comparisons indicated that children ‘at risk’ of anxiety ($M = 28.31$) were significantly lower in their appearance self-concept than children ‘not at risk’ of anxiety ($M = 31.72$), $t(1672) = 6.13$, $p < .01$.

Similarly, LSD post-hoc comparisons showed that children ‘at risk’ of anxiety ($M = 27.57$) were significantly lower in their academic self-concept than children ‘not at risk’ of anxiety ($M = 30.19$), $t(1692) = 6.04$, $p < .01$. The At Risk of anxiety main effect was also significant for anxiety, depression, friends self-concept, sport self-concept, self-esteem, social comparisons appearance, social comparisons friends, social comparisons sport, and social comparisons academic, however, these effects has been discussed earlier in the context of significant interaction effects.

**Time effects.** As shown in Table 6, the main effect of Time was significant for appearance self-concept and academic self-concept. For appearance self-concept, LSD post-hoc comparisons indicated that for both the intervention and control groups, children significantly increased in appearance self-concept from pre-
intervention ($M = 28.92$) to post-intervention ($M = 30.35$), $t(1672) = 5.47$, $p < .01$, and from pre-intervention ($M = 28.92$) to 12-months follow-up ($M = 30.76$), $t(1672) = 4.16$, $p < .01$.

Similarly, LSD post-hoc comparisons indicated that children in both groups significantly increased in academic self-concept from pre-intervention ($M = 28.21$) to post-intervention ($M = 28.95$), $t(1692) = 2.70$, $p < .01$, and from pre-intervention ($M = 28.21$) to 12-months follow-up ($M = 29.48$), $t(1692) = 3.08$, $p < .01$. The Time main effects was also significant for anxiety, depression, friends self-concept, sport self-concept, self-esteem, social comparisons friends, social comparisons sport, and social comparisons academic, however, these effects have been discussed earlier in the context of significant interaction effects.

‘At Risk’ Depression Analyses

Finally, additional analyses were conducted, where children were stratified into groups based on their pre-intervention depression scores, and were either ‘not at risk’ (CDI < 13) or ‘at risk’ (CDI ≥ 13) of depression. In the intervention group, 23.1% ($n = 75$) of children were identified as ‘at risk’ of depression, and 76.6% ($n = 249$) of children were identified as ‘not at risk’ of depression. In the control group 28.3% ($n = 83$) of children were identified as ‘at risk’ of depression, and 71.3% ($n = 209$) of children were identified as ‘not at risk’ of depression. A summary of each of the ‘at risk’ of depression effects for the 11 outcome measures is provided in Table 7.

Group × Time × At Risk. As shown in Table 7, the Group × Time × At Risk interaction was significant for social comparisons academic. LSD post-hoc contrasts of the three-way interaction highlighted a difference for children ‘at risk’ of depression in the intervention group, as they demonstrated significant reductions in social comparisons academic from post-intervention to ($M = 8.26$) to 12-months
Table 7

Interaction Effects and Main Effects for Program, Time, and 'At Risk' Depression on Outcomes Measures

<table>
<thead>
<tr>
<th>Measures</th>
<th>Effects</th>
<th>Group × Time × At Risk</th>
<th>Group × Time</th>
<th>Group × At Risk</th>
<th>Time × At Risk</th>
<th>Group</th>
<th>At Risk</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCMAS</td>
<td>F(2, 1708) = 3.89, p &lt; .01</td>
<td>F(2, 1708) = 1.26, p &gt; .01</td>
<td>F(1, 1708) = 1.53, p &gt; .01</td>
<td>F(2, 1708) = 58.19, p &lt; .001</td>
<td>F(1, 1708) = 0.86, p &gt; .01</td>
<td>F(1, 1708) = 263.64, p &lt; .001</td>
<td>F(2, 1708) = 105.26, p &lt; .001</td>
<td></td>
</tr>
<tr>
<td>CDI</td>
<td>F(2, 1708) = 0.39, p &gt; .01</td>
<td>F(2, 1708) = 1.04, p &gt; .01</td>
<td>F(1, 1708) = 0.56, p &gt; .01</td>
<td>F(2, 1708) = 136.15, p &lt; .001</td>
<td>F(1, 1708) = 2.26, p &gt; .01</td>
<td>F(1, 1708) = 748.74, p &lt; .001</td>
<td>F(2, 1708) = 140.19, p &lt; .001</td>
<td></td>
</tr>
<tr>
<td>SDQ-I</td>
<td>F(2, 1669) = 0.31, p &gt; .01</td>
<td>F(2, 1669) = 0.09, p &gt; .01</td>
<td>F(1, 1669) = 0.36, p &gt; .01</td>
<td>F(2, 1669) = 8.49, p &lt; .001</td>
<td>F(1, 1669) = 0.56, p &gt; .01</td>
<td>F(1, 1669) = 126.63, p &lt; .001</td>
<td>F(2, 1669) = 17.61, p &lt; .001</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>F(2, 1687) = 0.10, p &gt; .01</td>
<td>F(2, 1687) = 0.11, p &gt; .01</td>
<td>F(1, 1687) = 0.27, p &gt; .01</td>
<td>F(2, 1687) = 3.12, p &gt; .01</td>
<td>F(1, 1687) = 0.03, p &gt; .01</td>
<td>F(1, 1687) = 64.87, p &lt; .001</td>
<td>F(2, 1687) = 15.00, p &lt; .001</td>
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<tr>
<td>Friends</td>
<td>F(2, 1686) = 2.14, p &gt; .01</td>
<td>F(2, 1686) = 0.81, p &gt; .01</td>
<td>F(1, 1686) = 0.47, p &gt; .01</td>
<td>F(2, 1686) = 3.77, p &gt; .01</td>
<td>F(1, 1686) = 0.15, p &gt; .01</td>
<td>F(1, 1686) = 33.17, p &lt; .001</td>
<td>F(2, 1686) = 28.25, p &lt; .001</td>
<td></td>
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<tr>
<td>Academic</td>
<td>F(2, 1688) = 0.19, p &gt; .01</td>
<td>F(2, 1688) = 5.64, p &lt; .01</td>
<td>F(1, 1688) = 0.10, p &gt; .01</td>
<td>F(2, 1688) = 3.35, p &gt; .01</td>
<td>F(1, 1688) = 0.56, p &gt; .01</td>
<td>F(1, 1688) = 32.17, p &lt; .001</td>
<td>F(2, 1688) = 26.86, p &lt; .001</td>
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<tr>
<td>Self-esteem</td>
<td>F(2, 1691) = 0.46, p &gt; .01</td>
<td>F(2, 1691) = 1.39, p &gt; .01</td>
<td>F(1, 1691) = 0.71, p &gt; .01</td>
<td>F(2, 1691) = 22.08, p &lt; .001</td>
<td>F(1, 1691) = 0.29, p &gt; .01</td>
<td>F(1, 1691) = 78.63, p &lt; .001</td>
<td>F(2, 1691) = 19.35, p &lt; .001</td>
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<tr>
<td>Social Comparison Scale</td>
<td>F(2, 1687) = 1.22, p &gt; .01</td>
<td>F(2, 1687) = 4.98, p &lt; .007</td>
<td>F(1, 1687) = 4.33, p &gt; .01</td>
<td>F(2, 1687) = 3.70, p &gt; .01</td>
<td>F(1, 1687) = 9.89, p &lt; .01</td>
<td>F(1, 1687) = 25.25, p &lt; .001</td>
<td>F(2, 1687) = 15.00, p &lt; .001</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>F(2, 1690) = 2.00, p &gt; .01</td>
<td>F(2, 1690) = 2.01, p &gt; .01</td>
<td>F(1, 1690) = 5.83, p &lt; .01</td>
<td>F(2, 1690) = 4.76, p &gt; .01</td>
<td>F(1, 1690) = 2.64, p &gt; .01</td>
<td>F(1, 1690) = 24.10, p &lt; .001</td>
<td>F(2, 1690) = 25.18, p &lt; .001</td>
<td></td>
</tr>
<tr>
<td>Friends</td>
<td>F(2, 1696) = 2.24, p &gt; .01</td>
<td>F(2, 1696) = 0.18, p &gt; .01</td>
<td>F(1, 1696) = 6.02, p &gt; .01</td>
<td>F(2, 1696) = 3.61, p &gt; .01</td>
<td>F(1, 1696) = 0.01, p &gt; .01</td>
<td>F(1, 1696) = 7.10, p &gt; .01</td>
<td>F(2, 1696) = 9.74, p &lt; .001</td>
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</tr>
<tr>
<td>Academic</td>
<td>F(2, 1698) = 8.15, p &lt; .001</td>
<td>F(2, 1698) = 0.23, p &gt; .01</td>
<td>F(1, 1698) = 2.72, p &gt; .01</td>
<td>F(2, 1698) = 29.37, p &lt; .001</td>
<td>F(1, 1698) = 8.06, p &gt; .01</td>
<td>F(1, 1698) = 65.55, p &lt; .001</td>
<td>F(2, 1698) = 23.42, p &lt; .001</td>
<td></td>
</tr>
</tbody>
</table>

Note: RCMAS = Revised Children’s Manifest Anxiety Scale; CDI = Children’s Depression Inventory; SDQ-I = Self-Description Questionnaire I. Significant results indicated in bold text.
follow-up ($M = 6.94$), $t(1698) = 8.78, p < .01$. There was no change for children ‘at risk’ of depression in the control group from post-intervention to ($M = 8.96$) to 12-months follow-up ($M = 8.10$), $t(1698) = 2.73, p > .01$. The Group × Time × At Risk interaction was not significant for any other outcome measures.

**Group × Time.** As shown in Table 7, the Group × Time interaction was significant for academic self-concept. LSD post-hoc comparisons of the two-way interaction highlighted a difference for children in the intervention group, showing significant increases in academic self-concept from pre-intervention ($M = 28.20$) to post-intervention ($M = 29.65$), $t(1688) = 13.04, p < .01$, and from pre-intervention ($M = 28.20$) to 12-months follow-up ($M = 30.10$), $t(1688) = 3.01, p < .01$. There was no difference in academic self-concept for control group children, from pre-intervention ($M = 27.99$) to post-intervention ($M = 28.49$), $t(1688) = 1.68, p > .01$, or from pre-intervention ($M = 27.99$) to 12-months follow-up ($M = 28.89$), $t(1688) = 2.64, p > .01$.

**Group × At Risk.** As shown in Table 7, the Group × At Risk interaction was not significant for any of the outcome measures.

**Time × At Risk.** As shown in Table 7, the Time × At Risk interaction was significant for anxiety, depression, appearance self-concept, and self-esteem. For anxiety, the LSD post-hoc comparisons of the two-way interaction did not highlight a clear pattern between children ‘at risk’ and ‘not at risk’ of depression as both significantly decreased in anxiety across time. There was a significant reduction between pre-intervention and post-intervention for children ‘at risk’ of depression (pre: $M = 17.22$, to post: $M = 14.65$; $t(1708) = 5.89, p < .01$) and also for children ‘not at risk’ (pre: $M = 8.46$, to post: $M = 7.64$; $t(1708) = 3.67, p < .01$). There was also a significant reduction between pre-intervention to 12-months follow-up for
children ‘at risk’ of depression (pre: $M = 17.22$, to 12-months: $M = 11.17$; $t(1708) = 11.84, p < .01$) and for children ‘not at risk’ of depression (pre: $M = 8.46$, to 12-months: $M = 5.85$; $t(1708) = 11.27, p < .01$). Similarly, between post-intervention and 12-months follow-up, the reduction in anxiety was significant for children ‘at risk’ of depression (post: $M = 14.65$, to 12-months: $M = 11.17$; $t(1708) = 4.84, p < .01$) and for children ‘not at risk’ of depression (post: $M = 7.64$, to 12-months: $M = 5.85$; $t(1708) = 5.57, p < .01$).

For depression, LSD post-hoc comparisons of the two-way interaction highlighted a difference for children ‘at risk’ of depression, as they significantly decreased in depression from pre-intervention ($M = 19.46$) to post-intervention ($M = 14.32$), $t(1708) = 8.15, p < .01$, whereas there was no difference for children ‘not at risk’ of depression from pre-intervention ($M = 5.10$) to post-intervention ($M = 5.22$), $t(1708) = 0.90, p > .01$.

For appearance self-concept, LSD post-hoc comparisons of the two-way interaction highlighted a difference for children ‘at risk’ of depression, as they significantly increased in appearance self-concept from pre-intervention ($M = 26.22$) to 12-months follow-up ($M = 29.30$), $t(1669) = 5.48, p < .01$. No difference was shown for children ‘not at risk’ of depression from between pre-intervention ($M = 31.64$) and 12-months follow-up ($M = 32.35$), $t(1669) = 1.62, p > .01$.

For self-esteem, LSD post-hoc contrasts of the two-way interaction highlighted a difference for children ‘at risk’ of depression, as they significantly increased in self-esteem from post-intervention ($M = 30.53$) to 12-months follow-up ($M = 31.97$), $t(1691) = 2.10, p < .01$. There was no difference in self-esteem for children ‘not at risk’ of depression from post-intervention ($M = 34.95$) to 12-months follow-up ($M = 35.00$), $t(1691) = 0.25, p > .01$. The Time × At Risk interaction was
also significant for social comparisons academic, however, this effect has been discussed earlier in the context of the significant three-way interaction effect (i.e., Group × Time × At Risk).

**Group effects.** As shown in Table 7, the Group main effect was significant for social comparisons appearance. LSD post-hoc contrasts indicated that children in the intervention group made significantly less social comparisons appearance ($M = 8.53$) than children in the control group ($M = 9.42$), $t(1687) = 3.15, p < .01$. The Group main effect was also significant for social comparisons academic, however, this effect has been discussed earlier in the context of the significant interaction effect.

**At Risk effects.** As shown in Table 7, the At Risk of depression main effect was significant for friends self-concept, sport self-concept, academic self-concept, social comparisons appearance, and social comparisons friends. For friends self-concept, LSD post-hoc comparisons indicated that children ‘at risk’ of depression ($M = 28.16$) were significantly lower in their friends self-concept than children ‘not at risk’ of depression ($M = 32.81$), $t(1687) = 11.25, p < .01$. For sport self-concept, LSD post-hoc contrasts showed children ‘at risk’ of depression ($M = 31.25$) were significantly lower in their sport self-concept than children ‘not at risk’ of depression ($M = 34.30$), $t(1687) = 5.76, p < .01$. For academic self-concept, LSD post-hoc comparisons indicated that children ‘at risk’ of depression ($M = 27.20$) were significantly lower in their academic self-concept than children ‘not at risk’ of depression ($M = 30.58$), $t(1688) = 5.67, p < .001$.

For social comparisons appearance, LSD post-hoc contrasts indicated that children ‘at risk’ of depression ($M = 9.58$) were significantly higher in social comparisons appearance than children ‘not at risk’ of depression ($M = 8.53$), $t(1687)$
= 3.69, \( p < .01 \). For social comparisons friends, LSD post-hoc contrasts indicated that children ‘at risk’ of depression (\( M = 7.46 \)) were significantly higher in social comparisons friends than children ‘not at risk’ of depression (\( M = 6.17 \)), \( t(1690) = 6.49, p < .001 \). The At Risk of depression main effect was also significant for anxiety, depression, appearance self-concept, self-esteem, and social comparisons academic, however, these effects has been discussed earlier in the context of the significant interaction effects.

**Time effects.** As shown in Table 7, The Time effect was significant for friends self-concept, sport self-concept, social comparisons friends and social comparisons sport. For friends self-concept, LSD post-hoc comparisons showed that friends self-concept increased in both the intervention and control groups from pre-intervention (\( M = 29.32 \)) to post-intervention (\( M = 30.78 \)), \( t(1687) = 5.81, p < .01 \), and from pre-intervention (\( M = 29.32 \)) to 12-months follow-up (\( M = 31.35 \)), \( t(1687) = 3.61, p < .01 \). For sport self-concept, LSD post-hoc comparisons indicated that both groups significantly decreased in sport self-concept from pre-intervention (\( M = 32.31 \)) to post-intervention (\( M = 30.78 \)), \( t(168.06) = 3.79, p < .01 \), however, they significantly increased from pre-intervention (\( M = 32.31 \)) to 12-months follow-up (\( M = 32.99 \)), \( t(1686) = 4.26, p < .01 \).

For social comparisons friends, LSD post-hoc comparisons indicated that both groups showed significant decreases in social comparisons friends from pre-intervention (\( M = 7.27 \)) to 12-months follow-up (\( M = 6.11 \)), \( t(1690) = 3.5682, p < .001 \), and from post-intervention (\( M = 7.06 \)) to 12-months follow-up (\( M = 6.11 \)), \( t(1690) = 6.99, p < .001 \). For social comparisons sport, LSD post-hoc comparisons indicated that both groups showed significant decreases in social comparisons sport from pre-intervention (\( M = 8.83 \)) to 12-months follow-up (\( M = 7.74 \)), \( t(1696) = 2.82, p < .01 \).
\[ p < .01, \text{ and from post-intervention (} M = 8.56 \text{) to 12-months follow-up (} M = 7.74\),} \]
\[ t(1696) = 4.37 \, p < .01. \] The main effect for Time was also significant for anxiety, depression, appearance self-concept, friends self-concept, academic self-concept, self-esteem, and social comparisons academic, however, these effects has been discussed earlier in the context of significant interaction effects.

**Discussion**

The aim of the present study was to evaluate the 12-month effectiveness of the universal school-based COPE program, in preventing and reducing symptoms of anxiety and depression in children aged between 8 to 10 years. In addition, the effectiveness of the program was evaluated for its effects on improving children’s self-concepts and self-esteem, and reducing their use of social comparisons. A further aim was to examine the moderating effects of gender and children’s risk status for anxiety or depression.

**Summary of Findings**

The findings for three of the outcome measures were in line with expectations. These were academic self-concept, sport self-concept, and social comparisons academic. Overall, children in the intervention group were found to demonstrate increases in academic self-concept in comparison to the control group. Children ‘at risk’ of anxiety in the intervention group were found to show increases in sport self-concept in comparison to those in the control group. In addition, children ‘at risk’ of depression in the intervention group were found to show reductions in social comparisons academic when compared to the control group.

The findings for one of the outcome measures were in line with expectations only for the girls. There was a reduction in social comparisons friends for girls in the intervention group compared to the control group. However, for the boys there was a
reduction in social comparisons friends in the control group and not the intervention group.

For three of the outcome measures, the findings were unexpected in that they showed improvements for the control group rather than the intervention group, or the improvements were not consistent for the intervention group. These were social comparisons appearance, social comparisons sport, and self-esteem. For the overall group, the control group showed reductions in social comparisons appearance when compared to the intervention group. In addition, in the control group the girls were found to show reductions in social comparisons sport compared to the intervention group. The children ‘at risk’ of anxiety in the control group were also found to show reductions in social comparisons sport, compared to the intervention group. Lastly, for children ‘at risk’ of anxiety, the intervention group were found to show increases in self-esteem from pre-intervention to post-intervention, when compared to the control group. However, from post-intervention to 12-months follow-up, the control group were found to show increases in self-esteem compared to the intervention group. Unexpectedly though, for children ‘not at risk’ of anxiety, the intervention group were found to show increases in self-esteem (from pre-intervention to post-intervention, and from pre-intervention to 12-months follow-up) when compared to the control group.

For the remaining four outcome measures, anxiety, depression, appearance self-concept, and friends self-concept, the findings showed changes in both the intervention and control groups. For anxiety and depression, there was a reduction in symptoms for both the intervention and control groups, and for appearance self-concept and friends self-concept, there was an increase in both the intervention and control groups.
**Self-Concepts**

The two domains where the intervention program was found to be effective were academic self-concept in the overall sample, and sport self-concept for the children ‘at risk’ of anxiety. These two aspects of the self-concept may be more amenable to change given that these are highly salient in the school environment, and given that the intervention was delivered in the schools. In addition, these domains may also be more amenable to change as there are more clearly defined external indicators of academic and sporting achievements and abilities. For example, children would receive evaluations by teachers based on objective criteria such as grades, or finishing places in sport. Furthermore, given these objective criteria for school achievement and sport, children may find it easier to evaluate their skills and interests in these areas.

For two of the other self-concept domains, appearance and friends, the program showed no impact, as there were improvements for children in both the intervention and control groups. It is possible that these two domains may be less affected by the school context but more affected by other factors such as media pressures and parental influences. In addition, it is possible that these are the domains which are more affected by maturational changes, which will be discussed below (pp. 122-123).

The findings for self-esteem were more complex. There were improvements for the children ‘at risk’ of anxiety, both in the intervention (pre-intervention to post-intervention), and the control group (post-intervention to 12-months follow-up). However, there were also improvements for the children not at risk of anxiety in the intervention group (pre-intervention to post-intervention; pre-intervention to 12-months follow-up). Further research is needed to verify these findings and to more
fully examine other factors that may be impacting on children’s self-esteem. Such factors may include the role of peers, media influences and parental influences (Dohnt & Tiggemann, 2006; Silk, Morris, Kanaya, & Steinberg, 2003; Spilt et al., 2014).

**Social Comparisons**

There was a reduction in social comparisons in the academic domain for children in the intervention who were ‘at risk’ of depression. As discussed above, given the program was delivered in the school context, and that the academic domain has more objective criteria in comparison to the other domains, this may be an area that is more amenable to change. There was also a reduction in social comparisons in the friends domain, but only for girls. The friends domain is likely to be a more salient area for the girls, who tend to be more interpersonally oriented and spend more time in social conversation (Moller, Hymel, & Rubin, 1992; Rose & Rudolph, 2006), whereas boys tend to spend time playing sports and engaging in organised play (Moller et al., 1992; Pellegrini, Blatchford, Kato, & Baines, 2004). This finding may also indicate that the program was more geared towards the girls, however, more discussion of the gender differences is provided below (pp. 123-125).

For the social comparison domains of appearance and sport, the findings were unexpected in that improvements in children’s use of social comparisons (i.e., a reduction in the frequency of social comparisons), were shown only for the control group. For the overall sample, reductions in the control group were found from pre-intervention to post-intervention in the social comparisons appearance domain. The physical appearance domain is highly salient for children, and perceived physical attractiveness strongly predicts levels of self-esteem (Harter, 1999, 2000). Given this is a period where changes in children’s physical appearance are becoming more
noticeable, it is possible that the program may have drawn more attention to their appearance, rather than less attention. Interestingly, at 12-months follow-up a trend was observed indicating an increase in the control group, and a reduction in the intervention group for social comparisons appearance. A longer-term follow-up is needed to determine if this trend is transient or if it will develop into a prevention effect.

For social comparisons in the sport domain, improvements in the control group were shown for girls, and also for children ‘at risk’ of anxiety. This is another area that the program may have drawn more attention to, as girls may be less confident or have less experience in sport than boys. Similarly, for anxious children, sport which involves performing in public, may be an area that further exacerbates their anxiety.

**Anxiety and Depression**

The program was not effective in preventing or reducing symptoms of anxiety or depression in children. Rather, both the intervention and control groups demonstrated reductions in these two domains across time. In line with other studies, it has been argued that if children in a control group show the same improvements as children in intervention group, the noted changes are more likely to be reflective of natural developmental changes, or ‘maturational effects’ (McBride, 2010). Other studies with school-based CBT prevention programs with children at this age have also found both the intervention and control groups to show decreases in anxiety symptoms (Last, Perrin, Hersen, & Kazdin, 1996; Miller et al., 2011; Miller et al., 2010; Roberts et al., 2010) and depressive symptoms (Barrett et al., 1996a; Roberts et al., 2010; Roberts et al., 2003) across time.
In addition to maturational effects, other explanations for some of the unexpected findings need to be considered. The intervention in the current study was implemented as a universal school-based program, and as expected, children had low to normal levels of anxiety and depression at pre-intervention. As there is not much room for improvement in these already low anxiety and depression scores, this may have created a ‘floor effect’ on the anxiety and depression outcome measures. Another explanation is that the measures utilised may not have been adequately sensitive to detect small and subtle changes in social skills or anxiety or depressive symptoms at post-intervention and at follow-up (Challen, Machin, & Gillham, 2014).

The time effects observed in the current study may be a function of natural developmental changes in children or ‘maturational effects’, and these may have been stronger than the program effects. In order to strengthen the program effects, the program content and length may need to be boosted. At present, there is no consensus on the appropriate length of program for children, however, an eight-week program may be insufficient for children to acquire and develop the skills needed to identify, appraise, and fully modify their use of social comparison practices. Preventive and early intervention initiatives implemented with children aged 8 to 10 years may require a greater number of sessions, with more extensive practice opportunities for the consolidation of skills and changes in attitudes and behaviours, before children can utilise these skills in the long-term. Further research is needed to determine whether the length of the COPE program is sufficiently long enough to enable skill acquisition, or whether the number of sessions needed to be increased.

**Gender Differences**

Gender differences were found on some of the outcome measures. In line with previous research, overall, girls scored significantly higher on anxiety (Barrett
& Turner, 2001; Berger et al., 2007; Kraag et al., 2009), and lower on sport self-concept than boys (Gentile et al., 2009), and higher than boys on academic self-concept (Marsh, 1989). In contrast to research examining social comparisons and body image in adolescents, girls in the present study scored lower than boys on social comparisons appearance (Jones, 2001). Girls also scored lower than boys on social comparisons friends, and social comparisons sport.

The reduction in the use of social comparisons in the friends domain, also suggests that this may be a more important area for the girls. However, another possibility is that content of the program may have been more suitable for girls. For example, the program included activities which involved group discussions, and the content was particularly focussed on feelings. Girls in middle childhood are more likely than boys to engage in discussions with their friends, and are generally more open to discussing their feelings (Rose & Rudolph, 2006; Rubin et al., 2004).

In contrast to the girls, there was an improvement in social comparisons friends for boys in the control group. However, there was also a pre-intervention difference in social comparisons friends, where boys in the control group scored higher than girls in the control group \((p < .01)\). Thus, it is possible that the subsequent reductions shown by the control group at post-intervention were attributable to ‘regression to the mean’ (Barnett, van der Pols, & Dobson, 2005). Further research regarding the salient components of intervention programs which are shown to have a differential effect based on gender is required to ensure both girls and boys are appropriately matched to interventions which are likely to be both appealing and effective for each gender (Gillham et al., 2001). In addition, more studies need to examine how social comparisons and self-concepts may develop differently for girls and boys. In particular, researchers need to investigate the
direction in which girls and boys make their social comparisons in relation to anxiety and depressive symptoms. This would enhance our understanding of the types of social comparisons used, and the different ways in which they are moderated by gender.

**Limitations and Further Considerations**

In addition to the developmental and gender-related factors discussed above, the limitations also need to be acknowledged and these may have influenced the findings of this study. A limitation of the present study was that the results were solely based on self-reported assessment measures, thus children may have provided socially desirable responses. Additionally, it has been suggested that children’s self-reports of anxiety and depression symptoms have been shown to decline with repeated measures (Michael & Merrell, 1998). This raises some concern about the degree of accuracy of children’s self-report measures. Other studies have used parent measures (Bernstein et al., 2005; Miller et al., 2010; Roberts et al., 2003), teacher reports (Butler, Miezitis, Friedman, & Cole, 1980; Grietens et al., 2004), and follow-up interviews (Butler et al., 1980). To obtain a better understanding of children’s attitudes and behaviours, future research needs to corroborate children’s self-reports with those of parental and teacher reports, and also with follow-up interviews.

It also needs to be noted that the Social Comparison Scale was a newly developed measure. Thus it needs refining and further validation for children. It is possible that the scale is too abstract for children to understand, and also that children may not have the developmental maturity to verbalise their social comparisons. As this is an important construct in children’s development (Berk, 2009; Eccles, 1999), further testing of the scale is needed. A further limitation of the Social Comparison Scale is that it did not examine the direction of the social
comparisons (i.e., upwards or downwards), and whether children are comparing themselves with a ‘better off’ or ‘worse off’ other (Buunk, Collins, Taylor, VanYperen, & Dakof, 1990). This information is important as children may be using social comparisons for different purposes, and understanding this further would enhance our knowledge of how social comparisons affect self-concepts in children. Future work needs to further investigate children’s use of social comparisons, their self-concepts, and how these are associated with the development of anxiety and depressive symptoms in children.

Another limitation, is that there is no theoretical approach or model underlying children’s use of social comparisons in an intervention framework. As this may be helpful with predicting outcomes and reconciling unexpected results, further work is needed to develop such a model.

In the present study, the effectiveness of the intervention was evaluated according to changes in the primary outcome measures. However, understanding causality and the pattern of relationships between outcomes, may also be helpful. To further our understanding of the relationship between the social comparisons, self-esteem, anxiety, and depression in children, and the effects of the intervention on such relationships, future work could evaluate causal and/or mediation models.

A limitation associated with the program sample, were the differences between those who dropped out from the intervention group at 12-months compared to those who did not on appearance self-concept and social comparisons appearance. However, there was no consistent pattern given that those who dropped out in the intervention group were lower on appearance self-concept but made fewer social appearance comparisons. Moreover, there were no differences on any of the other
outcome measures, thus indicating that overall this attrition bias is unlikely to be a major threat to the external validity of the study.

In addition to the maturational changes previously discussed, the findings in children irrespective of group, of decreased anxiety and depressive symptoms, and increases in appearance self-concept, and friends self-concept, may indicate that the program did not successfully target each of the key outcome variables. Middle childhood is a time where several developmental changes are taking place, and these need to be taken into account when working with children. The comparative impacts of developmental processes and intervention effects on children’s levels of anxiety and depressive symptoms, however, need to be considered. Given epidemiological studies show a sharp increase in depression between ages 13 to 15 years (Costello et al., 2005; Goodyer et al., 1997; Hankin et al., 1998), prevention programs should ideally follow children through this developmental period, to elucidate the effects (Horowitz & Garber, 2006). Unfortunately, although the plan was to evaluate the COPE program again at the 24-months follow-up, the Education Department did not approve this follow-up. They were concerned that the control group was missing out on the intervention. Given the importance of long-term follow-ups, future work is needed to include follow-ups beyond 12-months to determine if there were further changes in children’s social comparison practices, self-concepts, or in symptoms of anxiety or depression.

Another limitation of the study was that the consent rate was 53%. The sensitive nature of this research may have concerned some parents and deterred them from consenting to their child participating in the program. Future studies need to address these concerns, by introducing information sessions with parents prior to the recruitment of the program. This could help alleviate concerns of parents, increase
participation rate, and improve generalisability of the sample. In addition, future research should include parent sessions and booster sessions as previous studies with children have indicated these are important factors for the success of universal programs (Barrett & Turner, 2001; Berger et al., 2007; Essau et al., 2012; Kraag et al., 2009; Lock & Barrett, 2003; Lowry-Webster et al., 2001).

Given several of the findings of this study were unexpected or were in the opposite direction, further studies are needed to evaluate the program. A more in-depth study of children’s experiences of the COPE using qualitative methods was the focus of Study 2. In order to further our understanding of the perceived benefits of the COPE program, and understand how the COPE program could be further improved or developed, children’s experiences of the COPE program and feedback from the program facilitators, teachers and parents were specifically examined.
CHAPTER SEVEN

Study 2. A Qualitative Evaluation of the COPE Program: Examining the Perspectives of the Children Participants, Parents, Teachers and Facilitators

The findings from Study 1 in Chapter 6, demonstrated limited effectiveness of the COPE program. Study 2 was conducted in order to explore children’s experience of the COPE program using qualitative methods, and also obtain feedback from program facilitators, teachers, and parents. A summary of the previous studies that have conducted a quantitative evaluation, and have followed this up with qualitative questions will be first provided.

Review of Qualitative Follow-up Evaluations

Butler et al.’s (1980) study. In their indicated depression prevention, Butler et al. (1980) randomised 56 fifth and sixth grade elementary children to one of four conditions. Post-program, 22 teachers were interviewed about changes they observed in the children. For nine children in a Role Play intervention condition, which emphasised social skills and problem-solving, teachers described change in children’s classroom behaviours as “much happier,” “doesn’t dream as much as before,” “more sociable,” “more positive about himself,” and “getting a sense of self-confidence at last” (Butler et al., 1980, p. 114). Each of these children demonstrated a reduction in their depression scores post-test to below the cut off. Another child whose parent had contacted the school prior to the study due to concerns about their child’s unhappiness and apathy, had demonstrated a large reduction in their post-test depression score. The teacher’s report on this child was “no change…always well adjusted” (Butler et al., 1980, p. 114). For two children, no changes were observed in the teacher reports or in their depression scores. Reports were unavailable for two other children as they had a new teacher post-test.
Changes in four children who participated in the Cognitive Restructuring intervention condition, which focused on the identification and modification of automatic and self-deprecating thoughts, were described by teachers as “less anxious about achievement,” “not as negative about herself,” “happier,” and “more cooperative” (Butler et al., 1980, p. 116). Three of these children showed an improvement in their depression scores. For two others in this condition, depression scores decreased but no change was reported by teachers, and interview data were not available for three other children.

For children in an Attention Placebo group, three teachers described improvement in children’s social and emotional adjustment as “more assertive and sure of himself,” “made her feel special,” “may have calmed a little”, two of whom had improved depression scores. Additionally, teachers reported on three children as “some improvement in attitude toward school work” (Butler et al., 1980, p. 116), whereas only one had an improved depression score. Two other students in this condition were reported by teachers as being worse, also had an increase in depression scores.

For children in the Control condition, depression scores and teacher’s description of classroom behaviour improved for two, and the remaining children were described as unchanged, although two children had marked improvement in their depression scores.

Overall, results of the above study indicates a consistency between the teacher’s descriptions of observed changes in the children’s classroom behaviour, and the direction of change in children’s depression scores, in that reported improvements in children’s happiness, would be reflected by an improved depression score. This was strongest for the Role Play condition.
**Barrett, Sonderegger, and Sonderegger’s (2001) study.** In a study of the FRIENDS anxiety prevention program by Barrett et al. (2001), 106 children (aged 7 to 13 years) and 98 adolescent participants (11 to 19 years) from non-English speaking backgrounds (NESB), completed a Treatment Integrity Checklist (TIC) after each of the 10 sessions, which measured how effective they perceived each activity to be. At program completion, a Group Leader Integrity Questionnaire (GLIQ) was also completed, assessing how well they felt facilitators related to group participants. Both were assessed on Likert-rating scales. Concordance rates on the TIC, between session and manual content, were 95% for primary schools and 93% for high schools. No differences were found between group facilitators on the GLIQ. Participants rated facilitators’ ability to lead the group as extremely well (69.4%), moderately well (25.4%), or not very well/not at all (4%).

At program completion, participants completed a Social Validity Questionnaire indicating their level of satisfaction. Participants rated their enjoyment and how much they learned from the program, from the response options: ‘a lot’, ‘some’, ‘a little’, or ‘nothing at all’; and also rated how often they used the ideas/skills learned from the program from options: ‘all the time’, ‘some of the time’, ‘not very often’, or ‘not at all’, and which skills were found to be most useful. Children were also invited to provide comments to help improve the program, which included “I really liked the program, and learned a lot from it” (Barrett et al., 2001, p. 86). Participants in primary school reported ‘learning practical ways to cope with worries’ as the best program component. Whereas for high school participants, highly rated program components were: ‘introduction to FRIENDS plan’ and the step plan (all high school students); problem-solving (former-Yugoslavian students); communication and relationships (Chinese students); and, applying the FRIENDS
plan (mixed-ethnic students). Overall, results indicated that FRIENDS was positively evaluated by participants across all ethnic groups at primary and high school levels. All students enjoyed the FRIENDS program, and the most useful skill was ‘helping others to feel good’.

Additionally, to determine which aspects of the program would benefit from culturally sensitive modifications, interviews were conducted during and after program completion with program facilitators (number not reported) and 15 participants, who were randomly selected from all cultural groups and school levels. These revealed that not all program activities were practical for use with NESB students. Due to language and comprehension difficulties experienced by participants, activities took longer than the allocated timeframe set out in the program manual. As a consequence, the facilitators reported feeling rushed when implementing the program. Participants also reported activities could be more fun and exciting. According to facilitators and participants, this could be achieved by including music, art, and creative stories which are relevant to young migrants. Facilitators commented on the differences in maturity levels and interest areas of the high school students from the different cultures, (i.e., the Chinese youth were seen as more serious and were focussed on cultural differences, whereas the former Yugoslavian youth were more mature physically, and were focussed on age-related issues). It was recommended that a program supplement be created which is more culturally sensitive and appropriate for NESB populations, and that the supplement includes flexible, open forums for group discussions on topics of interest and concern to participants.

*Stallard et al.’s (2005) study.* The acceptability of the FRIENDS program was assessed with 190 children aged 9 and 10 years by Stallard et al. (2005).
Discussions with a small group of the participating children (participant number not provided) were used to compile a list of ten important issues about the FRIENDS. These items formed the acceptability scale used by children to evaluate whether they thought the program was understandable, enjoyable and/or useful. The questions included: ‘Did you understand most of the work?’, ‘Did you feel safe talking about yourself?’, ‘Were you listened to?’, ‘Was it fun?’, ‘Do you think it has helped you?’, ‘Did you learn anything new?’, ‘Were you given enough time to do the work?’, ‘Did your family think FRIENDS was good?’, ‘Have you helped anyone with your new skills?’, and ‘Would you recommend it to a friend?’. Responses were rated on a 3-point rating (i.e., ‘Yes’, ‘A little’, or ‘No’). Overall, results indicated that the program was positively evaluated by the children. Eighty-six per cent of children understood the work, 81% felt listened to, 81% found the program fun, 77% would recommend it to others, 72% learned new skills, 65% found it helpful, 60% thought their family liked FRIENDS, 51% felt safe talking about themselves, 43% felt they were given enough time to complete the work, and 41% helped someone with their new skills. This feedback led to program amendments, which included providing more prepared responses to some of the children’s activities so they had enough time to complete these.

*Ginsburg’s (2009) study.* Although not school-based, in a similar community-based Coping and Promoting Strength anxiety prevention program, Ginsburg (2009) conducted a study with 40 children (aged 7 to 12 years) of parents who were diagnosed with an anxiety disorder. Post-treatment, parents completed a treatment satisfaction questionnaire evaluating the intervention. Parents \((n = 17)\) assessed how helpful specific aspects of the program were (thirteen items) rated on a 5-point Likert-scale (i.e., \(1 = \text{very helpful}\) to \(5 = \text{very unhelpful}\)), and overall
satisfaction (three items) on a 7-point scale (i.e., 1 = ‘not at all satisfied’, to 7 = ‘very satisfied’). Overall, parental satisfaction with the intervention was high with the most helpful skills rated as: talking to a professional (70%), talking to their therapist (70%), information on facing challenges (60%), factual information on stress and worries (55%), information on helpful and unhelpful thoughts (55%), information on problem solving (55%), and information on parenting (50%). The intervention components with the lowest ratings were session handouts (35%), out-of-session assignments (30%), information on relaxation (30%), and daily diaries (10%).

In addition, parents responded to three open-ended questions about the most and least helpful aspects of the program: (1) What was the most helpful part of the program? (2) What was the least helpful part of the program? (3) Suggestions for how to make the Coping and Promoting Strength program better? Responses to what parents found helpful, included “communication and problem solving skills,” “identifying stressors and having concrete approaches,” “it gave us a vocabulary with which to discuss anxiety and some skills to use,” and “facing challenges, using rewards, helpful and unhelpful thoughts.” To what was least helpful, parents reported “the daily diaries,” and “relaxation exercises.” Parents suggested improvements included “involve extended family when in same household,” and “focus a little more parenting skills” (Ginsburg, 2009, p. 586).

Rose et al.’s (2009) study. In another study of the FRIENDS anxiety prevention program with 52 children in Grade 4 (aged 8 and 9 years), Rose et al. (2009) included two post-program feedback surveys, measuring children’s perception of the skills they had learned from FRIENDS. Additionally, parents’ perception of the effects FRIENDS had on their children were also assessed. Each survey utilised a 4-point Likert-style format where participants rated their
experiences. Response options on the children’s survey included: ‘yes’, ‘a little’, ‘not really’, or ‘no’; and the parent survey included: ‘a lot’, ‘somewhat’, ‘very little’, or ‘not at all’. In addition, both surveys included a qualitative component that was evaluated using open-ended questions. Questions included in the children’s survey were: (1) “What was the most helpful thing you learned in the FRIENDS program?” and (2) “Do you think anything should be changed about the FRIENDS program? If so, what?” Data from the questions were collated, analysed and coded for themes. In response to what children found most helpful in the program, 44% reported being taught how to manage their inner thoughts, 28% reported learning ‘coping step plans’ and problem solving, 16% reported learning about feelings and ways to react to them, and 12% reported learning relaxation strategies was the most helpful.

Similarly, two open-ended questions included in the parents’ survey were: (1) “What was the most helpful thing your child learned in the FRIENDS program?” and (2) “What should be changed about the FRIENDS program?” Parents’ answers commonly included that they found the program helpful as their child learned about different kinds of feelings and how to deal with them, being taught how to initiate positive self-talk and using “green light” thinking (i.e., challenging negative thoughts and generating positive thoughts), goal setting, and learning different types of coping skills. Secondly, parents commonly felt changes to the program could include having more comprehensive information sent home during and after the program had ended. Parents reported that if they had information about the skills their children were taught, they could continue to support their child after the program was completed.

_Eimecke, Pauschardt, and Mattejat’s (2010) study_. Eimecke et al. (2010) conducted a modified version of the FRIENDS anxiety and depression prevention study containing a parent training component, in a randomised controlled trial with a
sample of 70 children aged 8 to 12 years. An evaluation questionnaire containing multiple-choice and free-response questions was given to parents. All parents evaluated their own ability to cope with their child’s problem (i.e., ‘Compared to the registration period, I can cope better today with my child’s problems that led to participation in the preventive course’), which was responded to on a 5-point scale. On average, parents were ‘mostly/usually’ able to better deal with their child’s problems. In addition, parents who participated in the training were asked to evaluate the parent training course using a 5-point rating scale (i.e., 0 = ‘not at all’, 4 = ‘very well/always’). Of the parents who participated in the parent training program, 93% rated it as helpful, and 98% of parents would recommend the course to others. Specific program components that parents rated as helpful were: problem-solving strategies, discussions with other parents, learning about the relationship between thoughts, feelings, and behaviours, and contingency management. In response to the free-response questions (not included by authors), parents stated that in comparison to the start of the course, 80% were calmer when dealing with their child, or had a greater understanding of their child’s behaviour, and 60% were more competent in coping with their child’s issues. Parents who received the training subjectively felt it was effective, although there were no significant differences in symptom reduction or perceived self-competence, when compared to parents who did not receive the training.

**Miller et al.’s (2010) study.** In the Taming Worry Dragon’s anxiety prevention program, Miller et al. (2010) included post-program questionnaires for the children (n = 116; aged 7 to 12 years) and their teachers (n = 5), to capture qualitative data (such as social importance and acceptability) in response to the intervention program. Although neither the content of the questionnaires nor the
method used to analyse responses were reported by authors, children reported that they enjoyed learning relaxation techniques, particularly deep breathing and imagining a peaceful place. Most children named at least one skill from the program that they found helpful, and some reported that learning ways to calm themselves made them “less scared now” of things. Teachers reported how the program appeared to: normalise anxiety for children (as they observed others experience anxiety); increase children’s understanding of other people’s feelings, including empathy and also understanding ways to approach shy children; and, it provided a common language for children to use in the classroom to talk about worries. Teachers also reported difficulty with getting children to complete a homework detective task, as parents did not understand the underlying concepts of the task. Inclusion of a parent information session in the intervention may help to overcome this issue.

**Summary and Aims of Study 2**

Overall, the reviewed studies have provided some qualitative feedback of the intervention programs from children, teachers, parents and/or facilitators. However, aside from one study which included teacher interviews (Butler et al., 1980), and two others which included a maximum of three open-ended questions at the conclusion of their written surveys of parents and/or children (Ginsburg, 2009; Rose et al., 2009), the reviewed studies used questionnaires and/or checklists which commonly measured responses on Likert-type scales. Arguably, these methods are more quantitative in design and do not provide enough detail to examine participants responses in-depth. Furthermore, of the reviewed studies, none included perspectives of all stake-holders, that is, children, facilitators, teachers, and parents. Given that intervention programs are designed to benefit a child’s functioning beyond either the
school or home environment, it is important that the various perspectives of those involved in children’s lives is sought, in order to provide a more complete understanding of perceptions and experiences of the intervention program.

The purpose of Study 2, was to build upon and supplement the survey-based evaluation of the early intervention COPE program, using semi-structured interviews and open-ended questions, with children who participated in the COPE program. As noted above, none of the reviewed studies in this chapter have provided an in-depth qualitative analysis. Such an approach will enable children’s experiences of the program to be probed in more depth. In addition, to gain a richer understanding of how the program was received, it was deemed important to conduct further interviews to gain the perspectives of the parents of the participants, the teachers of the participants, and COPE facilitators. Each of these groups had a different type of involvement with the COPE program, and each may provide a unique perspective.

The specific aims of this study were to evaluate: (1) What the perceived benefits of the COPE program are; and (2) How the COPE program could be further improved or developed. In order to obtain feedback from the children, teachers, parents and facilitators, about their experiences and perspectives of the COPE program, open-ended questions were used. In-depth semi-structured interviewing allows the researcher to identify the most meaningful experience for each individual, and to explore these more fully, by allowing a participant time to articulate what is important to them.

Method

Participants

The participants were 12 Grade 4 and Grade 5 children from two primary schools in the Melbourne metropolitan area who participated in the COPE program.
In Grade 4 there were two girls and two boys, and in Grade 5 there were five girls and three boys. The mean age was 10.44 years ($SD = 0.79$). In addition, five parents, three teachers and six facilitators of the COPE program were interviewed for this study. Interviews were conducted by the student. Table 8 provides demographic characteristics for the participants.

**Materials**

**Interviews.** Semi-structured interviews were employed to gather detailed information about the COPE program from each participant group (i.e., children, parents, teachers and facilitators). An interview schedule was designed by the student, to elicit an in-depth understanding of the children’s experiences of the COPE program, to understand the benefits of the program from the perspectives of the parents, teachers and facilitators, and to determine ways in which the program can be improved (see Appendix J). Individual interviews for children, parents and teachers took place during school hours in a private room at the schools. The interviews with facilitators took place during business hours at Deakin University, at their workplace, or a private residence. Each interview was audio-taped. The length of the interviews varied between 7 to 20 minutes for children, 14 to 21 minutes for parents, 31 to 36 minutes for teachers, and 17 to 69 minutes for facilitators.

Children were asked questions about their experiences of the program. These included: What do you remember about the COPE program? What did/didn't you like about the program? What did you learn from the program? If needed, the interviewer assisted children to remember parts of the program by using props from the COPE program such as the children's activity manual, story books, and the children's certificates.
Table 8

*Demographic Characteristics of Participants and Education Level*

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Children ((n = 12))</th>
<th>Parents ((n = 5))</th>
<th>Teachers ((n = 3))</th>
<th>Facilitators ((n = 6))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range 9-11</td>
<td>9-11</td>
<td>36-45</td>
<td>39-46</td>
<td>22-36</td>
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<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>7</td>
<td>5</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Male</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Education Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Grade 5</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>High school graduate</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Bachelor degree</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Post-graduate degree</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

Parents were asked about their perceptions of the COPE program. These included: What do you think your child liked about the program? What do you think your child didn’t like about the program? In what ways did you think your child benefited from the program?

Teachers were asked about their perceptions and observations of the COPE program. These included: What do you think the children liked about the program? What do you think the children didn’t like about the program? In what ways did you think the children benefited from the program?

Facilitators were asked about their perceptions and observations of the COPE program. These included: What aspects of the COPE program worked best? What aspects of the COPE program didn't work well? In what ways did the children benefit from the program? What recommendations do you have for improving the program? For each group, additional questions were asked in line with the
participants' responses to probe more in-depth and to elicit more comprehensive answers (e.g., “Can you tell me more about that?” or “What does that mean?”).

**Procedure**

Ethics approval was obtained from the Deakin University Human Research Ethics Committee, and approval was also obtained from the Department of Education and Early Childhood Development, and the Catholic Education Office (see Appendix K).

Four of the 11 schools who participated in the COPE program, were randomly selected to be involved in this interview follow-up study. An invitation outlining the study was sent to the principal of each school. Consent for the schools to participate was given verbally during a follow-up phone call made by the student. The consent rate for the schools was 50%. Selection of children to participate in this study was conducted by computerised random number generation. Invitations and information packs containing a Plain Language Statement and a Consent Form (Appendix L) were then sent to these selected children and their parents. The information packs were sent to parents or legal guardians (via children, via teachers) for consent of their child's participation and their own participation. Additionally, all classroom teachers of the children who participated in the COPE program and all facilitators of the program were also sent an invitation and information package containing consent forms (Appendices M and N respectively). Participation in the study only took place if participants returned their signed consent form. All children, parents, teachers and facilitators consented to participate. The interviews were conducted 12-months after the completion of the COPE program.
**Data Analysis**

The interview for each participant was transcribed verbatim from the digital audio files by the student, and double checked for accuracy. During this process, initial ideas about the data were generated and recorded as this is considered an important part of the analysis (Braun & Clarke, 2006). Thematic analysis was then undertaken to analyse participants’ perspectives of the COPE program. Thematic analysis was seen as an appropriate analytic strategy, as it focuses on understanding the phenomena in question, which are the experiences and perceptions of the COPE program from the perspectives of the children, parents, teachers and facilitators. Thematic analytical methods as outlined by Braun and Clarke (2006) were employed. This process involved reading and re-reading the transcripts, identifying patterns and themes which emerged, and reorganising the data by coding and unifying the identified themes and subthemes. This process is a cyclical, iterative process which requires constant revisiting of the transcripts to ensure that the themes which are generated, directly relate to the shared experience of the participants (Braun & Clarke, 2006).

The validity and reliability of qualitative research is measured by the rigour or ‘trustworthiness’, which aims to promote consistency and authenticity with respect to the analysis and interpretation of the data. Establishment of trustworthiness involved the use of Lincoln and Guba’s (1985) four evaluative criteria of credibility, transferability, dependability and confirmability.

Credibility/Coherency was established using seven methods: (1) random sampling of the children participants; (2) iterative questions during the interviews; (3) the accuracy of the data was checked at different stages of each interview; (4) a range of perspectives were provided with the inclusion of four different participant
groups (i.e., children, parents, teachers and facilitators); (5) holding regular
debriefing sessions between student and supervisor; (6) continuing interviews even
after saturation of themes was reached in order to consolidate and improve the
reliability of the established themes; and (7) examination of previous research to
frame the findings.

Transferability/Transparency was established as detailed descriptions of each
stage of the research process have been provided, and all documents used in the
study are provided in the Appendix. Dependability was enhanced through the
processes of documenting the interviews and by “memo writing”.

Confirmability was established by the inclusion of open-ended questions to
reduce bias, using multiple participants groups, and by having regular discussions
with the student’s supervisor to discuss themes and interpretations until final themes
were agreed upon. Self-reflection and self-monitoring were also used to enhance
awareness of the student’s own bias and/or subjectivity.

Results

A summary of the experiences and perceptions of the COPE program from
the children, parent, teacher and facilitator participant groups, are presented in Table
9 to Table 12, respectively. Tables for each participant group are structured by the
interview questions and organised by themes, subthemes, and response frequency.
Quotes are provided to exemplify the themes. It needs to be noted that the themes are
not independent and there is some overlap. Each quote is demarcated by an identifier
at the end of the quote. The identifiers are: C = Child; P = Parent; T = Teacher; F =
Facilitator. The number after each identifier indicates a specific participant.

For each of the four participants groups, five themes summarised the data: (1)
Program content, resources, and structure; (2) Personal experiences, relationships
<table>
<thead>
<tr>
<th>Themes</th>
<th>Subthemes (Response %)</th>
<th>Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What do you remember about the COPE program?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program content, resources and structure</td>
<td>• Certificates (91.67%)</td>
<td>“I remember the activity booklet that we got, and that would just focus on what we would do in that session. I also remember we got read a story and then we would go back to activities in the group, and at the end we would share what we have gotten together. At the end got a certificate with each skill for each week. I remember we would list things down on the whiteboard and focus on what we had read, and we would have a discussion about it.” C5</td>
</tr>
<tr>
<td></td>
<td>• Activities, games and storybooks (83.33%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Children’s workbook (75%)</td>
<td></td>
</tr>
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<td></td>
<td>• Nametag (33.33%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Group activities (25%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Discussions (16.67%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Reinforcement/revision (16.67%)</td>
<td></td>
</tr>
<tr>
<td>Emotional, social and cognitive development:</td>
<td>• Identify feelings (50%)</td>
<td>“I remember that every week we got read a book and they were really good, because after the book the teacher tells us how it relates to real life and how to harness our emotions. Every week we would do a sort of small game, which I think everyone enjoyed, about emotions and stuff. Every week we would do an activity in the book and they were pretty fun to do. It was fun because sometimes it can happen in your life. For example, one of your friends may be better at running than you and you might feel depressed about it but you may be better than them at maths or something. So it just helps you.” C9</td>
</tr>
<tr>
<td></td>
<td>• Positive thinking (41.67%)</td>
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<tr>
<td></td>
<td>• Identify positive and negative thoughts (41.67%)</td>
<td>“We got certificates. They would have thing like, “Today I learned about…” and sometimes we would have to write in what we learned. In a couple of later sessions we would go back and revise all of it.” C3</td>
</tr>
<tr>
<td></td>
<td>• Identify strengths and weaknesses (41.67%)</td>
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<tr>
<td></td>
<td>• Improve self-esteem (33.33%)</td>
<td>“It was about feelings, most of them, and how to make people feel better if they are not happy with themselves if they were being bullied or something. We did some activities about negative thoughts and positive thoughts. There were these things like if you go to a party and you were wearing something and you were different to others, it was asking how you feel because you were different We played Snakes and Ladders one time, where if you feel down you go down the snake and if you feel better you go up the ladder. There was something where it would say “Oh, he’s much cooler than me” and we had to say “Yeah…But…” and say why you are both good, and you can help make them feel better.” C7</td>
</tr>
<tr>
<td></td>
<td>• Individual differences (16.67%)</td>
<td></td>
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<tr>
<td></td>
<td>• Skill development (8.33%)</td>
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<td></td>
<td>• “They told us that it doesn’t really matter what is good about other people. They tried to tell us that we are all special in different ways. We read some books to give us examples. I remember the book about the giraffe who couldn’t dance and I remember about a boy who keep looking in the mirror.”</td>
<td></td>
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</tbody>
</table>
Table 9 (cont).

<table>
<thead>
<tr>
<th>Themes</th>
<th>Subthemes (Response %)</th>
<th>Quotes</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>I remember that we went into different groups and we had to talk about stuff in a circle. And we had to say two things that were true and one that wasn’t. I remember that we did some worksheets and they were trying to help us discover our talents and our downs, and our good things and stuff.” C12</td>
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<tr>
<td></td>
<td></td>
<td>“I remember going each week and they taught us skills about living a happy life and being the best you can. It helped us improve in our everyday life and also to compliment ourselves and make us feel good. And how we could think positively about ourselves, even thought it might look bad.” C2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“We would be given a situation and we had to find the positive and the negative in there and then the people who were running it would say, “Well, what about these positive things? There’s always a lot of positive things in any situation.” C3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I remember it was about self-esteem, feelings and emotions. There were questions about how you feel about different things and whether you feel happy or sad about things.” C4</td>
</tr>
<tr>
<td>What did you like about the program?</td>
<td></td>
<td>“The ones that I liked were the one which had the cards. I like the Compliments game, so that you could remind yourself of something positive about yourself.” C2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I liked the booklet and the activities. I remember it was fun!” C7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“A liked a lot of it. I liked doing the activities in the book and all of the games. I liked reading the stories. The stories told you not to be always negative and how to be positive. I remember the one about the ‘stone’. The activities had games which were fun.” C8</td>
</tr>
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<td></td>
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<td>“Reading the picture story books was enjoyable. I liked going back to those as most of us hadn’t read them since Prep or Grade 1. We could go back and actually understand them. Instead of just seeing the basic story we could actually understand the skeleton of the book.” C3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“It was fun. I liked filling in the workbook and doing the activities. I liked how it teaches you about compliments. It was a really fun way to learn it, and it was easy to understand. It teaches you to not think bad about yourself and to think about a positive thought, which makes you feel better. It teaches you heaps about negative and positive thoughts.” C11</td>
</tr>
</tbody>
</table>
Table 9 (cont).

<table>
<thead>
<tr>
<th>Themes</th>
<th>Subthemes (Response %)</th>
<th>Quotes</th>
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</thead>
<tbody>
<tr>
<td><strong>Themes</strong></td>
<td><strong>Themes</strong></td>
<td><strong>Quotes</strong></td>
</tr>
<tr>
<td><strong>Emotional, social and cognitive development</strong></td>
<td>Positive thinking and coping strategies (66.67%)</td>
<td>“The books were good. I remember in one of the books, there were all the stones to make a wall and one stone couldn’t fit in. It showed me that there is always a spot for you, so you don’t leave people out in a game.” C11</td>
</tr>
<tr>
<td></td>
<td>Learning about self-esteem and self-concepts (41.67%)</td>
<td>“I definitely doing the activities in a group with everyone else in the program and not just doing it by ourselves.” C1</td>
</tr>
<tr>
<td></td>
<td>Learning about individual differences (25%)</td>
<td>“I liked that it was always positive, and even if they said one negative thing, there would always be a positive to back it up. It was just enjoyable, better than maths in class! I liked that it would teach me and the other kids, that ‘every grey cloud has a silver lining’ and it would reinforce that. And not be pessimistic. I remember them teaching us the ‘glass half full and the glass half empty’ thing. That was an example they used most of the way through.” C3</td>
</tr>
<tr>
<td></td>
<td>Learning about strengths and weaknesses (16.67%)</td>
<td>“I really liked how it taught me to find something good in bad things and it got me more confident I think. I started doing more things and I wasn’t sad if someone was better than me at anything. I really liked it. Like, when you think of something negative and it really puts you down, and you can’t stop thinking about it, it kind of helped me think, “oh yeah, but then I can do this.” I really liked that it helps a lot to get my head off negatives and into the positives. It made me more confident and definitely more positive. It made me feel better about whatever happened that was bad.” C4</td>
</tr>
<tr>
<td></td>
<td>Increase happiness (8.33%)</td>
<td>“I liked how they taught you that you had different strengths and that’s what I learnt. It taught me that everybody’s different. I looked forward to doing to program. The people who took it were nice. The activities were pretty fun. They helped me to see what I’m good at and what I’m not so good at. I hadn’t thought about that stuff before. I was okay to learn about this stuff. I like that you learned about yourself.” C10</td>
</tr>
<tr>
<td></td>
<td>Increase confidence (8.33%)</td>
<td>“I liked how they taught you that you had different strengths and that’s what I learnt. It taught me that everybody’s different. I looked forward to doing to program. The people who took it were nice. The activities were pretty fun. They helped me to see what I’m good at and what I’m not so good at. I hadn’t thought about that stuff before. I was okay to learn about this stuff. I like that you learned about yourself.” C10</td>
</tr>
<tr>
<td><strong>Personal experiences, relationships and engagement</strong></td>
<td>Enjoyable and Fun (100%)</td>
<td>“I liked that it wasn’t a boring sort of session, it was all really fun and encouraging. When we got called to go, I always thought “yeah awesome!” You also got to meet new people which made me have better friendships with others.” C5</td>
</tr>
<tr>
<td></td>
<td>Relationship with facilitators and peers (50%)</td>
<td>“I really liked how it taught me to find something good in bad things and it got me more confident I think. I started doing more things and I wasn’t sad if someone was better than me at anything. I really liked it. Like, when you think of something negative and it really puts you down, and you can’t stop thinking about it, it kind of helped me think, “oh yeah, but then I can do this.” I really liked that it helps a lot to get my head off negatives and into the positives. It made me more confident and definitely more positive. It made me feel better about whatever happened that was bad.” C4</td>
</tr>
<tr>
<td></td>
<td>Felt supported and understood by facilitators (33.33%)</td>
<td>“I liked how they taught you that you had different strengths and that’s what I learnt. It taught me that everybody’s different. I looked forward to doing to program. The people who took it were nice. The activities were pretty fun. They helped me to see what I’m good at and what I’m not so good at. I hadn’t thought about that stuff before. I was okay to learn about this stuff. I like that you learned about yourself.” C10</td>
</tr>
<tr>
<td></td>
<td>Social component (16.67%)</td>
<td>“I liked how they taught you that you had different strengths and that’s what I learnt. It taught me that everybody’s different. I looked forward to doing to program. The people who took it were nice. The activities were pretty fun. They helped me to see what I’m good at and what I’m not so good at. I hadn’t thought about that stuff before. I was okay to learn about this stuff. I like that you learned about yourself.” C10</td>
</tr>
</tbody>
</table>
Table 9 (cont).

<table>
<thead>
<tr>
<th>Themes</th>
<th>Subthemes (Response %)</th>
<th>Quotes</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>“I liked all the leaders supporting us and helping us to go through all the activities. I liked the way that they talked to us about the stuff that we need to learn and do in our everyday lives. They are not like the normal teachers. They go through things step-by-step, and make sure you understand, so that it sinks in.” C2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“The people who ran the program were really nice. They took the time to make sure that we all understood. And they understood you, and would help you if you were struggling or need some advice.” C9</td>
</tr>
<tr>
<td>What didn’t you like about the program</td>
<td>Program content, resources, and structure</td>
<td>• Didn’t dislike anything about the program (100%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Timing of program (8.33%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Focus on bullying (8.33%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Nothing. Except that it was towards the end of the year, and that it was on Friday afternoon. It didn’t really interfere that much though.” C12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I really liked to program but I wanted them to talk a bit more about bullying. How to help people who are being bullied.” C7</td>
</tr>
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<td></td>
<td></td>
<td>“Well there wasn’t anything that I didn’t like.” C1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I’m not sure there was anything that I didn’t like. I don’t think there was.” C2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I can’t really think of anything that I didn’t like because I really enjoyed it.” C4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Um, there wasn’t really much that I didn’t like about the program.” C9</td>
</tr>
<tr>
<td>Emotional, social and cognitive development</td>
<td>Introduction to social comparisons (8.33%)</td>
<td>“Maybe some of the questions are a bit intimidating. Maybe like “Do you compare yourself to other people?” It was just a bit confusing. I didn’t really know if I did. I didn’t really think those things before. But now it comes into relations with other things. I think about it more.” C4</td>
</tr>
<tr>
<td>What did you learn from the program?</td>
<td>Emotional, social and cognitive development</td>
<td>• Manage negative thoughts through positive thinking and/or coping strategies (100%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“To be strong and not give up. Not consider yourself as a bad person. Even if something bad goes on, you can always think of a good thing about it.” C2</td>
</tr>
</tbody>
</table>
Table 9 (cont).

<table>
<thead>
<tr>
<th>Themes</th>
<th>Subthemes (Response %)</th>
<th>Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>How to help others feel better (50%)</td>
<td>“How to be positive in any situation and how to be an optimist. Like if something bad happened, you might then think that might then lead onto something good. Because that didn’t happen, maybe we’ll get another opportunity for this or something.” C3</td>
</tr>
<tr>
<td></td>
<td>Understanding about individual differences (41.67%)</td>
<td>“It gave me a way to think about it as I didn’t really know what to do with the negatives.” C4</td>
</tr>
<tr>
<td></td>
<td>Self-esteem and self-concepts (33.33%)</td>
<td>“Well, if I was getting teased I could always think of positive ways that I could make myself or happier instead of feeling down and upset”. C5</td>
</tr>
<tr>
<td></td>
<td>Increased confidence (25%)</td>
<td>“Well it taught how to act and how to be a nice person and how to help if someone’s in the playground. Go and help them.” C6</td>
</tr>
<tr>
<td></td>
<td>How to identify and discuss feelings (25%)</td>
<td>“I’ve got a few friends that are really fast runners and I sometimes get jealous. I just say to myself that there is always space to improve. That makes me feel better. I learnt that through the program.” C9</td>
</tr>
<tr>
<td></td>
<td>Development of social and interpersonal skills (25%)</td>
<td>“That everyone’s different and you need to accept that. The world would be boring if everyone was the same. We can learn things off each other if we have different abilities and stuff.” C12</td>
</tr>
<tr>
<td></td>
<td>Identifying strengths and weaknesses (16.67%)</td>
<td>“Not to always be negative about yourself and to be positive most of the time. That it doesn’t matter if some people are better than you at something because usually you’re always better than them at something too. Treat everyone the same so if someone’s not good at something don’t say to them “you can’t do that” and be mean to them.” C8</td>
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<td></td>
<td>Increased happiness (8.33%)</td>
<td>“Not judging people compared to how good you are, and if you find that you are a bit better than them, you can help them to feel better.” C1</td>
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<td></td>
<td>Thought stopping (8.33%)</td>
<td>“I learned how to be a good person. I learned that it’s not all about how you look, it’s about being friendly, being nice and using all those skills that they taught us. And not just for then, but for the rest of our lives. Some of the skills I already had, but doing the program helped me develop the ones I didn’t have.” C2</td>
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<td></td>
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<td>“It taught me new things like how to be a nice person and how to help others”. C6</td>
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Table 9 (cont).

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<th>Themes</th>
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<td></td>
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<td>“I’ve learned how you can say something that you may not think is mean, but I understand now that they may get hurt by it. The main thing we learned about was feelings, and how you can make other people feel better, and even just being nice to someone can make them feel better.” C7</td>
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<td></td>
<td></td>
<td>“How to deal with different feelings. It made me feel more confident and outgoing. Probably with the people who I interact with, like my friends. I was a bit shy. I learned a lot about myself from doing it. I learned that I can meet new people, I don’t have to be shy or anything.” C4</td>
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<td></td>
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<td>“I learned to be stronger in my thoughts. If I wasn’t doing something right, to not let myself down and try not to give up. Now I say “I can do it”.” C5</td>
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<td></td>
<td></td>
<td>“I usually try to find something that is positive and if I find that if it’s leading me to something negative, then I think that that’s actually a bad thing and stop that thought completely and go off in another direction. So the program taught me that as well. I probably had a basic way of doing it before the program, and it helped me understand what I was doing. It helped me to improve on it.” C3</td>
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<td></td>
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<td>“Back then I developed those skills and then as I’ve gone along, I’ve kept on thinking of those skills and used them if I’m in a situation where I think they will help.” C2</td>
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<td></td>
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<td>“There are a lot of people who are left out and now I go up to them and ask them if they are okay.” C8</td>
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<td></td>
<td></td>
<td>“Well my friend made it into the public speaking finals and I didn’t, so not to be really disappointed and not to just ignore everyone. Just to congratulate everyone and usually when you would congratulate them they would say “Oh, bad luck”, you will be disappointed. But just be happy for your friends because they did go well in the finals.” C9</td>
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<td></td>
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<td>“Like if someone else tells you that they are better than you, “Yeah, but...” helps. It makes me feel better.” C10</td>
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<td></td>
<td></td>
<td>“If I do something bad, I just think about positives. Like if I was playing footy and did a bad kick, I would say to myself, “you did a good kick every other time” which makes me feel better.” C11</td>
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</table>

Use of program skills and program outcomes: Current use of skills (75%):
Table 10

*Parents’ Responses*

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<thead>
<tr>
<th>Themes</th>
<th>Subthemes (Response %)</th>
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<tbody>
<tr>
<td><strong>What do you think your child liked about the program?</strong></td>
<td></td>
<td>“She worked with the group and she worked individually I think at the time. Off memory, there were the two different processes and I just think she enjoyed the interaction”. P1</td>
</tr>
<tr>
<td>Program content, resources, and structure</td>
<td>• Activities (60%)</td>
<td>“I think what she enjoyed was the group work.” P4</td>
</tr>
<tr>
<td></td>
<td>• Certificates (60%)</td>
<td>“He did like the activities and there seemed to be a problem-solving component to them, and he talked about needing to find the positive and negative in situations and there was always the obvious things in the situations, and then he said that he knew there would be something else he had to find. He enjoyed that sort of problem-solving activity. It was seen as a puzzle, as an activity, and afterwards he would bring it back to himself, “Now how does that relate to me”. But initially it wasn’t confronting because it wasn’t about “How are you feeling?” P3</td>
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<td></td>
<td>• Group work and social interaction (40%)</td>
<td>“He liked the activities and the certificates.” P5</td>
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<td></td>
<td></td>
<td>“She had fun. She was happy to be involved in putting her views across and I suppose her feelings too.” P1</td>
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<td></td>
<td></td>
<td>“She said it was good fun.” P2</td>
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<td></td>
<td>“I think she did find it fun when she was participating.” P4</td>
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<tr>
<td></td>
<td></td>
<td>“He enjoyed the program.” P5</td>
</tr>
<tr>
<td>Personal experiences, relationships and engagement</td>
<td>• Enjoyable and Fun (80%)</td>
<td>“She is a girl that has got qualities I think that are very sensitive to other people’s feelings anyway, and I think the program made her happy in that she might have identified some of the things that she has already done. But also, I think, giving her strategies, where if there was a gap in her skills it may have provided her with just a hint of how to go about it with her friends and how to interact. But I do remember it was about feelings.” P1</td>
</tr>
<tr>
<td>Emotional, social and cognitive development</td>
<td>• Positive self-esteem and self-concepts (60%)</td>
<td>“She worked with the group and she worked individually I think at the time. Off memory, there were the two different processes and I just think she enjoyed the interaction”. P1</td>
</tr>
<tr>
<td></td>
<td>• Positive thinking (60%)</td>
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<td></td>
<td>• Identifying and discussing feelings (40%)</td>
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### Table 10 (cont).

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<th>Themes</th>
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<tbody>
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<td></td>
<td>Social skills (20%)</td>
<td>“I think he liked that it made him think about his feelings and some of the things he probably wouldn’t ordinarily think about. Like what he’s good at and what he’s not so good at.” P5</td>
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<td></td>
<td>Problem-solving process (20%)</td>
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#### What do you think your child didn’t like about the program?

| Program content, resources, and structure | No dislikes (100%) | “She didn’t actually come out saying any negatives.” P1 |
|                                          |                    | “Nothing. No I don’t think anything.” P3 |
|                                          |                    | “Nothing. He’s not said anything specifically about that, and even being selected often he’ll be a bit intimidated by that, but he wasn’t this time. He wasn’t at all uncomfortable so that was fine.” P5 |

#### In what ways do you think your child benefited from the program?

| Emotional, social and cognitive development | Positive thinking and coping strategies (60%) | “I think that it provided her with some tools and strategies. It may have even highlighted some of her behaviour patterns. She was also able to identify different behaviour patterns within the classroom. For example, there was a child in her class who was on the ‘spectrum’, and she was able to tell me, “He is a little bit different, but that’s okay Mum.” P1 |
|                                            | Skill development (60%) | “Well I think she may not realise just yet how she has absorbed the messages about self-esteem and body image. I am sure it’s created a seed of thought in her mind. So it will register with her when she needs to think about. Even if it registers subconsciously, it will be a great thing. She’s a reflective child. I thought it was great for her, I really did.” P2 |
|                                            | Self-awareness (40%) | “Seeing the positive in things and being able to learn how to respond to different situations. He is quite a smart, switched on kid, but he’s certainly not street smart so putting him in situation where he had to anticipate and think about how you would react and how you would behave is very useful.” P3 |
|                                            | Learnt about individual differences (40%) | “I noticed some of his terminology changed in terms of him understanding that you can’t be good at everything and there are kids that are good at certain things.” P5 |
|                                            | Developed verbal communication skills (40%) |        |
|                                            | Positive self-concepts and self-esteem (40%) |        |
|                                            | Increased self-confidence (40%) |        |
|                                            | Increased resilience (20%) |        |
|                                            | Improved mood (20%) |        |
Table 10 (cont).

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<tbody>
<tr>
<td>Use of Program Skills and Program Outcomes</td>
<td>Current use of program skills (100%)</td>
<td>“I think it made him a bit more reflective and using that language about being complementary and identifying good things in others. Plus he’s not so hard on himself now. I think he realises that he can’t be good at everything. We’ve had a really good year this year and it could even be attributable to this program. He has really been happy and it may be part of where he’s learning to accept that people are different. As I said he knows he can’t be good at everything and some of his friends are good at some things and not others and it’s okay to feel a certain way. I’m sure the program’s been part of that journey. All of a sudden he would say “Oh, he’s really good at that” or, “I know I can’t be good at everything”. Now that I’m reflecting on this myself, I’m seeing that this program has played a bit part in all that. Thin sort of program lets them see that it’s okay to be different, to do different things. Also he’s quite independent now. It’s okay to not do something just because everyone else is doing it. He seems to have gotten a lot of confidence from being able to stand on his own two feet. He’s definitely more resilient.” P5</td>
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<td></td>
<td>Use of positive terminology (100%)</td>
<td>“I know that she learned when you have negative thoughts, how to change them into positive thoughts. The ‘being positive’ aspect of it. She is quite a positive child and I’m not sure if that is from this, or if she was like that before. She also says things differently now, and she has different thought processes, and says thing more positively.” P4</td>
</tr>
<tr>
<td>What other kinds of activities/training might help your child?</td>
<td>Parent training (60%)</td>
<td>“I don’t know if I am very good at changing negative thoughts into positive thoughts myself, but I guess reinforcing things on an ongoing basis is probably the most beneficial thing for them. Maybe having a session with parents so they are aware of how to reinforce the program at home.” P4</td>
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<td></td>
<td>Booster sessions (20%)</td>
<td>“Reinforcement. I’m sure there were things he learned in your program which were then being reinforced at home. We teach him about looking for positives in a situation at home, so it sounds like a great tandem.” P3</td>
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<td>“Can you revisit the program at a later stage in Grade 6? The peer pressure thing will really start to kick in at that age so just to reiterate that it’s okay to be different and to accept that everyone else is different”. P5</td>
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Table 10 (cont).

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<tr>
<th>Themes</th>
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<tbody>
<tr>
<td>Emotional, social, and cognitive skill development</td>
<td>• Assertiveness (20%)</td>
<td>“I think being more assertive and teaching them how to be a little more assertive without being aggressive. Also identifying when it’s appropriate to be vocal when they’ve experienced inappropriate behaviour the playground” P1</td>
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<td>• Managing bullying (20%)</td>
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Table 11  
Teachers’ Responses

<table>
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<tr>
<th>Themes</th>
<th>Subthemes (Response %)</th>
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</table>
| Program content, resources, and structure  | • Group activities and individual activity workbooks (100%)  
• Structure appropriate to maintain children’s engagement (66.67%)  
• Certificates (66.67%)  
• Nametags (33.3%)  | “The three-tiered structure catered for a lot of the needs. They had some work on the floor where they did some discussion and then they would split up into groups, and then they did the follow-through with the activity in the book. The structure was very good, and it wasn’t too long on the floor.” T3 |
|                                             |                                                        | “They liked the activities because they were very interactive, so they were able to talk in small groups and they come back and share. The children are very used to that type of setup in the classroom, so they felt very comfortable doing activities in a group and then coming together at the end”. T2 |
|                                             |                                                        | “They had their own workbook which was good, because it wasn’t introducing something new to them every week. They knew about the workbook and so it made things progress through quite quickly within the lesson itself and then they had something to refer back to if they ever needed to, or talk about with a friend who had the same book. I liked that workbook idea, as well as other activities without the workbook. It was a good combination of activities within the lesson itself”. T1 |
|                                             |                                                        | “They looked forward to the program. I think they enjoyed that the program was quite focussed and at the same time each week. They like structure.” T3 |
| Personal experiences, relationships and engagement | • Content tailored to children’s personal experiences (66.67%)  
• Enjoyed program (66.67%)  
• Shared experiences of facilitators and rapport (33.33%)  | “The best part of the program is that it focused on children’s personal experiences and what they could relate to. I liked the nametags too. It made it a lot more personal. I also liked that the facilitators could each also bring some of their own personal experiences to it, so the kids got to know them. So after the first couple of weeks they felt very settled with them.” T3 |
|                                             |                                                        | “They put themselves into the situation that they had lived, in relation to what you were talking about, so they could draw on their own experiences, and they do love that. They love it when they can relate to what’s being talked about in the classroom, to their own life. It makes the learning very authentic and very relevant to them as learners, and then they can take ownership of that learning as well.”T1 |
### Table 11 (cont).

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<th>Themes</th>
<th>Subthemes (Response %)</th>
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<tr>
<td>What do you think the children didn’t like about the program?</td>
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<td>&quot;They seemed to be engaged at the time, I didn’t participate. I just sat at the back of the room and pretty much did my own work in that time. But they were engaged.&quot; T2</td>
</tr>
<tr>
<td>Program content, resources, and structure</td>
<td>Time allocation of activities (66.67%)</td>
<td>“Sometimes I think they felt that they were left a little bit too long at times with the working group, and they tended to lose focus a little bit.” T1</td>
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<td>“Some things went for a little bit too long, they would get a bit antsy. Say when they were doing the role play. But that would be only for a couple of students, not the class as a whole.” T3</td>
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<tr>
<td>Overall, in what ways do you think the children benefited from the program?</td>
<td>Reinforcement of messages (66.66%)</td>
<td>“I think the kids felt pretty important when the facilitator first came and said she was from a university because that’s another person in our community reinforcing the same sorts of messages that we have been giving them, so for them, it isn’t just Mum and Dad saying it, it isn’t just my teacher saying it, it is somebody in our community. I do think that gives more validity to some of our messages sometimes” T1</td>
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<td>“I could reiterate the messages during the rest of the week, anything that they hadn’t finished in their workbook. We could go back and spend a bit of time doing those, or if I needed to I could say “Okay, let’s have a chat about…” A lot of those issues would come up when we did restorative practice in ‘circle time’. So that was really good. We sometimes did some role-plays from things in the book. The kids would talk about things that happened in the playground, or at home and discuss how they used the techniques from the program to work things out. Like using positive words rather than negative words.” T2</td>
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<tr>
<td>Emotional, social and cognitive development</td>
<td>Positive thinking and coping strategies (100%)</td>
<td>“They definitely built up language skills about how to respond to a situation in a more positive way. Also looking at emotions and feelings and that sort of thing, and specifically naming emotions. I remember talking about something like the difference between anxiousness and nervousness. But there were some of those emotional sorts of things I think building up that ability, that ‘metalinguage’ – the ability to talk about what they are thinking – was probably beneficial.” T1</td>
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| Others | Positive thinking and coping strategies (100%) | |
|--------|-----------------------------------------------| |
|        | Identifying and discussing feelings (100%)    | |
|        | Developed verbal skills (66.67%)              | |
|        | Social skills and peer relationships (66.67%)  | |
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<th>Themes</th>
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<tr>
<td>More positive and happier (33.33%)</td>
<td>“Working together in another group, different groupings, different ideas, different children, getting to know somebody else. Not just within the classroom but within another group. I think that’s so valuable for the children to talk to other people who they may never have otherwise. So for that program to have come in, and for them be able to get to know someone else within the school is always a good thing as it helps them develop social skills.” T2</td>
<td>“I think just being more positive about themselves.” T3</td>
</tr>
<tr>
<td>Use of program skills and program outcomes</td>
<td>Integration and application of program skills (100%)</td>
<td>“There was one girl and she was experiencing a lot of social difficulties at the time with her friends and about being liked and we worked really hard that year. She participated in this program and she’s really gone from strength to strength as she’s matured over time. She such a happy girl now, she is Grade 6 leader and her whole demeanour has changed over time. And certainly in the early years she did have a lot of difficulties socially. So I think, it’s hard to pinpoint exactly what the causative factors are, but I think this program alongside other, such as support from the classroom and at home, as we were working with parents. So the program would have been really positive for her. So that is one student who I have seen really turn around over a period of time.” T1</td>
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<td></td>
<td>Observed social improvements (100%)</td>
<td>“There was a student who was having social difficulties and I am not sure, but one of the things that we did do with him was to have ‘circle time’ with the boys across all of the grades, and I do think he verbalised quite well in that. He was able to verbalise how he felt about something a little bit more in control than maybe earlier in the year where, he was over-emotive to begin with. But as the year went on he was able to calm himself and explain the situation. So reflective listening was really good for him because he felt valued and respected, and that his ideas and opinions were valued. Some of that might have influenced his ability to articulate building up that language, because he used to get too angry to articulate that earlier in the year.” T2</td>
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<td>“The program had finished and you were seeing those positive signs in the playground. One of the students came up to me and said, “Ms B, so and so called me dumb. But I know I’m not dumb because I’m really good at art”. They didn’t take that negative thought on board, they changed the thought around and thought of themselves in a positive way, so as to make the negative comment not affect them. Also some of the students are no longer coming up in the student well-being discussions anymore. There are not as many social troubles.” T3</td>
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<tr>
<td>Personal experiences, relationships and engagement</td>
<td>Rapport with facilitators and level of disclosure (33.33%)</td>
<td>“I think they got used to talking with the facilitators that came in, because most of the time it was the same person. So it was good that as a group, they became more familiar with that. They became more comfortable with talking about these types of things.” T2</td>
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In what way do you think the girls benefited from the program?

<table>
<thead>
<tr>
<th>Program content, resources, and structure</th>
<th>Discussion and activity manual effective for girls (100%)</th>
<th>“The activity manual may have been more geared towards them [the girls]. They enjoy sharing things with their friends and are perhaps better at it than the boys.” T3</th>
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<td></td>
<td>Discussing feelings (33.3%)</td>
<td>“The girls loved the type of activities and they also loved talking about themselves and their feelings. That comes very naturally to girls. I think they thrive on that type of thing, talking about themselves in the situations, and then talking to each other in their peer group about different thing.” T2</td>
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<td></td>
<td></td>
<td>“The girls loved this format. The girls could sit and do this for ages. What they do at lunchtime is sit together and talk about themselves!” T1</td>
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In what ways do you think the boys benefited from the program?

| Emotional, social and cognitive development | Improved self-esteem (66.6%)                                | “Self-esteem. To be more a bit more resilient and have a more positive self-image. To manage those hurtful words more. I think that’s where it worked more on the girls.” T3 |

| Program content, resources, and structure | Physical activities effective for boys (66.6%)              | “The boys liked the more physical things like the activity involving throwing the ball and the role-plays.” T3                                                                                             |
|                                           |                                                             |                                                                                       |
| Emotional, social and cognitive development | Emotional development (66.6%)                               | “It’s a bit more physical for the boys, but you also have your sensitive boys.” T3.                                                          |
|                                           | Verbal expression of feelings and thoughts (33.3%)           | “I think it was a good structure for them. They had to verbalise, something like “this is my negative thought, this is my positive thought, and this is what I can do.” T1 |


Table 11 (cont).

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<tbody>
<tr>
<td><strong>Program development</strong></td>
<td>Use of technology for program components (66.6%)</td>
<td>“They could do something between sessions on something that was interactive, I think that would be really good, or an ‘App’ on a mobile phone. Even setting up a Twitter account so that kids could do a blog. These are the types of things that these kids are doing a lot. This is great, but it’s very traditional in its presentation in a booklet. The reality is that they are on the phone, on Facebook, on the Internet, on Twitter and different blogging sites. They love to get onto some sort of interactive thing, a follow-up, and they would do that. We do a lot of homework on email and online, and they do it very successfully. So you could go that next step. Twitter would be really good because they could be really succinct in their thinking. That sort of stuff would be quite good. Try and maybe incorporate some communication tools to setup that network, blogging with another school about the program, get kids talking to one another. Often kids will say things on a blog that they won’t say orally.” T1</td>
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<td></td>
<td>Reinforcement of messages (i.e., certificates, posters, etc.) (66.6%)</td>
<td>“Reminder posters, positive posters, that after each week you can put them around the room and leave them up and then you can refer to them (A3 size). Then that can be up on the wall for the rest of the year. So running it at the start of the year would be good.” T3 “I did like the certificates. They reinforced those messages, they were excellent. The simple reinforcement of that sort of stuff is a good thing to do.” T1</td>
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<td>Timing of program during year (66.6%)</td>
<td>“It would be better to do it in the first half of the year. School isn’t as busy then.” T1</td>
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<td></td>
<td>Program implemented by teachers (66.6%)</td>
<td>“The only thing I would say is that it would needed to be graded. So that you would do something from Prep right through. It would be good if teachers could run it.” T2 “I do think that this has got so much to offer. I think it would be great to be done with schools, within the classroom with the teacher.” T1</td>
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### Table 12

**Facilitators’ Responses**

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<th>Themes</th>
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<tbody>
<tr>
<td><strong>Program content, resources and structure</strong></td>
<td>Activities (books and games) to facilitate teaching children program concepts (100%)</td>
<td>“You would present the concept, such as social comparisons, or how thoughts affect your feelings or behaviours, read a story to the kids, and talk about it. So it wasn’t all conceptual. We read them a basic story and would draw out the concepts from them, and then, we would link this to another concept that we were trying to teach them about. I think what worked really well, was that the kids could listen to a story, relate to the story, and that’s how they could get the concept. I think if we were just talking to them and writing on the board, or coming up with our own stories, that might not have worked so well. But we are reading these fun stories to the kids.” F1</td>
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<td>“I think the games are probably the best way to show the kids what we were trying to teach them. A lot of the time when we were writing things on the board and trying to get things across to them, they maybe didn’t understand. But when we played things like “Two truths one lie” and throwing the ball and telling someone good things about them, you know the activities that we did, probably were the most useful. I think it’s always better when you’re learning to be actively involved in the learning. If you’re just sitting there listening to someone talk at you, it’s a lot different to actually doing the activity yourself. So I think that’s probably why the activities worked better.” F2</td>
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<td>“I thought the activity about changing negative thoughts to positive thoughts worked really well. They were able to grasp that idea and turn it around and say “well that’s the negative way of thinking about it, but you could also think of it in a positive way”. So that worked well. They did enjoy it, and it seemed to work. They were able to easily identify their negative thought, which they said was their standard way of thinking, and were able to, at least on paper, change that into a positive thought. So, “Another way to think of it would be…”F4</td>
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<td>“Ah, they liked the idea “Yeah, but” so this is Activity 4, Session 3, where they would state a social comparison and say “Yeah, but” and recognise one of their own strengths. They seemed to get that and even by up to the end of the sessions, and even in follow-up sessions, they remembered “Yeah, but” and would even use those word. So I think even just the phrase, it was something that was memorable and it was something that allowed them to counteract the comparison.” F4</td>
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<td></td>
<td><strong>Children’s activity manual (83.33%)</strong></td>
<td>“I remember there was an activity where they had to draw around their hands and I think it was that they had to have five good thoughts about themselves. I can’t remember the exact activity but I remember that that was really effective because it was visual. They could see, “Oh yeah, I am good at gym”. It was like a nice reminder for them so when they walked away and they were in the playground, they could look at their hand and that would trigger those thoughts about themselves. I thought that that was a really useful activity.” F5</td>
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<td>“They loved games! Or things they perceived as games like “Yeah… But”, “Two truths one lie” was also really popular. They liked the “Comparison cards”, and “Famous skills”. They got the messages too. They pretty much liked talking about themselves! There were some really awesome activities.” F6</td>
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<td>“I definitely think that the big pros are the stories. I was really surprised regardless of their age, the students loved the stories, and if we don’t have a story they ask for it. So I understand why it is possible that we have it for the first few weeks, and I imagine it’s to build rapport and to make it a bit of fun. But actually, what they get out of it is a chance to be heard and a chance to be validated and that seems to be just as important as anything else.” F3</td>
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<td></td>
<td><strong>Children’s activity manual (83.33%)</strong></td>
<td>“What it did was break up us talking and teaching, and it broke up mat time and the concept built on each. So we’d have mat time where we’d discuss it, then we’d have an activity on the mat such as a discussion to explain it, and then they’d go back and do their own kind of learning which reinforced the learning process, and that was a tool and I think it worked well.” F1</td>
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<td>“I think the workbooks were probably useful for them because they’re nice and bound and they look nice. So they’d be able to flick through them, they keep them afterwards and hopefully look back at what they’ve learned.” F2</td>
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<td>“They can look back on the booklet and materials as a reinforcer. It is a resource for them for the longer term They love knowing that the books are theirs to keep.” F3</td>
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<td>“The children’s activity book worked really well. I think they really liked owning something, getting it, drawing in it and having something consistent throughout which was really great and I think it was good because it was private. Something that was theirs. It thought it was set out really well. The kids found it easy to use.” F6</td>
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<td></td>
<td><em>COPE facilitator’s manual (66.67%)</em></td>
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<td>“The manual is great! I found it so easy. I think it’s really well set up. It was really thorough and what I found really helpful, was that it had everything that you had to do but also what you were looking for from the kids.” F1</td>
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<td>“I found the manual really good. If you’d never done it before, assuming obviously that you’ve got some level of understanding of what you’re aiming to do, you could just pick it up and it’s very comprehensive and user-friendly.” F3</td>
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<td>“The manual made it really easy in the sense that it was really easy to understand and easy to see what the activities were going to be for the day. The time limits given to each activity were appropriate. The resources, also like the little games that we had, and the books were really helpful as well. It really made it hard not to get it. It’s good because no matter who the facilitator was, anyone could pick up that manual and give the program the same way. So you are not going to have much variation in a good way. Everyone’s going to be able to get the right message across because it made it really easy.” F5</td>
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<td>“I thought the resources for the facilitators were really good. It was fantastic to have those resources. With the facilitator’s manual, there was so much information in there, so it made it easy to be consistent. It was really well set out and easy to use. It was really good having two facilitators as these was support for each other, and also extra support for the children.” F6</td>
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<td><em>Weekly review and reinforcement (50%)</em></td>
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<td>“At the start of every class we would go through what we learnt last week and go over it. I think it just gave them the opportunity to reflect on what they learnt last week. Get back into the frame of mind.” F2</td>
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<td>“Each week we went back over the last week, so there was a review and reinforcement. Also each session really did build on the last session so as they went through, while we might be talking about something different, it still was always reinforcing and going back over those earlier concepts.” F1</td>
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<td>“I think the summary at the start of each session worked really well. The kids who were on top of it were really keen to say what they remembered, and the ones who had forgotten got reminded by those kids, and then it allowed us to build the next concept on top of it. So it did work really well.” F4</td>
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<td>Certificates (50%)</td>
<td>“They did love the certificates and it’s something they can look back on and think, “oh, yeah, we did that!” And it had on it the message, “Today I learned about …” and had the key concepts and stuff. So it’s a good reminder and reinforcer for them. They take it home too so hopefully parents might ask about it, and they hopefully can explain it a bit. So it might have worked as another learning tool and as a reinforcing certificate, like a reward.” F1</td>
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<td>“They loved the certificates! They really did. They really felt quite proud about having them. Obviously it goes without saying that the message within each topic, each session, was obviously very, very helpful. But what reinforces it is them actually being able to put them into real-life scenarios through the games.” F3</td>
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<td>“Students loved the certificates. The certificates were personalised for them with their names on it and giving them out at the end of every class was really nice. I think it made them feel special. Some would put them on the fridge and some in their workbooks.&quot; F6</td>
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<td></td>
<td>Group activities, individual workbooks and children’s engagement (33.33%)</td>
<td>“There was movement and I think going from the mat to the tables help, physically getting them to move around a bit, worked really well. It is difficult for kids to stay in one place and focus on the same thing for too long. So the variety of activities worked well” F1</td>
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<td>“I think it worked well having some of the activities at their desks and others on the floors. It helped focus them.” F6</td>
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<td>Personal experiences, relationships and engagement</td>
<td>Engagement maintained as children found activities enjoyable and fun (100%)</td>
<td>“It's better when they're having fun as they might take it in more, and really, kids can't concentrate for long. So I think if we were sitting on the mat for too long talking about what we learnt last week or talking about what we're going to do next, it would get a bit much. Sometimes you saw them start lose focus and I'd think “okay, we've got a move on to the activity now.” F1</td>
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<td>Engagement enhanced by program tools, and individual attention (66.66%)</td>
<td>“During the whiteboard activities, sometimes they’d have silly answers and giggle and just not really pay that much attention, but when you split them up into smaller groups where they had more individual attention - for example, if there are two groups and they’ve got a helper and a facilitator talking a group each - I think the kids felt more involved.” F2</td>
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<td>What aspects of the COPE program didn't work well? In what ways didn't these work?</td>
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<td>Program content, resources, and structure</td>
<td>• Activity too complex (50%)</td>
<td>“I think that they found the board game ‘I can’t do it’, a little bit confusing. A couple of the brighter students who got it straight away had no problem, but with the other students you found that they don’t get it. Some of the students actually said “we don’t get it.” F3</td>
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<td>- ‘I Can’t Do it’ (50%)</td>
<td>“They found the ‘I can’t do it’ game board, a bit confusing, and I didn’t see as much merit in this one. I think it was a bit confusing for them.” F6</td>
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<td>- ‘How do I Feel’ (50%)</td>
<td>“They found it difficult to consider things on a continuum [i.e., ‘All About Me’]. They tended to pile some things way on the positive end and then other things were down the negative end, but didn’t put things in the middle.” F4</td>
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<td>- ‘All About Me’ (16.67%)</td>
<td>“We gave them a little scenario and they were to identify feelings that didn’t work so well [i.e., ‘All About Me’]. I don’t think that they had the vocab or the understanding of a large variety of feelings and they often would just say “sad” or “bad” or “good”. So their feelings were quite simple. That would probably just be a maturity thing.” F4</td>
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<td>Other factors</td>
<td>• Behavioural management issues without teacher involvement (100%)</td>
<td>“We had a teacher there always, but they tended to not want to interfere, and sometimes it was really hard to keep the kids under control for these kinds of activities.” F4</td>
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<td>• Class size (50%)</td>
<td>“Time is a problem with the bigger groups. With smaller groups everything works well. With the bigger groups, by the time you’ve gotten everyone to sit down, stand up, and have a go, time is a big challenge. So I think the groups either need to be split up again, which would require double the number of facilitators, or you just need to keep the group smaller. Generally most classes are about 23 to 25 and that is manageable. Any more than that, and it just starts to get out of control time-wise.” F3</td>
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"Whole class groups were hard as sometimes there were over 25 kids and this was difficult to manage." F4
Table 12 (cont).

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<td>• Timing of program implementation (33.33%)</td>
<td>“It was probably best when you had a maximum of 20 kids. Anything more than that and the children started to get a bit excited, as this was a special activity. That wasn’t really the programs fault. It just depended on the requirements of the school.” F2</td>
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<td>• School involvement (33.33%)</td>
<td>“At the end of the year, in Term 4, I felt there was huge gap between the Grade 3’s and the Grade 4’s as the Grade 4’s are already getting into that Grade 5 mentality.” F3</td>
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<td>“At one of the schools, the programs was run right before Christmas and it was really rushed at the end. So I think the time of year is important to consider. Everyone was a bit more stressed at the end of the year. The children were fine, but I think they were picking up on the teachers level of stress.” F6</td>
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<td>“I don’t think we had a lot to do with the school. It probably would have been beneficial though. I don’t think the teachers really knew what the program was about unless they sat in. But I think that would have been helpful, so they could then bring it in in other lessons.” F4</td>
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<td>“Level of organisation within the school sometimes affected how well the program ran. If we couldn’t start the session on time we would have to rush. Although, we would settle into it okay. Also, at one school the program was run through their lunch break which I thought was a bit mean!” F6</td>
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<td>Which parts of the program worked better for boys?</td>
<td>• Activities related to sports and ‘sporting ability’ self-concept domain (66.67%)</td>
<td>“The boys really like the snakes and ladders game. Also, when we were brainstorming about the sports stars and the skills they had, and then comparing them to another superstar, or like a singer, the boys would come up with the sports stars, cricketers, AFL players, soccer players.” F1</td>
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<td>“When the boys were asked to compare good and bad things about themselves it always came back to sport. Yeah, football, soccer, basketball. I found that funny!” F5</td>
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<td>“The boys were better with the physical ability related examples, in that they more readily came up with responses for that than other areas.” F6</td>
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<td>Identifying strengths (33.33%)</td>
<td>“The boys responded better to things like strengths, like picking out a strength card and highlighting a compliment.” F3</td>
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<td>Activities which are more physical (16.67%)</td>
<td>“The boys were quite quick to recognise their strengths, but their strengths seemed to be fairly shallow - “I've got big muscles, I'm good at football” - kind of things.” F4</td>
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Which parts of the program worked better for girls?

| Program content, resources, and structure | Activities involving discussion of feelings (66.67%) | “The girls were more receptive when sitting on the floor and discussing things.” F2 |
|                                          | Activities related to ‘physical appearance’ self-concept domain (33.33%) | “The girls more easily identified with examples/activities related to physical appearance. The girls were more empathetic with coming up positive thoughts, feelings and were more nurturing.” F6 |

In what ways did the children benefit from the program?

| Personal experiences, relationships and engagement | Enjoyment and positive experience (33.33%) | “I think it was a nice thing for them to do. I think they enjoyed having us there. They enjoyed the opportunity to feel good about themselves, to be complimented, and to think about positive aspects of themselves that they might not get from other parts of their schooling. Even though we did discuss some negative things, I think overall it was very positive and they learnt skills about how to change negatives to positives. I think they liked that.” F4 |
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<td>Emotional, social and cognitive development</td>
<td><img src="image.png" alt="Image" /></td>
<td>“I think they really enjoyed it, they got enjoyment out of it. When we were sitting in the circle and talking about the things they have learned and put into action, they were all really positive. Some kids couldn’t think of something, but that happens. So hopefully that transferred through to their lives.” F6</td>
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<td><img src="image.png" alt="Image" /></td>
<td>“It got them to stop and think about their thoughts and how those thoughts made them feel. I found by the last session the whole, “If I have this negative thought then that can make me feel unhappy, but if I stop and think…, then that can make me feel happy”. That was really, really useful.” F5</td>
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<td><img src="image.png" alt="Image" /></td>
<td>“The activities helped the children to think positively about themselves, and about their strengths.” F4</td>
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<td><img src="image.png" alt="Image" /></td>
<td>“The activities helped the children to think positively about themselves, and about their strengths.” F4</td>
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<td><img src="image.png" alt="Image" /></td>
<td>“I think at the time anyway, they were able to learn and in the discussion they were able to talk about giving compliments and say things like, “yep we tried this, and this was a time when I used that kind of strategy, and when I was feeling worried I tried this.” F1</td>
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<td><img src="image.png" alt="Image" /></td>
<td>“By teaching the children to recognise their own feelings, this can also help them to develop the awareness and understanding of how other children may feel. You know, it could help with social skills.” F1</td>
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<td><img src="image.png" alt="Image" /></td>
<td>“I found that by the last session, those people that were really quiet at the start had really found their voice and really felt comfortable enough to speak up and give their opinion. I just thought that that was great. It was nice to see those shy kids speaking up for themselves and having an opinion because that’s just how the program worked. It really gave them that confidence to speak up.” F5</td>
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<td><img src="image.png" alt="Image" /></td>
<td>“I think they learnt to open up and feel more comfortable disclosing things. Over the weeks, we got to know them, and they got to know us which helped.” F6</td>
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<td><img src="image.png" alt="Image" /></td>
<td>“It was beneficial to their self-esteem. It wasn’t just someone telling them they are good, they gave compliments to each other and they learnt to practice them outside of school.” F4</td>
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| Use of program skills and program outcomes | Children’s use of program concepts (66.67%) | “Individuality is good, but they have their own strengths. The things that aren’t strengths they can practice and perhaps can get better at. So they are getting the message.” F3  
“I think the main benefit would be considering strengths, and cognitive-behaviour therapy skills.” F4  
“There was one week in the program where we asked them to give compliments I think, and the next we would ask them “how many compliments did you give, and how may did you get.” I think quite a few of them came back with examples like, “Mum’s cooking’s good”. I think that definitely worked. Asking them to do something during the week, giving them a bit of homework, I don’t think we did it every week and possibly only the one week. But yeah I think that worked.” F2  
“They would give little stories of things that had happened at home or something that had happened with a friend and they were able to implement some of these strategies, such as positive thinking and reminding themselves that everyone’s different. There were always some children who were able to give examples of how they put these learning into practice.” F4  
“I think it would be very helpful for the teacher to be involved, because the role of the facilitator is to deliver the program. I never had any really disruptive children, it was never really a problem, but a few times it was difficult when you’re just trying to calm them down, or when one child was acting out.” F1  
“I’d definitely recommend that the teachers have a role, even if it was that they step in when the kids started to get a bit rowdy or chatting when they weren’t supposed to, and do what they normally would do with the class. But it’s kind of hard for the facilitators to kind of control. Especially as we’re not trained as teachers.” F2  
“Having a teacher that wants to be involved and appreciates the program, and prompts the kids with us, was a lot more effective than when you have a teacher at the back doing something else. That was a lot more disruptive. So I think what could have a big impact on how effective the program is, is how involved the teacher is. If they are not motivated and just sitting, the kids again...
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<td>pick up on that. Whereas we had one teacher who was just brilliant, and he would answer the questions along with the kids and so that really kept them interested, and kept them involved which was really good. He would put them into line if they needed to be. We felt that that class got it much more than perhaps other classes.” F5</td>
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<td>“The teachers could maybe go through an introductory session themselves, so they understand the importance of being involved, and being supportive.” F3</td>
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<td>“Give the teachers a PD [Professional Development] beforehand, tell them what we were going to do, and maybe even involve the school community. Write something for the school newsletter, maybe even each week saying what was going on. It would be helpful so that the parents could support it at home as well. I think it would be very beneficial.” F4</td>
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<td>“Maybe providing teachers with guidelines on what to expect, and creating roles for them. Something along the lines of highlighting that they are role models, and can influence how well the students take on these programs. Also this could help with the preparedness of the schools for each weekly session.” F6</td>
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<td>“Smaller class size would have been helpful.” F2</td>
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<td>“It could work better with smaller groups. It was good that they were able to hear each other and work together, but perhaps splitting the group in half would easier. With our particular groups we had three classes split into two. So I found that not every child was given the opportunity to voice their opinions.” F5</td>
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<td>“I think we have quite a bit of summary, because at the beginning of every session we have a summary of the one before. So I think the last two [sessions] could come out, the revision as well as the plays at the end. I think the rest worked well.” F4</td>
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<td>“Sometimes it was hard. We were trying to stay nice and calm, yet sometimes you had to raise your voice to keep the children quiet and we not teachers and have no experience in managing the full class. So maybe another facilitator, more of us, so we could break into groups more easily.” F4</td>
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<td>Parent Involvement (33.33%)</td>
<td>“If the parents knew the types of skills the children were doing, maybe it could have helped them to consolidate them more. You could give them an outline of what the children were doing so the parents could ask them about it.” F6</td>
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<td>Use trained teachers as facilitators (16.67%)</td>
<td>“Get trained teachers to facilitate the program as they have better classroom management skills. Perhaps get trained teachers who weren’t working as a teacher in that school, but just for this project. So they had the teaching skills but were independent. I would have liked the teachers more involved so that they could carry on the teachings of the program in other subjects and at other times.” F4</td>
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and engagement; (3) Emotional, social and cognitive development; (4) Use of program skills and program outcomes; and (5) Program development. In addition, within each of these main themes were several subthemes, which were also fairly similar across the four groups. However, the frequencies of the reported subthemes differed. The following section will highlight the more salient subthemes that emerged from the interview transcripts for each participant group, based on frequencies being greater than 40%.

**Children**

*Program content, resources, and structure.* As shown in Table 9, the major features that children remembered about the program were the certificates (91.67%), the activities, games and storybooks (83.33%), and the activity booklet (75%). The majority of children liked the activities, games and storybooks (83.33%), and over 40% liked the activity booklet. There was nothing about the program content, resources or structure that the children disliked.

*Personal experiences, relationships and engagement.* All children found the program enjoyable and fun (100%), and half the children liked their relationships with facilitators and peers (50%) (see Table 9).

*Emotional, social and cognitive development.* As shown in Table 9, over 40% of children remembered that the content was about identifying feelings, positive thinking, identifying positive and negative thoughts, and identifying strengths and weaknesses. The majority liked that the program was about positive thinking and coping strategies (66.67%), and over 40% liked learning about self-esteem and learning about their different abilities (i.e., self-concepts). All children learned to better manage negative thoughts through positive thinking and/or coping strategies (100%). Furthermore, over 40% of children reported they learned how to help others
feel better, and now understand how each individual is different and unique in their areas of strengths and weaknesses.

**Use of program skills and program outcomes.** The majority of children reported currently using the skills they learned in the program (75%), such as managing negative feelings or thoughts by ‘positive thinking’ and applying the ‘Yeah, but...’ exercise, to help them feel better about themselves (see Table 9).

**Parents**

**Program content, resources, and structure.** As shown in Table 10, the majority of parents thought their child liked the activities (60%) and the certificates (60%). Furthermore, 40% reported their child enjoyed the group work and social interaction. There was nothing about the program content, resources or structure that parents thought the children disliked.

**Personal experiences, relationships and engagement.** The majority of parents reported that the children found the program enjoyable and fun (80%) (see Table 10).

**Emotional, social and cognitive development.** As shown in Table 10, the major features that parents thought the children liked about the program was that the content focused on helping them develop positive self-esteem and self-concepts (60%), and that it taught them about positive thinking (60%), and 40% reported their child enjoyed identifying and discussing feelings.

The majority of parents thought their child benefitted from participating in the program as they were more positive in their thinking and had learned coping strategies (60%), and developed skills to help themselves feel better (60%). In addition, 40% of parents reported benefits to their child were having a greater self-awareness and understanding of themselves, understanding individual differences, developing verbal communication skills about thoughts and feelings, being more
positive in their self-concepts and having higher self-esteem, and increased self-confidence.

**Use of program skills and program outcomes.** All parents reported the children were using the skills they had learned in the program, such as managing negative feelings or thoughts by ‘positive thinking’. The parents also reported on how the children were using more positive terminology (see Table 10).

**Program development.** The majority of parents were of the view that the program should include parent training (60%), teaching them about the program content so they can assist by reinforcing the program at home.

**Teachers**

**Program content, resources, and structure.** As shown in Table 11, all teachers reported that children liked the group activities and the individual activity workbooks (100%), and the majority liked the certificates (66.67%). Two thirds were also of the view that the structure was appropriate to maintain children’s engagement (66.67%). However, teachers also pointed out children’s engagement was reduced as too much time was allocated to the role-play activity and some group activities (66.67%). The teachers identified that children benefited from the program content as it was reinforcing messages (66.66%) which were given in other classes. All teachers reported that the discussions and the activity manuals were more effective for the girls, as they enjoy having discussions with friends, and talking about themselves (100%), and the majority of teachers reported the physical activities (i.e., role play) were more effective for the boys (66.66%).

**Personal experiences, relationships and engagement.** The majority of teachers thought that the children enjoyed the program (66.67%), and liked that the content was tailored to the children’s personal experiences (66.67%) (see Table 11).
Emotional, social and cognitive development. As shown in Table 11, all teachers were of the view that children benefitted from the program in terms of their development of positive thinking and coping strategies, and identifying and discussing feelings. The majority of teachers thought the program helped children develop language skills (66.67%), and that the interaction with peers helped them develop social skills (66.67%). The majority of teachers reported areas that the program helped girls was improving their self-esteem (66.67%), and for boys, it helped them learn how to verbalise thoughts and feelings (66.67%).

Use of program skills and program outcomes. All teachers reported children were using the skills learned in the program, such as managing negative thoughts through positive thinking. They also provided examples of children who had improved socially since learning how to manage their emotions and to be more positive in their thinking (see Table 11).

Program development. Improvements to the program suggested by the majority of teachers were to use technology for the program components (66.6%), and to reinforce the program messages by using other means in addition to the certificates, such as posters for the classroom (66.6%). The majority of teachers also suggested that the program could by implemented within the schools by teachers (66.6%), and that the program should run during the first half of the year when the teachers and the school were less busy (66.6%) (see Table 11).

Facilitators

Program content, resources, and structure. As shown in Table 12, features of the program that facilitators reported worked best, were the activities (i.e., books and games) to facilitate teaching children program concepts (100%), the children’s activity manual (83.33%), and the COPE program manual (66.67%). Half the facilitators reported two program activities (i.e., “I Can’t Do It” and “How Do I
Feel…” were too complex (50%) for the children and did not work well as the children found them confusing. The majority of facilitators reported the activities relating to sports and the ‘sporting ability’ area of the self-concept (66.67%) worked better for the boys, and the activities involving discussion of feelings (66.67%) worked better for girls.

**Personal experiences, relationships and engagement.** All facilitators reported that the best program features were that children’s engagement was maintained as the activities were enjoyable and fun (100%). Furthermore, the majority of facilitators reported children’s engagement was enhanced by program tools, and by the individual attention (66.66%) the children received from them when working in smaller groups (see Table 12).

**Emotional, social and cognitive development.** Half of the facilitators reported that the children had improved in their confidence since participating in the program, as shown in Table 12.

**Use of program skills and program outcomes.** The majority of facilitators reported that the children provided examples of how they were using the concepts learned in program (66.67%) outside the program (i.e., giving compliments and using positive thinking).

**Program development.** As shown in Table 12, recommended improvements to the program made by all facilitators was to have teacher involvement to assist with behavioural management issues. Furthermore, facilitators also suggested program improvements by involving the school and providing teacher training (50%), and having smaller class sizes (50%).

**Discussion**

In this study, children, parents, teachers and facilitators were interviewed to better understand children’s experiences of the COPE program. The specific aims of
this study were to evaluate: (1) What are the perceived benefits of the COPE program, and (2) How the COPE program could be further improved or developed? In addressing these aims, it is important to consider the perspectives across the different participant groups.

**Benefits of the COPE program**

One of the key findings which emerged in this study is that the COPE program was evaluated positively across the four groups. It was unanimously agreed upon by all participant groups that the children enjoyed the program and found it fun. This finding that children enjoyed the program is consistent with children’s reports from previous research (Barrett et al., 2001; Stallard et al., 2005). Some of the children based their enjoyment on the program components (i.e., activities and games), whereas others were more reflective about their experiences of how the program challenged them and about what they learned.

Another main finding was the positive evaluation of the activities, resources and structure of the program by all four groups. Not only were they well-liked and appropriate for the children’s cognitive level, both teachers and facilitators emphasised that the structure and design of the program (including the resources and variety of activity types), were conducive to maintaining children’s engagement. Facilitators also commented that in addition to enhancing engagement, the activities assisted with teaching children the program concepts, and served as a catalyst for positive change in the children. Additionally, all groups noted that children had positive social interactions with peers and they also developed a strong rapport with facilitators. These were important factors associated with enjoying the program and enhancing the children’s engagement. In particular, the children reported enjoying the relationship with facilitators, and facilitators reported observing how the individual attention children received enhanced engagement.
In addition to “enjoyment” and “engagement”, all groups noted the positive benefits which children gained from the program. All four groups discussed the skills that children learned to manage negative feelings and thoughts. This included the use of positive self-talk, positive thinking and coping strategies, which children reported helped them feel better. Similar findings were found by Rose et al. (2009), where children identified learning how to manage their inner thoughts, and parents reported using positive self-talk as helpful program components for the children. Other benefits to the children, noted by teachers and parents were the increased verbal and language skills which facilitated greater discussion of feelings. This finding was also reported by teachers in Miller et al. (2010), who observed that the program gave children a ‘common language’ to use in the classroom so they could discuss worries. Similarly, parents in another study reported that participating in the program helped give them the vocabulary to discuss anxiety and provided them with skills to better manage unhelpful thoughts, yet this was in reference to the parents’ experience based of their own participation in the program (Ginsburg, 2009).

Another benefit for children reported by children, parents and facilitators, was that children were more positive in their self-concepts and self-esteem, and had increased in their self-confidence. Similarly, this latter finding was also reported by teachers in Butler et al. (1980), who observed changes in the classroom behaviour of children who participated in the Role Play condition of the program, which included ‘developing a sense of self-confidence’. Also reported by both children and parents in the present study, were that children developed an understanding about the individual differences in people’s abilities. This has not been noted in other studies. A focus of the COPE program was on helping children identify and value differences in themselves and in others, so they learn to feel good about being unique, and are less likely to engage in social comparisons. Children also reported that participating
in the COPE program taught them how to help others feel better, particularly from learning about feelings, both in themselves and in others. This finding was similarly reported by children in previous research (Barrett et al., 2001), who identified the most useful program skill they had learned was ‘helping others to feel good’.

Children’s use of program skills was identified by each group, however, only the teachers identified improvements in the children’s social interactions and in their behaviour. Similarly, teachers in Butler et al.’s (1980) study reported on changes in children’s classroom behaviours (in the Role Play condition), which included being ‘more sociable’.

Gender differences were also noted by teachers and facilitators. According to the teachers, the greatest improvements for the girls were in their self-esteem, whereas the boys were observed to have developed a stronger sense of emotional maturity. In addition, facilitators identified that the activities involving discussions, especially about feelings, were more appealing for the girls, whereas for the boys, the more popular activities were those which included sports or were related to the ‘physical ability’ area of the self-concept. Future programs need to more fully consider gender differences and ensure there is a balance across program activities and within the program structure itself, to ensure the program is appealing, engaging and appropriate for both girls and boys.

**Recommendations for Improving the COPE Program**

Parents, teachers and facilitators outlined several suggestions that they felt would enhance the running the COPE program in the future. Consistent with previous research (Ginsburg, 2009; Miller et al., 2010; Rose et al., 2009), parents held the view that parental involvement and the provision of training is needed to enhance their capacity to assist children at home. Not only would this help children to consolidate the program content during the program, it would also provide the
opportunity for children to continue practising the skills after the program had concluded. The importance of including parents was also found in the systematic review presented in Chapter 4, which showed that all of the universal programs which included a parent component were found to be effective.

Teacher recommendations also focused on methods to enhance the messages of the program, by increasing their impact on the children and assisting with the consolidation of the new skills and strategies. Based on their knowledge of children’s learning, such suggestions included the use of technology and social networks, and greater reinforcement within the classroom such as posters, to display pictures and messages of the program concepts. This is akin to booster effects, which involve reinforcement of the program concepts and messages after the program has concluded. Importantly, all of the universal programs in the systematic review (Chapter 4) which included booster sessions were found to be effective. In light of the findings above, both parent sessions and booster sessions would be beneficial for future programs.

Facilitators’ suggestions focused on practical issues to reduce the barriers they experienced when implementing the program. In addition to parent training, another type of training suggested by facilitators, was that the program include training for teachers. It was suggested that this focus on providing teachers with information about the COPE program, and that they assist facilitators with management the children’s behaviour if they became disruptive during the program. Facilitators also recommended reducing the size of classes so they can provide greater individual attention to the children, which is associated with better engagement. In addition, teachers suggested that the program should be scheduled to commence in the first half of the year, as this is a period during the year which is less busy.
Two of the program activities (i.e., “I Can’t Do It” and “How Do I Feel…”) were identified by facilitators as being too complex and were confusing for the children. To improve these activities, they could be simplified, and children provided with further practice examples. It may also be the case that children may not have the cognitive capacity to understand the activities, in which case they may need to be replaced with more suitable activities. Finally, an important suggestion made by both facilitators and teachers, was to involve the teachers and the school community. The benefits of involving teachers and the school community in the program would help address many of the issues raised previously by facilitators, including those with program implementation and delivery, child behaviour management, and organisational issues, such as program timing and class size.

In addition, by providing teachers with training about the COPE program, and including additional classroom resources, such as posters, teachers would have the tools to integrate the program messages and concepts in other subjects within the classroom, and more broadly within the school community. This would provide further reinforcement and create additional opportunities for the children to apply the skills, concepts and messages taught within the COPE program. The suggestions outlined in this study for improving the COPE program are in line with a ‘Whole-School Approach’, which will be discussed in the next and last chapter, Chapter 8.

Limitations and Further Considerations

Limitations to the current study include those which are common to other qualitative studies. There was a relatively small number of participants representing the COPE program and the extent to which these findings can be generalised beyond the specific group of individuals involved in these interviews are limited. Children from two schools were used in the present study, whereas ideally, having children from all schools would have ensured that the study represented a wider range of
views. Other schools were randomly selected and invited to participate but refused to take part given time commitments and other pressures at the time. This is an ongoing issue which is faced by researchers when working with schools.

In the present study all four groups were interviewed after 12-months. To obtain a broader perspective of the program, ideally, interviews with each group need to also be conducted during the program and soon after completion. In addition, conducting focus groups with the children may invoke more interactive discussion of their experiences of the program, particularly as children’s enjoyment and engagement in the program was strongly association with the peer and social element. Furthermore, while children were asked which activities they liked most, and what they learned from the program, they were not asked which major components of the program they regarded as being most helpful. As this is important to understand, it would be beneficial to explore this with children in future work. Finally, to enhance our understanding of how children are using COPE skills, it is recommended that observational studies of children are conducted at school, with peers, and at home.
CHAPTER EIGHT
General Discussion

Overview and Summary of Findings

The overall aim of this thesis was to further our understanding of how to improve school-based early intervention and prevention programs for preventing and reducing anxiety and depression in children. Firstly, a systematic review (Chapter 4) was conducted on school-based early intervention and prevention programs of anxiety and depressive symptoms with children, as one of the limitations of previous reviews is that they have all included children and adolescents. The findings of this review showed modest support for universal programs, with 62% of the programs being effective in reducing anxiety and/or depressive symptoms in children at post-intervention or follow-up. An important finding was that all universal programs that included parental sessions and/or booster sessions were found to be effective.

Despite the modest support for universal programs, these are still viewed as important given all children have the opportunity to learn and develop skills designed to prevent anxiety or depression, regardless of risk or diagnostic status (Stopa et al., 2010). However, there is also a need to ensure that these programs incorporate developmental factors that are relevant for children. In particular, important developmental changes which occur during middle childhood are children’s use of social comparisons for self-evaluation purposes (Berk, 2009; Eccles, 1999). Social comparisons are a critical part of self-development, given they enable children to have greater accuracy in their view of the world and themselves. These comparisons play an important role in shaping the child's self-concepts and self-esteem and influence the positive or negative feelings they have about themselves (Butler, 1998; Pomerantz et al., 1995).
The COPE program was designed to help children reduce their use of social comparisons, and develop more positive self-concepts and higher self-esteem, in order to reduce symptoms of anxiety and depression. It specifically focussed on promoting the positive use of social comparisons as this is the age when children begin to frequently use social comparisons and are most vulnerable to the negative impact of these comparisons. The program also focussed on helping children understand strengths and weaknesses in themselves and others, to identify and discuss feelings, to understand about the perspectives of others, and to understand that everybody is different. The program also taught children CBT-based strategies, such as positive thinking.

Study 1 was designed to evaluate the 12-month effectiveness of the universal school-based COPE program, in preventing and reducing symptoms of anxiety and depression in children aged between 8 to 10 years. In addition, the effectiveness of the program was evaluated for its effects on improving children’s self-concepts and self-esteem, and reducing their use of social comparisons. A further aim was to examine the moderating effects of gender and children’s risk status for anxiety or depression.

The findings demonstrated that the COPE program had limited effectiveness in reducing anxiety and depressive symptoms in children. However, the COPE program was effective in improving academic self-concept for the overall sample, social comparisons friends for the girls, sport self-concept for children ‘at risk’ of anxiety, and social comparisons academic for children ‘at risk’ of depression.

However, several of the findings in Study 1 were unexpected and not easy to explain. Improvements were shown in the control group rather than that the intervention group for social comparisons appearance in the overall group, social comparisons sport for the girls, and social comparisons sport for children ‘at risk’ of
anxiety. Although improvements in self-esteem were initially found for children in the intervention group ‘at risk’ of anxiety from pre-intervention to post-intervention, the control group were found to show increases in self-esteem from post intervention to 12-months follow-up. In addition, children in the intervention group who were ‘not at risk’ for anxiety also showed improvements from pre-intervention to post-intervention, and from pre-intervention to 12-months follow-up. Finally, in both the intervention and control groups, reductions were found in anxiety and depressive symptoms, and increases were shown in appearance self-concept and friends self-concept across time, which indicates these changes were not due to program effects.

In order to more fully understand how the COPE program was experienced by children and how the program could be improved, a qualitative follow-up of the intervention program was conducted in Study 2. This involved semi-structured interviews with open-ended questions. In addition, interviews were also conducted to gain the perspectives of the parents, teachers, and the COPE facilitators.

Findings of the qualitative study demonstrated that there were many perceived benefits for the children who participated in the COPE program. A key finding of Study 2 was that all four participant groups positively evaluated the COPE program. All four groups agreed that the children enjoyed participating the program. In addition, the program’s activities, resources and overall structure were rated positively by all four groups. Moreover, where some children stated their enjoyment stemmed from engaging in the activities, other children associated this with the positive social interactions they experienced from their relationships with peers and facilitators.

Other important key findings about the positive benefits children gained from participating in the COPE program which emerged across all four groups, were that the children learned how to manage their negative thoughts and feelings, and were
able to help themselves feel better by using positive self-talk, positive thinking, and by using coping strategies. Improvements in children’s verbal and language skills were noted by teachers and parents, which they believed facilitated children’s capacity to better discuss their feelings. Importantly, children, parents and facilitators all reported that children were more positive in their self-concepts and self-esteem, and were more confident overall. According to children and parents, children developed an understanding about individual differences in people’s abilities. Additionally, children reported that the program taught them how to help others feel better.

Other benefits identified by teachers and facilitators, were that certain aspects of the program were more appropriate for girls and boys, and that there were certain differences in areas of improvement for both genders. These gender differences are discussed in a later section of this chapter (pp. 194-195).

Another important finding which was unanimous across all four participant groups, was that the children were currently using the program skills. Children were able to provide specific and recent examples of their use of skills learnt from the COPE program, which included remembering their strengths, that that everybody is different, and using CBT techniques (i.e., positive thinking and cognitive restructuring) to manage negative feelings which helped them feel happier and more confident. A final benefit of the COPE program identified by teachers were that there were observable improvements in the children’s social interactions and behaviour.

In addition to the perceived benefits gained from the program, Study 2 also highlighted aspects of the COPE program that need improving. The key recommendations for improving COPE suggested by parents were for the inclusion of parent training. The challenges associated with implementing of the program (i.e., program delivery, class sizes, management of children’s behaviour), were identified
by facilitators and important suggestions were provided to help overcome these issues. In addition, facilitators and teachers recommended teacher training, and also school involvement, and teachers also suggested the program could be enhanced with more program resources.

**Parental, Teacher, and School Involvement**

In the COPE program, the intervention was focussed at the individual level (i.e., the child), however, the systematic review, the findings from Study 2, and other research (e.g., Barrett et al., 1996b; Beidas et al., 2012; Bernstein et al., 2005; Fukushima-Flores & Miller, 2011; Wood et al., 2006), highlight the need for parental and teacher involvement in school-based early intervention and prevention programs for children. As discussed previously, the findings of the systematic review presented in Chapter 4 showed that important factors for the success of universal programs were parent sessions, and booster sessions. Interestingly, in Study 2 these two program variables emerged as subthemes, and were two of the key recommendations for improving the COPE program. Specifically, it was suggested that parents become involved in the COPE program so they are able to support the children at home. In addition, suggestions were made to have more tools and program resources, including an online or technological component, so they can be integrated into the classroom and at home to help ‘boost’ and reinforce the program skills, concepts and messages.

There are many reasons which highlight the importance of involving parents in early intervention and prevention programs. Firstly, parents and legal guardians are the primary care-givers to children, so it is crucial that they become actively involved with supporting their child to develop positive mental health, especially within the home environment. COPE was administered in the school setting, however, as children’s lives extend beyond the classroom and the school setting, it is
important to provide children with additional skills and tools that can be used by children and reinforced in other environments. One method to achieve this, is by incorporating parent sessions into the intervention program. Such sessions could include psychoeducation about anxiety and depression in children, including identifying symptoms, psychoeducation about the COPE program, practical parenting skills and strategies which augment and reinforce the program’s core messages, and information for parents seeking support for their own mental health issues, as parental well-being and coping skills are also important for children’s mental health (Barrett et al., 1996a; Bernstein et al., 2005; Fukushima-Flores & Miller, 2011). Furthermore, in line with suggestions made by teachers in Study 2, additional program resources could be provided for parents and the home environment, to assist with reinforcing and ‘boosting’ the program’s messages. In addition to the COPE certificates, it would be important to provide additional take-home resources, such as COPE information and activity booklets for parents and children to do together at home, wall charts, and posters. Furthermore, providing links to online information about the program, such as a COPE website, with additional online resources, information handouts about the program and mental health in children, and links to other support services would be important.

The universal studies in the systematic review which included a parent component, included two to four sessions with parents, consisting of psychoeducation about the intervention program, child-management skills (e.g., reinforcement skills, planned ignoring, giving and backing up clear instructions), anxiety self-management skills, positive reinforcement strategies, and a family skills component which includes partner support training and encourages families to build supportive social networks (Barrett & Turner, 2001; Essau et al., 2012; Lock & Barrett, 2003; Lowry-Webster et al., 2001). In another study, additional skills taught
to parents were mindfulness meditation and relaxation strategies (Berger et al., 2007). The amount of involvement needed by parents is not clear, however, in addition to attending the formal sessions, it is expected that parents would practice the skills learned on a daily basis. Further research examining the amount of parental involvement needed (i.e., both formal and informal) to enhance the effectiveness of prevention programs would be most beneficial.

Despite the benefits of involving parents into prevention programs, engagement of parents in such school-based prevention programs is difficult. The main issue is poor attendance, which is impacted on by the timing of sessions (i.e., convenient for both schools and parents), perceived necessity of sessions by parents, and the availability of parents given the commitment families have external to the school (Lowry-Webster et al., 2001).

In addition to parents, teachers are also highly influential adult figures in children’s lives and the suggestions for parent involvement (i.e., psychoeducation about childhood anxiety and depression, and the COPE program), would also apply to teachers. Expanding on the recommendations discussed in Study 2 (Chapter 7, pp. 177-179), to provide the best opportunity for teachers to integrate the program messages and concepts within other subjects, and more broadly within the school community, teachers could be trained in the delivery and facilitation of the program. This notion is supported by the findings of the systematic review presented in Chapter 4, which showed no differences in the effects of universal programs when delivered by a mental health professional or a teacher. Given COPE is a manualised program, this is a feasible option. Furthermore, by creating a role for teachers and having greater involvement of the school community as a whole, the practical and implementation issues which were identified by facilitators in Study 2, (i.e., child behaviour management, organisational issues, program timing and class size), could
be better managed or overcome. To further involve the school community, involvement of the school psychologist is recommended. Given their understanding of mental health issues in children and their familiarity with the culture of the school (Massey, Armstrong, Boroughs, Henson, & McCash, 2005), a school psychologist could offer a unique contribution to the collaboration process and provide support to teachers in their role as facilitators.

Collectively, the abovementioned recommendations suggest an approach which integrates the individual (i.e., the child), parents, teachers and the school community. To implement these recommendations with multiple stakeholders and within the various environments, a systematic approach based on a framework or model is required. In particular, the approach needs to focus on the needs of the children, but also on creating sustainable links and maintaining a balance in the relationships between each of the stakeholder groups. One such approach to mental health promotion is the ‘Whole-School’ approach, which involves not only the school, but also the children’s families and the broader community. Much of this work is based on the concept of ‘Health Promoting Schools’, which operates between three concurrent areas of practice: (1) School curriculum, teaching and learning; (2) School ethos, organisation and environment; and, (3) School community partnerships and services. Collaboration between children, parents, teachers, and the wider-school community is a key process in developing a health-promoting school (Wyn, Cahill, Holdsworth, Rowling, & Carson, 2000).

A recently developed Australian program which utilises a whole-school approach, is the KidsMatters Primary mental health promotion, prevention and early intervention initiative, which was developed in collaboration with the Australian Government Department of Health and Ageing, beyondblue: the national depression initiative, the Australian Psychological Society, and Principals Australia, and was
supported by the Australian Rotary Health Research Fund (Slee et al., 2009). The KidsMatters framework targets risk and protective factors at the levels of the child, families, social settings, the school environment, and also life events (e.g., death of a family member). KidsMatters provides schools with a framework, an implementation process, and key resources to develop and implement health promotion, early intervention and prevention strategies, and comprises of four key components. The first component is ‘Positive School Community’, which focusses on engendering a sense of belonging and inclusion within the whole school community, and having a welcoming school environment which promotes positive mental health and well-being in children. The second component is ‘Social and Emotional Learning for Students’, which is designed to assist the school with creating a whole-school approach to teaching children social and emotional skills, by developing a curriculum aimed at helping children understand their own emotions and those of others, and it emphasises the importance of positive relationship, which is based on five core competencies (i.e., self-awareness, social awareness, self-management, relationship skills, and responsible decision-making). The third component is ‘Parenting Support and Education’, which focusses on developing partnerships between the school and families, and assisting parents with parenting and child-rearing skills through providing an education access point where they can learn about parenting, child development, and children’s mental health. Lastly, the fourth component is ‘Early Intervention for Students Experiencing Mental Health Difficulties’, which is a whole-school approach to assisting schools with supporting children who present with early signs of mental health issues and those with ongoing mental health problems, through having supportive and inclusive policies and procedures. This component also involves developing relationships with local health
and community services for referrals and access to support and/or treatment for children and families (Slee, Dix, & Askell-Williams, 2011; Slee et al., 2009).

The overall aim of KidsMatters was to improve the mental health and well-being of children in primary-school, reduce mental health problems, and increase support for children with mental health problems. The program was evaluated Australia-wide over a two-year period with 100 public, Catholic and independent primary schools, from metropolitan, rural and remote areas. The schools were randomly allocated to the intervention condition (n = 50) or the wait-list condition (n = 50). The sample was 4980 children (M = 9.6 years), 1393 teachers, and 4980 parents. The evaluation examined the impact of KidsMatters on children, parents, teachers and schools, using questionnaires, interviews and focus groups. Children’s mental health was measured using the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997), and the purpose-designed Mental Health Strengths and the Mental Health Difficulties scales. All three scales were rated by parents and teachers. Questionnaires were also administered to evaluate engagement with KidsMatters, implementation of KidsMatters, and influences on school teachers, parents and children. These required a response using a 7-point Likert scale (‘strongly disagree’ to ‘strongly agree’), and were completed by teachers at four time points, and by parents at three points, across the two-year evaluation period (Slee et al., 2009).

In addition to these questionnaires, the evaluation of KidsMatters also included a qualitative component. Interviews and focus groups were conducted with school leaders, teachers, parents and children from 10 of schools involved in KidsMatters. There were also reports from the Project Officers involved with KidsMatters at each school, and summaries of the processes and effects of KidsMatters from Principals and KidsMatters Action Team Leaders (Slee et al., 2009).
Findings of the KidsMatters evaluation for Component 1, ‘Positive School Community’, indicated no change in parent and teacher ratings for their school’s performance as the high ratings provided at the start of the program (i.e., 63% strongly agreed), were maintained across the trial. However, findings from the qualitative analysis indicated that KidsMatters strengthened the sense of belonging and connectedness for members of the school community (Slee et al., 2009).

For Component 2, ‘Social and Emotional Learning for Students’, 19% more teachers strongly agreed that their school was performing well on their teachings of social and emotional skills for children. In addition, 14% more teachers strongly agreed that they knew how to help the children develop social and emotional competencies, 8% more teachers strongly agreed that the school staff acted to help students develop social and emotional competencies, and 16% more teachers strongly agreed their teaching programs helped the children develop social and emotional competencies (Slee et al., 2009).

In relation to Component 3, ‘Parenting Support and Education’, findings of KidsMatters indicated that 7% more parents strongly agreed they became more involved with the school, 11% more parents strongly agreed they had increased in their capacity to help their children with social and emotional issues, and 10% more parents strongly agreed there had been improvements in the school’s capacity to cater for their child’s needs. Furthermore, 22% more teachers strongly agreed with this latter statement. In addition, interviews with parents revealed that they valued the supportive information and strategies provided by their school as part of the component, as this helped them support their child with social and emotional issues. In addition, parents also felt more connected with the school. No changes were shown on parenting knowledge and parenting styles, as the high ratings parents
provided at the start of KidsMatters were maintained for the duration of the trial (Slee et al., 2009).

To evaluate Component 4, ‘Early Intervention for Students Experiencing Mental Health Difficulties’, children’s mental health was classified into ‘normal’, ‘borderline’ or ‘abnormal’ range, based on their pre-intervention Total Difficulties SDQ score. Findings indicated that KidsMatters was associated with statistically and practically significant improvements in children’s mental health, in terms of reduced mental health difficulties and increased mental health strengths. In addition, the impact of KidsMatters was more apparent for children who were rated as having higher levels of mental health difficulties prior to the commencement of the evaluation. Specifically, reductions in the SDQ Total Difficulties score (medium to large effect sizes) were found for children in the ‘borderline’ and ‘abnormal’ range. In addition, children in the ‘abnormal’ range, showed reductions (medium to large effect sizes) in mean scores for the SDQ subscales of Emotional Symptoms, Conduct Problems, Peer Problems and Hyperactivity. Children in the ‘borderline’ range also had reductions in Hyperactivity (medium effect size), and Emotional Symptoms, Conduct Problems and Peer Problems (small effect sizes) across time. Moreover, improvements for children in the ‘abnormal’ (medium effect size) and ‘borderline’ ranges (small effect size) were shown on the Mental Health Strengths scale. In addition, 11% more teachers strongly agreed they felt effective in dealing with children’s mental health issues and in identifying children who were experiencing social and emotional difficulties, and 10% more teachers strongly agreed their school was effective in providing early intervention (Slee et al., 2009).

KidsMatters has a website (https://www.kidsmatter.edu.au) containing extensive resources including downloadable information sheets, implementation checklists, literature reviews and readings, ‘how-to’ guides, videos, program
manuals, facilitator guides, activity books, surveys, training and professional development information (including on-line training), and information on seeking a mental health professional. In addition, the program has quarterly online newsletters with additional tips and strategies to support the mental health and well-being of children.

The above summary of KidsMatters demonstrates how a prevention program such as COPE could be expanded and applied to a whole-school approach framework. In addition, this review shows how many of the recommendations for improving COPE could be implemented by using such an approach. For example, the COPE program could be embedded within the ‘Social and emotional learning’ component and/or the ‘Early intervention for students experiencing mental health difficulties’ component. Parental sessions, education and involvement could be implemented in the ‘Parenting Support and Education Component’, and finally, teacher and school involvement could be embedded within the ‘Positive school community’ and ‘Early intervention for students experiencing mental health difficulties’ components. However, to implement such recommendations, more work is needed to integrate individual work within a whole-school approach. The elements shown to be particularly important based on the findings from the systematic review and those from Study 2, are the inclusion of parent sessions and booster sessions.

**Prevention vs. Treatment**

The focus of early intervention and prevention studies is to help address issues when anxiety and depressive symptoms are at low levels (i.e., subclinical), to reduce further impacts on psychosocial and cognitive functioning of children, and to prevent the escalation of symptoms so they do not persist into adolescence and adulthood. Unfortunately though, there are children who do present with high levels of clinical symptoms, and also with anxiety and depressive disorders. In these cases,
universal prevention programs may not provide enough support for these children, as they are generally of a low dosage. Other types of prevention programs such as indicated and selective programs have been shown to be more effective with children exhibiting high levels of symptoms, and those with identifiable risk factors (i.e., parents with mental illness). This was demonstrated in the findings from the systematic review presented in Chapter 4, whereby all of the reviewed indicated prevention programs were effective in reducing anxiety or depressive symptoms in children.

For children who have clinical anxiety or depression, one-on-one treatment with a mental health professional within the school counselling services or the community may be required. As was discussed in Chapter 2, given the internalising nature of emotional disorders such as anxiety and depression, children’s symptoms are often not identified, and alarmingly, they do not receive the much needed treatment to help alleviate their distress. It is therefore necessary to enhance public awareness and education initiatives by targeting parents, teachers and the school community about detecting symptoms of anxiety and depression, and about access to treatment. An initial practical approach to raising awareness could be to include this information along with contact details for support services, to a ‘health and well-being’ section within school newsletters, on school websites, and as email mail-outs, as these are usually disseminated broadly across the school community. Overall, future work needs to examine how parents, teachers, and the school, can become involved in the process of identifying, assessing, and facilitating a treatment referral for children who have high levels of anxiety and depressive symptoms.

**Gender Differences**

Both Study 1 and Study 2 demonstrated that gender is an important factor which needs to be considered in future research. Findings from Study 1 showed
overall differences between girls and boys in their levels of anxiety, and in the particular areas of the sport self-concept, academic self-concept and the social comparisons domains of appearance, friends and sport. Also demonstrated in Study 1, were differences in the effectiveness of the COPE program for girls and boys in their use of social comparisons in the friends domain, which indicates that there are gender differences in the different self-concept and social comparison domains. However, there may also be aspects of the program which are more suitable for girls than boys, and vice versa. This concept was corroborated and further explored in Study 2, particularly through reports from the facilitators and teachers about the content and structure of the COPE program. It was highlighted that the activities involving group discussions and those which centred on feelings, were more conducive for the girls, whereas the boys were more interested and engaged in activities which involved sports and those related to the sport self-concept area.

Although the systematic review (Chapter 4) showed that findings for gender differences were mixed (or that gender effects were not examined), findings from both Study 1 and Study 2 have highlighted that the differential effects of gender are important. This demonstrates that the moderating effects of gender need to be studied in future research.

To maximise the effectiveness of programs such as COPE, any baseline differences between the genders need to be taken into account, and programs need to be reviewed and developed further so that they are appealing to both girls and boys. This will ensure that the content is relevant to girls and boys, but it will also ensure that both genders remain engaged and interested throughout the program. In addition, it is essential that future intervention and prevention programs also consider the salience of each area of the self-concept for girls and boys, and incorporate these into the program design and content.
Age Group

The focus of this thesis was with children in middle childhood, which is a period when children are negotiating the challenges of many social, emotional and cognitive developmental changes (Berk, 2009; Eccles, 1999; Kail & Cavanaugh, 2010). However, there is much debate in the literature about the ‘best’ time to intervene. In addition to programs targeting middle childhood, prevention work has been done with younger children and with adolescents. One of the suggested benefits of focusing on the older age-group, is that CBT-based programs are more effective with adolescents given they are more developed than children in their cognitive and social skills (Stice et al., 2009). It is possible that some of the content in COPE was too difficult for the children. Some of the facilitators in Study 2 did suggest certain activities were too complex for children. Specifically, the activities ‘I Can’t Do It’, ‘How Do I Feel’, and ‘All About Me’, (see Appendix G for activity details) were identified by facilitators as being confusing or too advanced for most of the children. On the other hand, all of the teachers indicated that the program accurately targeted the children’s cognitive level. However, as the teachers were not directly involved in all of the activities, more discussions with teachers, a more in-depth examination of the content, and how well it was understood by children is needed.

In the COPE program social comparisons practices were targeted to promote the positive development of self-concepts and self-esteem. However, it is possible that during middle childhood, children are still developing the cognitive capacity to be consciously aware of their social comparison practices and how these affect their self-concepts and self-esteem. In fact, they may be engaging in them unconsciously and underestimating their use. Again, although not a major finding, there was some suggestion in Study 2 from children indicating that prior to participating in the COPE program, they had not thought about the different areas of the self-concepts or about
social comparisons. The limitations of the Social Comparison Scale were discussed in Chapter 6 (pp. 125-126). Children in late childhood/early adolescence may have greater awareness of their self-concepts, and may be more aware of the use of social comparisons.

The prevention work which has been done with children in early childhood is very similar to programs targeting children in middle childhood. These include universal programs (delivered in kindergartens or primary schools), which have been developmentally designed for young children. They involve cognitive-behavioural interventions designed to target risk factors, and promote social competence, coping skills and resilience. The Fun FRIENDS program (Barrett, 2007) has been downwardly extended from FRIENDS for Life (Barrett, 2004), and is a 10-session universal program for anxious children aged 4 to 7 years. The program includes relaxation, cognitive restructuring, problem-solving, attention training, and graded exposure to anxiety-provoking situations, which are facilitated by peer and family support. Parents and teachers are also involved to promote skill acquisition and reinforcements of skills across different settings (Anticich, Barrett, Silverman, Lacherez, & Gillies, 2013; Pahl & Barrett, 2007). Another program, Zippy’s Friends, is a 24-week universal program for children aged 5 to 7 years, designed to increase coping and social skills by teaching children how to cope with everyday difficulties, to identify and talk about their feelings, and to explore ways of dealing with them. It also encourages children to help other people with their problems (Mishara & Ystgaard, 2006).

In addition, other universal programs for young children focus on parents (Dadds & Roth, 2007; Rapee, 2013). One example is the REACH for RESILIENCE program which is a six-session universal CBT-based program, designed for parents of children aged 3 to 6 years. The program focusses on building positive future
expectations and social competencies in children, through self-talk, behavioural change, and problem-solving strategies, and emphasises participant strengths and competencies (Dadds & Roth, 2007).

Overall, as there is no consensus on the appropriate age to intervene, future research is needed to ensure that programs are age-appropriate. Regardless of the age-group targeted, it is crucial that all program designs take into account the level of social, emotional and cognitive development and also the developmental changes and challenges faced during that age-period.

**Further Considerations**

The COPE program is a school-based intervention designed to prevent and reduce anxiety and depressive symptoms in children. It was designed to be developmentally appropriate for children and specifically targets children’s use of social comparisons for self-evaluation purposes, their self-concepts and self-esteem. These developmental concepts were viewed as potential risk factors, as children’s over-reliance on social comparisons, negative self-concepts and low self-esteem, are associated with the development of anxiety and depressive symptoms. However, in addition to these factors, there are a myriad of other risk factors associated with symptoms of anxiety and depression in children. Such risk factors include: living with a parent with mental illness (Burstein, Ginsburg, & Tein, 2010; Goodman et al., 2011), family history of mental illness (i.e., genetic predisposition) (Kovacs & Devlin, 1998), parenting practices (Rapee, 1997; Silk et al., 2003), parental conflict (Mazza, Fleming, Abbott, Haggerty, & Catalano, 2010), parental separation or divorce (Strohschein, 2005), death of a loved one, grief and loss (Sood, Razdan, Weller, & Weller, 2006), family violence (McCloskey, Figueredo, & Koss, 1995), and childhood trauma, neglect or abuse (Shanahan, Copeland, Costello, & Angold, 2011). Importantly, many of these risk factors reside in environments which are
perhaps beyond the reach of universal prevention programs like the COPE program, as these programs usually only focus on the individual and are classroom-based. As discussed previously, involving parents in programs may help to curtail some of these risk factors. Unfortunately though, many of these risk factors identified above are a consequence of the negative influence of parents and/or parenting. For instance, children with parents who have an authoritarian parenting style (i.e., show high levels of control with low levels of warmth towards their children), have been shown to have low self-esteem, low mood, and are often extremely aggressive (Silk et al., 2003). Thus more work is needed on how to best involve such parents.

Other factors which may influence children’s self-concepts also need to be considered. The impact of peers is one such factor, with research demonstrating negative developmental pathways between peer rejection, peer group exclusion, peer victimisation and bullying, and low social self-concepts in children (Cole et al., 2014; Spilt et al., 2014). In addition, children already demonstrating subclinical levels of anxiety or depressive symptoms are at a heightened risk of difficulties with peer relations and peer group experiences, as both anxious and depressive children demonstrate deficits in social skills (e.g., making eye contact, initiating conversational requests, social withdrawal, social reticence and shyness) that may further impede their abilities to participate in peer activities (Ekornås, Heimann, Tjus, Heyerdahl, & Lundervold, 2011; Rubin, Coplan, & Bowker, 2009).

The influence of media and societal pressures on children’s appearance self-concept, sport self-concept, and on their body image also needs to be taken into account. Today’s media is flooded with images and messages which stipulate physical ideals for men and women which are deemed to be attractive; women are to be thin, and men are to have big muscles and be strong (Harter, 2000; Ricciardelli & McCabe, 2001). These are powerful and pervasive messages which are difficult for
children to ignore. In fact, further research had also indicated that children during the pre-school age, are receiving similar messages from parents, that is, for girls to lose weight, and for boys to increase their muscle size (McCabe et al., 2007). Research with adolescents has shown that when making social comparisons in the appearance domain, girls and boys not only make social comparisons with peers, but also models and celebrities, and higher engagement in social comparisons in general were associated with greater dissatisfaction with their bodies (Jones, 2001). Alarmingingly, as such sociocultural messages can lead to body dissatisfaction and also to patterns of disordered eating in both girls and boys (Bernier, Kozyrskyj, Benoit, Becker, & Marchessault, 2010; McCabe & Ricciardelli, 2003; Ricciardelli & McCabe, 2001), they cannot be ignored.

Another factor which needs to be considered in future programs is that of academic performance and academic interest, as research has shown these two factors are highly correlated with children’s academic self-concept (Guay, Marsh, & Boivin, 2003; Marsh, Trautwein, Lüdtke, Köller, & Baumert, 2005). Given the important role that peer relations, media and societal pressures, parental pressures and academic performance have on children’s self-concepts, it is imperative these are integrated within the COPE program, and included in future programs.

**Conclusion**

School-based early intervention and prevention programs for childhood anxiety and depression are needed to help reduce the deleterious psychosocial impacts these symptoms can have on children, and to prevent them from becoming ingrained. The aim of the COPE program, which was evaluated in Study 1 and Study 2, was to prevent and reduce children’s symptoms of anxiety and depression, by specifically targeting their use of social comparisons to promote the positive development of self-concepts and high self-esteem.
Overall, the research in the thesis and the discussions presented in this chapter indicate several improvements need to be made to strengthen the COPE program. Based on the systematic review and findings from Study 2, the key elements shown to be particularly important for the success of universal programs are parental involvement and booster sessions. In addition, more work is also needed to involve teachers and to integrate the COPE program within the whole-school approach.
References


health difficulties. *Australian and New Zealand Journal of Psychiatry, 47*, 849-858.


Venning, A., Kettler, L., Eliott, J., & Wilson, A. (2009). The effectiveness of cognitive-behavioural therapy with hopeful elements to prevent the
development of depression in young people: A systematic review.


Appendix A: Excluded Studies and Reason for Exclusion

No control group


**No control group and no outcome measures**


**Treatment study**


**Not school-based**


**Analysis - Did not report child-only results**


**Analysis - Not enough information to evaluate findings**


**Analysis - Analysis with control group not conducted**


**Analysis - Does not include post-intervention results**


**Violates age range**


**Violates age range and treatment study**


**Violates age range and parent only intervention**


**Violates age range and not school-based**

## Appendix B: Assessment of Risk of Bias

<table>
<thead>
<tr>
<th>Studies</th>
<th>Randomisation:</th>
<th>Double-blinding:</th>
<th>Withdrawals/ Dropouts:</th>
<th>Quality Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1a) Was the study described as &quot;randomised&quot;?</td>
<td>(1b) Were the participants appropriately randomised?</td>
<td>(2a) Was the study described as “double blind”?</td>
<td>(3) Was a description of drop-outs &amp; withdrawals provided?</td>
</tr>
<tr>
<td>Universal:</td>
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</tr>
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<td>Berger et al. (2007)</td>
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<tr>
<td>Roberts et al. (2003)</td>
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<td>Bernstein et al. (2005)</td>
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<td>Milud and Rapee (2005)</td>
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<td>Gillham et al. (2006)</td>
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<td>Siu (2007)</td>
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<td>Selective:</td>
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<tr>
<td>Cardemil et al. (2002) Study 2</td>
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<tr>
<td>Cooley-Strickland et al. (2011)</td>
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</tbody>
</table>
Appendix C: Questionnaire

1. Questions about what you think and feel

Tick next to YES if you think the statement is TRUE about you.  
Tick next to NO if you think it is NOT TRUE about you.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I have trouble making up my mind</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>2.</td>
<td>I get nervous when things do not go the right way for me</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>3.</td>
<td>Others seem to do things easier than I can</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>4.</td>
<td>Often I have trouble getting my breath</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>5.</td>
<td>I worry a lot of the time</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>6.</td>
<td>I am afraid of a lot of things</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>7.</td>
<td>I get mad easily</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>8.</td>
<td>I worry about what my parents will say to me</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>9.</td>
<td>I feel that others do not like the way I do things</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>10.</td>
<td>It is hard for me to get to sleep at night</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>11.</td>
<td>I worry about what other people think about me</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>12.</td>
<td>I feel alone even when there are people with me</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>13.</td>
<td>Often I feel sick in the stomach</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>14.</td>
<td>My feelings get hurt easily</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>15.</td>
<td>My hands feel sweaty</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>16.</td>
<td>I am tired a lot</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>17.</td>
<td>I worry about what is going to happen</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>18.</td>
<td>Other children are happier than I am</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>19.</td>
<td>I have bad dreams</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>20.</td>
<td>My feelings get hurt easily when I am fussed at</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>21.</td>
<td>I feel someone will tell me I do things the wrong way</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>22.</td>
<td>I wake up scared some of the time</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>23.</td>
<td>I worry when I go to bed at night</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>24.</td>
<td>It is hard for me to keep my mind on my schoolwork</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>25.</td>
<td>I wriggle in my seat a lot</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>26.</td>
<td>I am nervous</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>27.</td>
<td>A lot of people are against me</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>28.</td>
<td>I often worry about something bad happening to me</td>
<td>☐ Yes ☐ No</td>
</tr>
</tbody>
</table>
2. Questions about feelings

Describe how you have been in the past TWO WEEKS. Please tick ✓ one of the three options for each question.

1. I am sad once in a while  
   - I am sad many times  
   - I am sad all the time

2. Nothing will ever work out for me  
   - I am not sure if things will work out for me
   - Things will work out for me OK

3. I do most things OK  
   - I do many things wrong  
   - I do everything wrong

4. I have fun in many things  
   - I have fun in some things
   - Nothing is fun at all

5. I am bad all the time  
   - I am bad many times  
   - I am bad once in a while

6. I think about bad things happening to me once in a while  
   - I worry that bad things will happen to me
   - I am sure that terrible things will happen to me

7. I hate myself  
   - I do not like myself  
   - I like myself

8. All bad things are my fault  
   - Many bad things are my fault
   - Bad things are not usually my fault

9. I feel like crying every day  
   - I feel like crying many days  
   - I feel like crying once in a while

10. Things bother me all the time  
    - Things bother me many times
    - Things bother me once in a while

11. I like being with people  
    - I do not like being with people many times
    - I do not want to be with people at all

12. I cannot make up my mind about things  
    - It is hard to make up my mind about things
    - I make up my mind about things easily

13. I look OK  
    - There are some bad things about my looks
    - I look ugly

14. I have to push myself all the time to do my schoolwork  
    - I have to push myself many times to do my schoolwork
    - Doing schoolwork is not a big problem

15. I have trouble sleeping every night  
    - I have trouble sleeping many nights
    - I sleep pretty well
16  I am tired once in a while
   I am tired many days
   I am tired all the time

17  Most days I do not feel like eating
   Many days I do not feel like eating
   I eat pretty well

18  I do not worry about aches and pains
   I worry about aches and pains many times
   I worry about aches and pains all the time

19  I do not feel alone
   I feel alone many times
   I feel alone all the time

20  I never have fun at school
   I have fun at school only once in a while
   I have fun at school many times

21  I have plenty of friends
   I have some friends but I wish I had more
   I do not have any friends

22  My schoolwork is alright
   My schoolwork is not as good as before
   I do very badly in subjects I used to be good in

23  I can never be as good as other kids
   I can be as good as other kids if I want to
   I am just as good as other kids

24  Nobody really loves me
   I am not sure if anybody loves me
   I am sure that somebody loves me

25  I usually do what I am told
   I do not do what I am told most times
   I never do what I am told

26  I get along with people
   I get into fights many times
   I get into fights all the time
3. Questions about me

PLEASE READ THESE INSTRUCTIONS FIRST

This is not a test - there are no right or wrong answers.

This is a chance to look at yourself. There are no right answers and everyone will have different answers. Be sure that your answers show how you feel about yourself.

PLEASE DO NOT TALK ABOUT YOUR ANSWERS WITH ANYONE ELSE. We will keep your answers private and not show them to anyone. When you are ready to begin, please read each sentence and decide your answer (You may read quietly to yourself as I read aloud). There are five possible answers for each question - "True", "False", and three answers in between. Choose your answer to a sentence and tick the answer. You may only choose one answer. DO NOT say your answer out loud or talk about it with anyone else.

SOME EXAMPLES

Before you start there are three examples below. A student named Bob has already answered the first two examples to show you how to do it.

A. I like reading comic books
   - False
   - Mostly false
   - Sometimes false
   - Mostly true
   - True

(Bob ticked "TRUE". This means that he really likes to read comic books. If Bob did not like to read comic books very much, he would have answered "FALSE" or "MOSTLY FALSE".)

B. In general, I am neat and tidy
   - False
   - Mostly false
   - Sometimes false
   - Mostly true
   - True

(Bob answered "SOMETIMES FALSE, SOMETIMES TRUE" because he is not very neat, but he is not very messy either.)

In the third example you must choose your own answer by ticking one of the choices "False", "Mostly false", "Sometimes false, Sometimes true", "Mostly true" or "True".

C. I like to watch TV
   - False
   - Mostly false
   - Sometimes false
   - Mostly true
   - True

For this sentence you have to choose the answer that is best for you.

First you must decide if the sentence is "True" or "False" or somewhere in between. If you really like to watch TV a lot you would answer "True" by ticking the box next to "True". If you hate watching TV you would answer "False" by ticking the box next to "False". If your answer is somewhere in between then you would choose one of the other three boxes.

Please do not leave any statements blank. If unsure, please ASK FOR HELP.

Please tick the most correct statement about you.
1. I am good looking
   - False
   - Mostly false
   - Sometimes false
   - Mostly true
   - True

2. I am good at all school subjects
   - False
   - Mostly false
   - Sometimes false
   - Mostly true
   - True

3. I can run fast
   - False
   - Mostly false
   - Sometimes false
   - Mostly true
   - True

4. I have lots of friends
   - False
   - Mostly false
   - Sometimes false
   - Mostly true
   - True

5. I like the way I look
   - False
   - Mostly false
   - Sometimes false
   - Mostly true
   - True

6. I enjoy doing work in all school subjects
   - False
   - Mostly false
   - Sometimes false
   - Mostly true
   - True

7. I like to run and play hard
   - False
   - Mostly false
   - Sometimes false
   - Mostly true
   - True

8. I make friends easily
   - False
   - Mostly false
   - Sometimes false
   - Mostly true
   - True

9. I have a pleasant looking face
   - False
   - Mostly false
   - Sometimes false
   - Mostly true
   - True

10. I do well in all school subjects.
   - False
   - Mostly false
   - Sometimes false
   - Mostly true
   - True

11. I am a nice looking person
    - False
    - Mostly false
    - Sometimes false
    - Mostly true
    - True

12. I enjoy sports and games
    - False
    - Mostly false
    - Sometimes false
    - Mostly true
    - True

13. I get along with kids easily
    - False
    - Mostly false
    - Sometimes false
    - Mostly true
    - True
14. I do lots of important things
   - False
   - Mostly false
   - Sometimes false
   - Sometimes true
   - Mostly true

15. I learn things quickly in all school subjects
   - False
   - Mostly false
   - Sometimes false
   - Sometimes true
   - Mostly true

16. I have good muscles
   - False
   - Mostly false
   - Sometimes false
   - Sometimes true
   - Mostly true

17. I am easy to like
   - False
   - Mostly false
   - Sometimes false
   - Sometimes true
   - Mostly true

18. Other kids think I am good looking
   - False
   - Mostly false
   - Sometimes false
   - Sometimes true
   - Mostly true

19. I am interested in all school subjects
   - False
   - Mostly false
   - Sometimes false
   - Sometimes true
   - Mostly true

20. I am good at sports
    - False
    - Mostly false
    - Sometimes false
    - Sometimes true
    - Mostly true

21. Other kids want me to be their friend
    - False
    - Mostly false
    - Sometimes false
    - Sometimes true
    - Mostly true

22. In general, I like being the way I am
    - False
    - Mostly false
    - Sometimes false
    - Sometimes true
    - Mostly true

23. I have a good looking body
    - False
    - Mostly false
    - Sometimes false
    - Sometimes true
    - Mostly true

24. I can run a long way without stopping
    - False
    - Mostly false
    - Sometimes false
    - Sometimes true
    - Mostly true

25. I have more friends than most other kids
    - False
    - Mostly false
    - Sometimes false
    - Sometimes true
    - Mostly true

26. Overall, I have a lot to be proud of
    - False
    - Mostly false
    - Sometimes false
    - Sometimes true
    - Mostly true
27. I am better looking than most of my friends
   False [ ] Mostly false [ ] Sometimes false [ ] Mostly true [ ] True [ ]

28. I look forward to all school subjects
   False [ ] Mostly false [ ] Sometimes false [ ] Mostly true [ ] True [ ]

29. I am a good athlete
   False [ ] Mostly false [ ] Sometimes false [ ] Mostly true [ ] True [ ]

30. I am popular with kids of my own age
   False [ ] Mostly false [ ] Sometimes false [ ] Mostly true [ ] True [ ]

31. I have nice features like nose, and eyes, and hair
   False [ ] Mostly false [ ] Sometimes false [ ] Mostly true [ ] True [ ]

32. Work in all school subjects is easy for me
   False [ ] Mostly false [ ] Sometimes false [ ] Mostly true [ ] True [ ]

33. I am good at throwing a ball
   False [ ] Mostly false [ ] Sometimes false [ ] Mostly true [ ] True [ ]

34. I can do things as well as most other people
   False [ ] Mostly false [ ] Sometimes false [ ] Mostly true [ ] True [ ]

35. Most other kids like me
   False [ ] Mostly false [ ] Sometimes false [ ] Mostly true [ ] True [ ]

36. Other people think I am a good person
   False [ ] Mostly false [ ] Sometimes false [ ] Mostly true [ ] True [ ]

37. I like all school subjects
   False [ ] Mostly false [ ] Sometimes false [ ] Mostly true [ ] True [ ]

38. A lot of things about me are good
   False [ ] Mostly false [ ] Sometimes false [ ] Mostly true [ ] True [ ]

39. I am as good as most other people
   False [ ] Mostly false [ ] Sometimes false [ ] Mostly true [ ] True [ ]

40. When I do something, I do it well
   False [ ] Mostly false [ ] Sometimes false [ ] Mostly true [ ] True [ ]
4. Questions about Comparisons

These questions are asking you if you compare yourself to other children. For example, it might say: “I compare my spelling ability to other children my age.”

This means if you think you’re a better speller or worse speller than other children. If you don’t do this, then you would tick NEVER, if you do it a lot, then you would tick VERY OFTEN, or you could choose somewhere in between.

1. I compare myself on how well I play sport to other children my age.
   □ Never    □ Almost never    □ Sometimes    □ Often    □ Very often

2. I compare myself on how good I am at maths to other children my age.
   □ Never    □ Almost never    □ Sometimes    □ Often    □ Very often

3. I compare myself on how fast I run to other children my age.
   □ Never    □ Almost never    □ Sometimes    □ Often    □ Very often

4. I compare myself on how well I swim to other children my age.
   □ Never    □ Almost never    □ Sometimes    □ Often    □ Very often

5. I compare myself on how well I do in my schoolwork to other children my age.
   □ Never    □ Almost never    □ Sometimes    □ Often    □ Very often

6. I compare myself on my height to other children my age.
   □ Never    □ Almost never    □ Sometimes    □ Often    □ Very often
7. I compare myself on how well I read to other children my age.
   □ Never □ Almost never □ Sometimes □ Often □ Very often

8. I compare myself on my looks to other children my age.
   □ Never □ Almost never □ Sometimes □ Often □ Very often

9. I compare myself on how popular I am to other children my age.
   □ Never □ Almost never □ Sometimes □ Often □ Very often

10. I compare myself on the size of my muscles to other children my age.
    □ Never □ Almost never □ Sometimes □ Often □ Very often

11. I compare myself on my weight to other children my age.
    □ Never □ Almost never □ Sometimes □ Often □ Very often

12. I compare myself on how good I am at making friends to other children my age.
    □ Never □ Almost never □ Sometimes □ Often □ Very often

13. I compare myself on how many friends I have to other children my age.
    □ Never □ Almost never □ Sometimes □ Often □ Very often

Thank you!
Appendix D: Ethics Approval for Study 1

Research Services
Office of the Deputy Vice-Chancellor (Research) (Melbourne Campus)

MEMORANDUM

TO: A/Prof. Lina Ricciardelli
    School of Psychology, Burwood

FROM: Deakin University Human Research Ethics Committee (DU-HREC)

DATE: 15 December 2008

SUBJECT: Project EC 207-2008  (Please quote this project number in future communication.)
An early intervention for mental health problems among children:
Comparisons, Openness, Peers and Esteem (COPE)

The application for this project was considered at the DU-HREC meeting held on 8 December 2008.

Approval has been given for A/Prof. Lina Ricciardelli, School of Psychology, to undertake this project for a period of three years from 15 December 2008.

The approval given by the Deakin University Human Research Ethics Committee is given only for the project and for the period as stated in the approval. It is your responsibility to contact the Executive Officer immediately should any of the following occur:
• Serious or unexpected adverse effects on the participants
• Any proposed changes in the protocol, including extensions of time.
• Any events which might affect the continuing ethical acceptability of the project.
• The project is discontinued before the expected date of completion.
• Modifications are requested by other HREC's.

In addition you will be required to report on the progress of your project at least once every year and at the conclusion of the project. Failure to report as required will result in suspension of your approval to proceed with the project.

DU-HREC may need to audit this project as part of the requirements for monitoring set out in the National Statement on Ethical Conduct in Human Research (2007).

Vicky Bates, Secretary
On behalf of DU-HREC
03 9251 7052

Signature Redacted by Library
Appendix E: Plain Language Statement and Consent Form for Parents

DEAKIN UNIVERSITY
PLAIN LANGUAGE STATEMENT AND CONSENT FORM for parents

PLAIN LANGUAGE STATEMENT

Date: April 2009

Full Project Title: An Early Intervention of Mental Health Problems Among Children. Comparisons, Openness, Peers and Esteem

Principal Researchers: Associate Professor Lima Ricciardelli, Professor Marita McCabe, Dr Helen Skouteris and Ms Judy Crigan (School of Psychology, Deakin University, Burwood)

This Plain Language Statement and Consent Form is 3 pages long. Please make sure you have all the pages.

1. Your Consent
Your child is invited to participate in a new project on self-esteem. This Plain Language Statement contains detailed information about the research project. If you give permission for your child to participate please complete and sign the consent form and return it to your child’s class teacher.

2. Purpose and Background
The purpose of the project is to improve children’s self-esteem and other self-concepts they have about school, friends and their body image. We will help children become more positive in how they compare themselves to others, in terms of their self-esteem and other self-concepts.

3. Funding Australian Rotary Health Research Fund

4. Procedure
The study will involve 600 children from 12 schools aged between 8 and 10 years old. We will ask students standard questions about their self-concepts and their mood; and then we will provide children with a training program to help children identify their strengths and use positive strategies to compare themselves to others. Half of the children will complete an eight-week training session this year; and the other half will complete it in one year’s time. This wait-list control group is needed so that we can fully evaluate the program. Children who complete the program this year will also complete surveys after the training program and then at 6 and 12 months after the program to assess whether it has been effective. For the children who are to receive the program next year, they will complete the assessments before the program.

Assessments may identify a child who is at high risk of developing low self-esteem and other emotional problems. If this occurs we will contact you via the school and offer additional assistance. All sessions will take about 60 minutes, and take place at the school during normal school hours.

Here are some of the survey questions. A full list can be obtained from the researchers, your child’s teacher or school principal:

- Do you feel sad, happy, upset, excited?
- How often are you sad, hate yourself, feel bad things are your fault?
- I worry a lot of the time
- It is hard for me to get to sleep at night
- I am good looking
- I can run fast
- I get along easily with other kids
- I have good muscles
- In general, I like being the way I am
5. Possible Benefits

This work is important as many children by the age of 8 years old are already displaying low self-esteem and negative feeling about themselves. We need to help children develop a positive and healthy self-image at an early age.

6. Possible Risks

This study may raise children’s awareness of their esteem and some negative feelings they may be having. We will ask the questions in a sensitive way as we want to help promote children’s healthy social development. If you have any concerns you can discuss these with the school counsellor, your own doctor, or you may contact one of the research team (see below).

7. Privacy, Confidentiality and Disclosure of Information

You can be assured that your child will not be identified by name in any way in the reporting of our results, and you are welcome to see your child’s responses before we use these in our research. The information we collect will be stored in a locked cabinet within the School of Psychology at Deakin University for a minimum of SIX years from date of publication.

8. Results of Project

A summary of the findings will be provided to the school and available for any interested parents to read at the completion of the study. Please contact us to receive this report (see below).

9. Participation is voluntary

Your child will only be invited to take part in the study with your permission. Children who agree to participate are free to withdraw from the study at any time. Please also note that not taking part in the project or withdrawing participation will not affect your child’s relationship with the school. A member of the research team will be available to answer any questions you may have about the research project and/or your child’s involvement. Please do not sign the consent form until you have had a chance to ask your questions and received satisfactory answers. If you decide to withdraw from this project please notify a member of the research team (see below).

10. Ethical Guidelines

The study will be carried out in accordance to the National Statement on Ethical Conduct in Human Research (2007). In addition, the School Principal and the Department of Education and Early Childhood Development have given their approval for this research to take place.

11. Complaints

Should you have any concerns about the conduct of this research project (EC 307-2008), please contact the Secretary, Ethics Committee, Research Services Division, Deakin University, 221 Burwood Highway, BURWOOD VIC 3125. Tel (03) 92517123 (International + 61 3 9251 7123).

12. Further Information:

Lisa Ricciardelli: 92446866 or 98895002 or email: lirr@deakin.edu.au
Judy Crigan: 9251 7364, 0402 463 416 or email judc@deakin.edu.au
TO: Parents

Consent Form

Date: March, 2009

Full Project Title: An Early Intervention of Mental Health Problems Among Children: Comparisons, Openness, Peers and Esteem

Researchers: Lina Ricciardelli, Marita McCabe, Helen Skouteris, Judy Crigan

☐ I have read and I understand the attached Plain Language Statement.
☐ I freely give consent for my child to participate in this project according to the conditions in the Plain Language Statement.
☐ I have been given a copy of the Plain Language Statement and Consent Form to keep.

The researchers have agreed not to reveal my identity and personal details, including where information about this project is published, or presented in any public form.

Participant's Name (Printed) ...........................................................................................................

Parent's Signature...................................................................................................................Date.............
Appendix F: Plain Language Statement For Children

Deakin University Project: Children, Feelings, Thoughts and Comparisons

DEAKIN UNIVERSITY
ETHICS COMMITTEE
PLAIN LANGUAGE STATEMENT FOR CHILDREN

My name is Judy Crigan and I am inviting you to take part in a project on helping children to learn about what they are good at and help them with their feelings if they are unhappy. We are doing this project as part of our work at Deakin University.

There are two parts. The first part involves completing questions. The second part involves completing an eight week training program on improving how you see yourself and how you feel. Half the schools will do the training program now. Half the children will do this at a later time.
I will ask you questions about the things you like doing at school and what you are good at; what you would like to look like and about your friends; and whether you have any worries.

Your parents have given permission for you to take part in the study. Are you also happy to take part? If you do not want to take part in this study then this is OK. You are welcome to return to your classroom and do another activity with your teacher.

This is not a test so there are no right or wrong answers. I am interested in finding out your thoughts on lots of different questions. We will use this information to help us understand how children think and also to learn more about how to help children feel happier.

If any of our questions make you upset then you do not have to answer them. You can also talk to your parents, your school counsellor or call KIDS HELP LINE (1800 55 1800) about any topics that you are worried about.

The research team and I are the only persons who will study your answers. When we will write up our project we will separate your name and personal details from your answers. If you don't want to answer a question then you just say so.

Do you have any questions?
Appendix G: Outline of COPE Sessions

**Outline of Session 1: “Uniqueness”**

<table>
<thead>
<tr>
<th>Session Aims</th>
<th>Materials</th>
<th>Worksheets</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>To understand that large differences exist between people so children do not strive to be the same as others</td>
<td>Pre-printed nametags</td>
<td>Worksheet 1: All about Me</td>
<td>Activity 1 - Why I’m special: Children are seated on floor. Children are told how we are all different in that we all have things we are good at, and are not so good at, we all have things that we like and do not like, and we have all seen or experienced different things. Children are encouraged to consider these things, raise hand their and tell the group two good things about themselves that makes them different from others in the class. Assistant to list attributes on board, and group discusses and reflects on the differences the class (i.e., differences make people interesting; help us to contribute something special in the world).</td>
</tr>
<tr>
<td>To recognise and acknowledge their strengths to act as a buffer against negative social comparisons</td>
<td>Book: I’m Special, I’m Me!</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To recognise weakness in the self are on a continuum and can be changed</td>
<td>Blackboard and chalk or Whiteboard and markers</td>
<td></td>
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<tr>
<td>Introduce how thoughts influence feelings.</td>
<td>Workbook for each child</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Pencil for each child</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Pre-named certificate for each child</td>
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</tr>
</tbody>
</table>

**Activity 1 - Why I’m special:** Children are seated on floor. Children are told how we are all different in that we all have things we are good at, and are not so good at, we all have things that we like and do not like, and we have all seen or experienced different things. Children are encouraged to consider these things, raise hand their and tell the group two good things about themselves that makes them different from others in the class. Assistant to list attributes on board, and group discusses and reflects on the differences the class (i.e., differences make people interesting; help us to contribute something special in the world).

**Activity 2 - All About Me:** Children are seated on floor. Children are encouraged to things about what they like about themselves, and the things they do not like about themselves, or things that they are good at, and things that that are not so good at. Assistant writes four domains and board (i.e., Social; School Work; Physical; and Looks) and children asked to suggest strengths/weaknesses for each list. A line is then drawn on board to indicate a continuum (i.e., Not so good, Middle, and Good) and children are taught to allocate their listed skills onto the continuum, according to their perceived ability level. Children to be seated at tables and workbooks distributed. Children are told the workbooks are private and will not be shared with the group. Children are asked to complete Worksheet 1: All About Me, which requires them to generate their own list of skills, and place them on a continuum. Upon completion, the activity is discussed as a group on the on floor, with emphasis on children understanding that some things can be changed with practice, whereas others are not in our control (e.g. like height - unless you are still growing it can’t be changed). Discussion centres around the notion that although some attributes of the self cannot be changed, we can change how we feel about such things. Emphasis is on the need to accept our strengths and weaknesses, as this will help us feel positive about ourselves.

**Activity 3 - Book: I’m Special, I’m Me!** Children are seated on floor, and are read the book ‘I am Special, I’m Me!’ This book illustrates the concept of how thoughts influence feelings, and that recognising positive contributions can make us feel more positive.
Outline of Session 2: “What We Like About Ourselves”.

<table>
<thead>
<tr>
<th>Session Aims</th>
<th>Materials</th>
<th>Worksheets</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• To think positively about oneself using evidence to support beliefs</td>
<td>• Nametags</td>
<td>None.</td>
<td><strong>Activity 1 - Book: The Wrong Stone</strong>: Children are seated on floor and are read the book <em>The Wrong Stone</em>. This book uses the analogy of stones for a wall as signifying people’s differences. Each stone was different, and those differences all fitted together to make a wall. Just like the stones, we are all different and contribute different things to life.</td>
</tr>
<tr>
<td>• To recognise each person’s unique contribution</td>
<td>• Book: The Wrong Stone</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Strength Cards</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Workbooks</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>• Highlighter pen for child</td>
<td></td>
<td></td>
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<td></td>
<td>• Pencil for each child</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td><strong>Worksheet 2: The Compliments Game</strong></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Activity 2 - Compliments Game</strong>: Children are seated at tables. A definition of a ‘compliment’ is provided to children, and they are then asked to think of some examples of a compliment. Workbooks and highlighters are distributed. Children asked to complete Worksheet 2: The Compliments Game, which requires them to listen to compliments being read aloud (e.g. You have a great smile, you are good at sport), and highlight the ones on the worksheet which they think applies to them. Upon completion, children are to be seated on the floor in two circles, and go around the circle giving each other a complement. A group discussion follows, about how the children knew if the compliments applied to them, how to collect evidence for their strengths, understanding the difference between acknowledging strengths vs. bragging, and how acknowledging strengths makes us feel good, which is an important strategy to use for when we do not feel good about ourselves. The link between thoughts and feelings is discussed.</td>
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<td></td>
<td><strong>Activity 3 - Strengths Cards</strong>: Children are seated on the floor and the Strength Cards are spread out on a table. Children are asked to take a card which represents a strength they have, and discuss with a partner why they chose that card. They are to think of some evidence which supports them having particular strength (e.g., an example of when they have shown that strength). Once children have collected a strength card they return to the floor and are divided into two groups (one led by facilitator and the other led by the assistant). They are asked to read their cards and explain why they chose it. A group discussion follows, and children are asked: if they found it hard to choose a card; if many cards applied to them; how they knew if a strength applied to them (e.g., using evidence); and if they thought they felt better when they were thinking about their strengths.</td>
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<td></td>
<td></td>
<td>None.</td>
<td></td>
</tr>
</tbody>
</table>
### Outline of Session 3: “Social Comparisons”.

<table>
<thead>
<tr>
<th>Session Aims</th>
<th>Materials</th>
<th>Worksheets</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• To explore our use of social comparisons and their negative effect</td>
<td>Nametags</td>
<td>None</td>
<td><strong>Activity 1 - Book: The Short and Incredibly Happy Life of Riley:</strong> Children are seated on floor and are read the book “The Short and Incredibly Happy Life of Riley”. This book introduces the concepts of social comparisons, and illustrates the negative effects of social comparisons.</td>
</tr>
<tr>
<td>• To learn a strategy to overcome the negative effect of social comparisons</td>
<td>Book: The Short and Incredibly Happy Life of Riley</td>
<td>Comparison Cards None</td>
<td><strong>Activity 2 - Famous Skills:</strong> Children are seated on the floor. Children are asked to come up with the names of famous people, and to identify the skills they have. The names they generate are to be listed on the board in a column, and strengths in an adjacent column. When the children have come up with several combinations of mixing up the skills or attributes to different people, discuss with them mixing up the skills or attributes to different people. This activity helps children explore the use of social comparisons and helps them understand that another’s desired attribute represents a strength, and does not mean they all have good attributes.</td>
</tr>
<tr>
<td></td>
<td>Comparison Cards</td>
<td>Workbook</td>
<td><strong>Activity 3 - Comparisons (Yeah, but...):</strong> Children should be on the floor. It is discussed that when we see things in other people that we want, then we can feel sad because we think we are not as good as them. They may be things that someone else has (like looks or possessions), or a skill (like in school work or sport), or something that they do (like in friendships). Children are reminded that they have their own strengths. Children are then taught to use the phrase “Yeah, but…” to help themselves feel better. The facilitator holds the comparisons cards, and the children are to read what is on the card, then say, “Yeah, but…”, and state one strength that they have. This is then practised with having volunteers holding the cards, out the front of the class. Children are taught that the strategy is to be used in their thinking, rather than said out loud.</td>
</tr>
<tr>
<td></td>
<td>Pencil for each child</td>
<td>Worksheet 3: “Yeah, but...”</td>
<td><strong>Activity 4 - Yeah, but...:</strong> Children should be seated at tables and workbooks are distributed. Children are asked to complete Worksheet 3: “Yeah, but...”, by coming up with some of their own strengths, as they have done over the previous couple of weeks.</td>
</tr>
</tbody>
</table>
### Outline of Session 4: “Thoughts and Feelings”.

<table>
<thead>
<tr>
<th>Session Aims</th>
<th>Materials</th>
<th>Worksheets</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• To identify positive and negative thoughts and their link to feelings</td>
<td>• Name tags</td>
<td>None.</td>
<td><strong>Activity 1 - Book: The Short and Incredibly Happy Life of Riley:</strong> Children are to be seated on floor and are re-read the book ‘The Short and Incredibly Happy Life of Riley’. This book introduces the concepts of social comparisons, and illustrates the negative effects of social comparisons. Children are reminded that when they compare themselves to others, they can feel unhappy.</td>
</tr>
<tr>
<td>• To change negative thoughts to positive ones</td>
<td>• Book: The Short and Incredibly Happy Life of Riley</td>
<td>None.</td>
<td><strong>Activity 2 - Two Truths and One Lie:</strong> Children are to be seated on the floor. They are told to make three statements about themselves. Two of them have to be true, and one of them has to be a lie. They are told to think of things that their friends won’t know, because the rest of the class are going to try to guess which is the lie. The activity is first demonstrated to the children, (e.g., ‘I am good at tennis, I am friendly, and I am good at maths’. Can anyone guess?). The class is then split into two large circles, one to be run by the facilitator, one by the assistant. Each child states their two truths and one lie. A group discussion follows, and the children are told that in the activity, they were actually telling the class two things that were their strengths, and by lying, they were letting the class know one thing that was not their strength. A group discussion follows, and children are asked: How did you feel about this game? Did you feel okay that you were pretending to have a strength that you didn’t have? Did everyone find something that wasn’t their strength? Is there anyone who has only strengths?</td>
</tr>
<tr>
<td></td>
<td>• Workbooks</td>
<td>None.</td>
<td><strong>Activity 3 - Thoughts and Feelings:</strong> Children are to be seated on the floor. Facilitator draws a line on the board to depict how thoughts affect feelings (e.g., Thoughts ➔ Feelings). Children are taught that the way we think about something affects the way we feel, and example are provided. They are then taught that thoughts can be either positive or negative, where a positive thought is one that makes them feel good, and a negative thought is one that makes them feel bad, and example provided. Children are told they can change their thoughts and that they don’t have to keep the thought that automatically comes into their heads, rather, they can change it for something better. They are taught that a positive thought is one that looks on the bright side and makes us feel okay, but a negative thought is pessimistic and makes us feel bad.</td>
</tr>
<tr>
<td></td>
<td>• Pencil for each child</td>
<td>None.</td>
<td><strong>Activity 4 - I Changed My Mind!</strong> Children should be seated at tables. They are instructed to complete Worksheet 4: I Changed My Mind, which involves making up some positive and negative thoughts for the characters in the workbooks.</td>
</tr>
<tr>
<td>worksheet: I Changed My Mind</td>
<td></td>
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</table>
**Outline of Session 5: “Thoughts, Feelings and Actions”**.

<table>
<thead>
<tr>
<th>Session Aims</th>
<th>Materials</th>
<th>Worksheets</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• To change negative thoughts to positive ones</td>
<td>• Nametags</td>
<td>None.</td>
<td><strong>Activity 1 - Book: Giraffes Can’t Dance</strong>: Children should be on the floor, and are read the book “Giraffes Can’t Dance”. The book helps children recognise that social comparisons can make one feel bad, and are not a helpful way of establishing their potential. A group discussion follows, and children are asked: Why was Giraffe sad? [because he thought he wasn’t as good as the others] What made him feel better? [Cricket told him to have faith in himself] Why do you think the animals changed their mind about his dancing? What do you think is the moral of the story? [sometimes you have to be your own judge, sometimes you have to find your own way].</td>
</tr>
<tr>
<td>• To introduce the link between feelings and behaviour</td>
<td>• Workbooks</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Book - <em>Giraffes Can’t Dance</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• One game piece per child</td>
<td></td>
<td><strong>Activity 2 - Snakes &amp; Ladders</strong>: Children should be at tables in pairs and have one workbook between them. Game pieces and dice are distributed. Children are taught how to play Snakes and Ladders (i.e., The Snakes take us down the board towards the start, so if we land on a snake’s head we slide down to the snake’s tail. If we land on the bottom of a ladder that’s good, and we get to go up the ladder). In this game, if they land on a square that has writing on it, then they are to read that out aloud. They are told to notice that the positive and negative statements will help them win or lose. Positive statements take them up the ladder to the finish, negative statements take them backwards to the start of the game.</td>
</tr>
<tr>
<td></td>
<td>• One die per pair of children</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Pencil for each child</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Worksheet 5: Snakes and Ladders game board</td>
<td><strong>Activity 3 - My Feelings Made Me Do It!</strong>: Children to be seated on the floor. At the board, facilitators write three headings with linked arrows: THOUGHTS ➔ FEELINGS ➔ ACTIONS. Children are reminded that thoughts we have cause our feelings, and we can change our thoughts to have better feelings. They are then taught that the feelings we have affect how we behave (i.e., actions). Various examples are used to help children understand the associations between the thoughts, feelings, and actions.</td>
</tr>
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**Outline of Session 6: “Being positive”**

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<th>Session Aims</th>
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<th>Worksheets</th>
<th>Activities</th>
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</thead>
<tbody>
<tr>
<td>To recognise and predict feelings arising from different kinds of social comparison</td>
<td>Name tags</td>
<td>Worksheet 7: How Do I feel?</td>
<td>Activity 1 - How Do I feel? Children should be seated at tables and are instructed to open workbooks to Worksheet 7: How Do I feel? Children are read out some scenarios (e.g., You go to a party, and all the other kids are wearing a certain kind of clothing, for example, cool clothes, or street clothes, or pretty party dresses, and you feel you don’t have the right kind of clothes). They are then instructed to think about how they would feel in each situation, then highlight the word which best matches how they would feel. All of these situations are about times when someone compares themselves to others. They are asked to notice the comparisons that are going on, and think about whether they are helpful. A class discussion follows, and children are asked about their response to each scenario, and about what they highlighted. Children attention is drawn to differences in the group and unhelpful effects of comparisons. If someone had a negative feeling, ask what thought they would have been having to have caused that feeling (to reinforce that thoughts lead to feelings). Ask if they could turn that into a more positive thought, and then what feeling they might be having.</td>
</tr>
<tr>
<td>To recognise negative and positive thoughts</td>
<td>Workbooks, Highlighters, Pencil for each child</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To create positive thoughts to feel better</td>
<td>One ‘I Can’t Do It’ envelope containing game cards per two children</td>
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</table>

Worksheet 8: I Can’t Do It: Children should be at tables, and game pieces distributed. Children are reminded of the association between through, feelings and actions. They are taught the strategy ‘I Can Do It’, to illustrate what happens when choosing a positive rather than negative thought. Working in pairs, children are instructed to play the board game Worksheet 8: I Can’t Do It. To play this game, children take turns drawing a card from the envelope. They should read what is written on the card out loud. At the bottom of each card it will say ‘move ahead’ or move back’. If the card says ‘move ahead’, they are to give an example of a positive thought that someone could have for that situation, roll the dice and move ahead that many places. If the card says ‘move back’ they are to give an example of a negative thought that someone could have and move back one place.

Activity 3 - Solutions for Sad: Children are to be seated on the floor. They are read some situations that might make some children feel bad, and are instructed to think of ways to help the character in the story feel better about themselves (e.g., Josh is not very fast at running, no matter how much he tries. He thinks the other kids don’t want to play with him and will make fun of him at lunchtime. What can Josh think to feel better?).
Outline of Session 7: “What I’ve Achieved”.

<table>
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<th>Worksheets</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• To review and practise strategies for feeling better</td>
<td>Nametags</td>
<td>Worksheet 9: I Can Remember My Strengths</td>
<td>Activity 1 - We’ve Got It! Children should be on the floor. Children are asked to think back to some of the earlier they had talked about, and asked what they have learnt. They are asked to provide an example, or something they remember about that point. The points to cover include: I am unique, all my friends are unique, Differences are good as they can be complementary, I have strengths and they are different to other people’s strengths and I know what I like about myself; I can accept compliments and I can give compliments; Comparing myself with others is often not helpful; I need to remember my good points when I feel bad about myself; What I think affects how I feel. I can change my thoughts and my feelings will change; What I feel affects how I behave. By changing my thoughts, my feelings will change, and my behaviour will change; Things change. Not-so-good can change to okay, or even good; What other people think of me is not always right; There are different ways of thinking about things and they can all be ‘true’.</td>
</tr>
<tr>
<td>• To reinforce remembering one’s strengths and positive coping strategies</td>
<td>Workbooks</td>
<td></td>
<td>Activity 2 - One thing I learnt — Children should sit in two circles. One circle is run by the facilitator, and one by the assistant. Children are instructed to throw the bean bag to others in the circle. When they catch the bean bag they are to say one thing they remember about what you they learnt during the sessions. They are encouraged to say how the program has changed things for them, or what they have learnt personally. They are then told to throw the bean bag to someone who had not had a turn yet, and they will say one thing that they have learnt. They are encouraged to come up with different things.</td>
</tr>
<tr>
<td></td>
<td>Pencil for each child</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Small beanbag</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Scripts for plays (1 per 3 or 4 children)</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>None.</td>
<td></td>
<td>Activity 3 - Prepare Play: Children should be divided into groups of four and each child is given a performance sheet (script for play). They are told that they will be preparing a play, and reminded of all the main concepts taught to them in the program. They are guided through the requirements of the play (see p. 265 for example).</td>
</tr>
<tr>
<td></td>
<td>Activity 4 - I can remember my strengths: Children should be seated at tables. They are reminded that changing negative thoughts to more positive ones when faced with a situation which makes them feel sad. They are taught that as we cannot control what other people say to us, it is important to have some things we can do to help ourselves when we feel bad about our abilities, performance, or behaviour. Children are instructed to complete Worksheet 9: I Can Remember My Strengths which requires them to trace around a hand, think of five things they do well, and write one in each finger.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>None.</td>
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Outline of Session 8: “Advocating to Others”.

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<th>Worksheets</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>To practise skills learnt in the program</td>
<td>Nametags</td>
<td>None.</td>
<td><em>Rehearsal and performance of plays:</em> Children are to form groups from the previous week and are re-distributed the scripts. They are given time to rehearse. Each group is given 3 minutes to perform their play.</td>
</tr>
<tr>
<td>To share those skills with peers</td>
<td>Pencil for each child</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Scripts for plays (1 per 3 or 4 children)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Comparing my athletic ability to another kid
This may be running, swimming, ball catching, kicking, throwing, or any sport skill.
Ask a helper if you want to use something else.

Your task is to come up with a play that you will perform for the class. You are to act out a situation where one kid is comparing themselves with another kid. Then, a voice from behind their shoulder will say a negative thought. You then need to say how this thought would make you feel, and act out what you might do because of that feeling.

Then say CUT, and rewind back to the beginning.

This time, you act out the situation, and the same thought person will give you a positive thought. Again, you say how this makes you feel, and then do the action that might follow. Remember the things we have learnt. We have learnt about giving compliments, saying ‘Yeah, but’, and remembering your own strengths.

This has to be repeated for each of the different thought voices you have in your group.

Say, “The End” and take a bow.

In your group, you need to choose who will play these roles. Write them here:

A. Kid who compares

B. Kid who gets compared to

C. Thought voice number 1

D. Thought voice number 2

E. (Thought voice number 3 if needed)

You task is to think of a situation where you might compare yourself with another kid. It must be in one of the areas listed above. Use your workbook if you need reminding.

Write the situation here:

____________________________________________________

____________________________________________________
Negative

If you have two thought voices in your group, think of two negative thoughts that you could have for the situation. If you have three kids playing thought voices, then you will need three. Write them here:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

What feelings could these thoughts lead to? Write them here: (2 or 3)
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

What actions might follow? Write it here: (2 or 3)
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Positive

If you have two thought voices in your group, think of two positive thoughts that you could have for the situation. If you have three kids playing thought voices, then you will need three. Write them here:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

What feelings could these thoughts lead to? Write them here: (2 or 3)

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

What actions might follow? Write it here: (2 or 3)

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
### Appendix H: Missing Data at Each Time Point for Intervention and Control Groups

<table>
<thead>
<tr>
<th>Measures and Group</th>
<th>Pre-intervention</th>
<th>Post-intervention</th>
<th>12-month follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>n</td>
<td>%</td>
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<td></td>
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</tr>
<tr>
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<td>3.3%</td>
</tr>
<tr>
<td>Control</td>
<td>0.0%</td>
<td>0</td>
<td>3.4%</td>
</tr>
<tr>
<td><strong>CDI</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intervention</td>
<td>0.3%</td>
<td>1</td>
<td>3.3%</td>
</tr>
<tr>
<td>Control</td>
<td>0.3%</td>
<td>1</td>
<td>3.4%</td>
</tr>
<tr>
<td><strong>SDQ-I</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Appearance</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Intervention</td>
<td>3.2%</td>
<td>14</td>
<td>5.7%</td>
</tr>
<tr>
<td>Control</td>
<td>2.0%</td>
<td>6</td>
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<tr>
<td><strong>Friends</strong></td>
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<td>Intervention</td>
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<td>Control</td>
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<td>3</td>
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<td><strong>Sport</strong></td>
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<tr>
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<tr>
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<td>4</td>
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<tr>
<td><strong>Self-esteem</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Intervention</td>
<td>1.2%</td>
<td>4</td>
<td>4.8%</td>
</tr>
<tr>
<td>Control</td>
<td>0.7%</td>
<td>2</td>
<td>3.8%</td>
</tr>
<tr>
<td><strong>Social Comparison Scale</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Appearance</strong></td>
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<td></td>
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</tr>
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<td>2.4%</td>
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<td>Control</td>
<td>0.7%</td>
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<td><strong>Friends</strong></td>
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<td><strong>Sport</strong></td>
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<td>1.2%</td>
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<tr>
<td>Control</td>
<td>0.0%</td>
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</tr>
</tbody>
</table>

**Note:** RCMAS = Revised Children’s Manifest Anxiety Scale; CDI = Children’s Depression Inventory; SDQ-I = Self-Description Questionnaire I.
Appendix I: Skewness and Kurtosis at Each Time Point for Intervention and Control Groups

<table>
<thead>
<tr>
<th>Measures and Group</th>
<th>Pre-intervention</th>
<th>Post-intervention</th>
<th>12-month follow-up</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Skew</td>
<td>Kurtosis</td>
<td>Skew</td>
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<tr>
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<td>0.49</td>
</tr>
<tr>
<td>Control</td>
<td>0.16</td>
<td>-0.92</td>
<td>0.28</td>
</tr>
</tbody>
</table>

Note: RCMAS = Revised Children’s Manifest Anxiety Scale; CDI = Children’s Depression Inventory; SDQ-I = Self-Description Questionnaire I.
Appendix J: Interview Questions for Study 2

We will be asking participants open-ended questions about the COPE program.

**Children**

Children will be asked questions about their experience of the program:

1) What do you remember about the COPE program?
2) What did you like about the program?
3) What didn’t you like about the program?
4) What did you learn from the program?

If needed, the interviewer will assist children to remember parts of the program by using props from the COPE program such as the children's activity manual, story books and the children's certificates.

**Facilitators**

The facilitators will be asked about their perception of the COPE program:

1) What aspects of the COPE program worked best? In what ways did these work?
2) What aspects of the COPE program didn't work well? In what ways didn’t these work?
3) Which parts of the program worked better for boys?
4) Which parts of the program worked better for girls?
5) In what ways did the children benefit from the program?
6) What recommendations do you have for improving the program?

**Parents**

Parents will be asked background questions:

1) Your country of birth________________
2) Child’s country of birth

3) Highest level of education

4) Number of children

5) Languages spoken at home

Parents will be asked about their perceptions and observations of the COPE program:

1) What do you think your child liked about the program?

2) What do you think your child didn’t like about the program?

3) In what ways do you think your child benefited from the program?

4) What other kinds of activities/training might help your child?

Teachers

Teachers will be asked about their perceptions and observations of the COPE program:

1) What do you think the children liked about the program?

2) What do you think the children didn’t like about the program?

3) Overall, in what ways do you think the children benefited from the program?

4) In what way do you think the girls benefited from the program?

5) In what ways do you think the boys benefited from the program?

6) What other kinds of activities/training might assist children?

In each of the interviews, additional questions will be asked in line with the participants' responses to probe more in-depth and elicit more comprehensive answers.
Appendix K: Ethics Approval for Study 2

DEAKIN UNIVERSITY
Human Ethics Research

Office of Research Integrity
Research Services Division
70 Elgar Road Burwood Victoria
Postal: 221 Burwood Highway
Burwood Victoria 3125 Australia
Telephone 03 9251 7123 Facsimile 03 9244 6581
research.ethics@deakin.edu.au

Memorandum

To:         A/Prof Lina Ricciardelli
            School of Psychology

            B

cc: Miss Emily Prytula

From:       Deakin University Human Research Ethics Committee (DUHREC)

Date:       14 March, 2011

Subject:    2011-019

A qualitative investigation of an early intervention and prevention program for children's emotional health: Comparisons, Openness, Peers and Esteem (COPE)

Please quote this project number in all future communications

The application for this project was considered at the DU-HREC meeting held on

Approval has been given for Miss Emily Prytula, under the supervision of A/Prof Lina Ricciardelli, School of Psychology, to undertake this project from 14/03/2011 to 14/03/2015.

The approval given by the Deakin University Human Research Ethics Committee is given only for the project and for the period as stated in the approval. It is your responsibility to contact the Human Research Ethics Unit immediately should any of the following occur:

- Serious or unexpected adverse effects on the participants
- Any proposed changes in the protocol, including extensions of time.
- Any events which might affect the continuing ethical acceptability of the project.
- The project is discontinued before the expected date of completion.
- Modifications are requested by other HRECs.

In addition you will be required to report on the progress of your project at least once every year and at the conclusion of the project. Failure to report as required will result in suspension of your approval to proceed with the project.

DUHREC may need to audit this project as part of the requirements for monitoring set out in the National Statement on Ethical Conduct in Human Research (2007).

Human Research Ethics Unit
research-ethics@deakin.edu.au
Telephone: 03 9251 7123
Dear Associate Professor Ricciardelli

Thank you for your application of 1 April 2011 in which you request permission to conduct research in Victorian government schools and/or early childhood settings titled *A qualitative investigation of an early intervention and prevention program for children’s emotional health: Comparisons, Openness, Peers and Esteem (COPE)*.

I am pleased to advise that on the basis of the information you have provided your research proposal is approved in principle subject to the conditions detailed below.

1. The research is conducted in accordance with the final documentation you provided to the Department of Education and Early Childhood Development.

2. Separate approval for the research needs to be sought from school principals and/or centre directors and this is to be supported by the DEECD approved documentation and the letter of approval from a relevant and formally constituted Human Research Ethics Committee.

3. The project is commenced within 12 months of this approval letter and any extensions or variations to your study, including those requested by an ethics committee must be submitted to the Department of Education and Early Childhood Development for its consideration before you proceed.

4. As a matter of courtesy, you advise the relevant Regional Director of the schools or early childhood settings that you intend to approach. An outline of your research and a copy of this letter should be provided to the Regional Director.

5. You acknowledge the support of the Department of Education and Early Childhood Development in any publications arising from the research.

6. The Research Agreement conditions, which include the reporting requirements at the conclusion of your study, are upheld. A reminder will be sent for reports not submitted by the study’s indicative completion date.
I wish you well with your research study. Should you have further enquiries on this matter, please contact Kathleen Nolan, Research Officer, Education Policy and Research, by telephone on (03) 9637 3244 or by email at nolan.kathleen.j@edumail.vic.gov.au.

Yours sincerely

Dr Elizabeth Hartnell-Young
Group Manager
Education Policy and Research

20/04/2011

enc
In reply please quote:

GE11/0009
1693
20 April 2011

Miss E Prtula
of- APProf Lina Ricciardelli
School of Psychology
Deakin University
221 Burwood Highway
BURWOOD VIC 3125

Dear Miss Prtula

I am writing with regard to your research application received on 1 April 2011 concerning your forthcoming project titled A qualitative investigation of an early intervention and prevention program for children’s emotional health: Comparisons, Openness, Peers and Esteem (COPE). You have asked approval to approach Catholic primary schools in the Archdiocese of Melbourne, as you wish to survey students, teachers and parents.

I am pleased to advise that your research proposal is approved in principle subject to the nine standard conditions outlined below.

1. The decision as to whether or not research can proceed in a school rests with the school’s principal, so you will need to obtain approval directly from the principal of each school that you wish to involve.

2. You should provide each principal with an outline of your research proposal and indicate what will be asked of the school. A copy of this letter of approval, and a copy of notification of approval from the university’s Ethics Committee, should also be provided.

3. A Working with Children (WWC) check — or registration with the Victorian Institute of Teaching (VIT) — is necessary for all researchers visiting schools. Appropriate documentation must be shown to the principal before starting the research in each school.

4. No student is to participate in the research study unless s/he is willing to do so and informed consent is given in writing by a parent/guardian.

5. You should provide the names of schools which agree to participate in the research project to the Knowledge Management Unit of this Office.
Miss E Pryhuja  20 April 2011

6. Any substantial modifications to the research proposal, or additional research involving use of the data collected, will require a further research approval submission to this Office.

7. Data relating to individuals or schools are to remain confidential.

8. Since participating schools have an interest in research findings, you should consider ways in which the results of the study could be made available for the benefit of the school communities.

9. At the conclusion of the study, a copy or summary of the research findings should be forwarded to this Office. It would be appreciated if you could submit your report in an electronic format using the email address provided below.

I wish you well with your research study. If you have any queries concerning this matter, please contact Mr Martin Smith of this Office.

The email address is <km@cemelb.catholic.edu.au>.

Yours sincerely

Signature Redacted by Library

Nancy Bicchieri
DEPUTY DIRECTOR
Appendix L: Plain Language Statement and Consent Form for Children and Parents

PLAIN LANGUAGE STATEMENT AND CONSENT FORM for Children Participants

TO: Parents/Legal Guardians

<table>
<thead>
<tr>
<th>Plain Language Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date: September 2011</td>
</tr>
<tr>
<td>Full Project Title: A Qualitative Examination of an Early Intervention of a Mental Health Program Among Children: Comparisons, Openness, Peers and Esteem (COPE).</td>
</tr>
<tr>
<td>Principal Researcher: Associate Professor Lina Ricciardelli</td>
</tr>
<tr>
<td>Associate Researcher: Emily Prytula</td>
</tr>
</tbody>
</table>

Your Consent:
Your child is invited to participate in a follow-up study about the COPE program. This Plain Language Statement contains detailed information about the study. If you give permission for your child to participate in the study, please complete and sign the consent form and return it to your child’s class teacher.

Purpose and Background:
The purpose of this follow-up study is to gain an understanding from the children, parent/legal guardian’s perspective, facilitators of the program and teachers about the COPE program in which your child took part in 2009 and 2010. The program was designed to improve children’s self-esteem and other self-concepts they have about school, friends, their body image and children’s resiliency. It was devised to help children become more positive in how they compare themselves to others, in terms of their self-esteem and other self-concepts.

The current follow-up study will help further our understanding on how to further improve the COPE program. We would like to interview 12 children, 12 parents, the children’s class teachers, and the facilitators that assisted with delivering the program.

Funding:

Plain Language Statement & Consent Form to Parents/Legal Guardian for Children Participants
[Project ID: 2011-019]; version n: [September 2011]
School of Psychology, Deakin University

Procedure:
Your child is invited to participate in an individual interview to share their experiences of the COPE program. The interview will approximately be 10 to 20 minutes and will be conducted during school hours at a time that is agreeable to the teachers. The interview questions will include: What do you remember about the COPE program? What did you like about the program? What didn’t you like about the program? What did you learn from the program?

To ensure accuracy of their responses, this interview will be audio-taped. A transcript of this interview will be available to you, so you can review and give your approval of your child’s responses on their behalf. You will be asked at the conclusion of your child’s interview if you would like to view their transcript.

Possible Benefits:
This work is important as many children by the age of 8 years are displaying low self-esteem and negative feelings about themselves. We need to help children develop a positive and healthy self-image at an early age. Feedback about the COPE program will help us to improve the program.

Possible Risks:
Participation in the COPE program may have raised children’s awareness of their esteem and some negative feelings they experience. However, there are no anticipated risks to participants in the present follow-up study. In this study, questions will be open-ended and asked in a sensitive way. If you have any concerns, you can discuss these with the school counsellor, your own doctor, or you may contact one of the research team (see below).

Privacy, Confidentiality and Disclosure of Information:
You can be assured that your child’s information will not be identified by name in any way in the reporting of the results. You are welcome to see your child’s interview transcript before we use this information in our research. This research forms part of Emily Prytula’s thesis for the Doctor of Psychology (Clinical). The information we collect will be stored in a locked cabinet within the School of Psychology at Deakin University for a minimum of 10 years from the date of publication.

Results of Project:
A summary of the findings will be provided to your child’s school and be available for any interested participant to read at the completion of the study. Please contact us below to receive this report (see below).

Participation is voluntary:
Participation in this study is voluntary and your child is free to withdraw from the study at any time up to the point that you can review their interview transcript. Please note that not taking part in the study or withdrawing participation will not affect your child’s relationship with the school. A member of the research team will be available to answer any questions you may have about the research project and/or your child’s involvement. Please do not sign the consent form until you have had a chance to ask your questions and received satisfactory answers. If you decide to withdraw from this study, please notify a member of the research team (see below).

**Ethical Guidelines:**

The study will be carried out in accordance to the National Statement on Ethical Conduct in Human Research (2007). In addition, the School Principal and the Department of Education and Early Childhood Development have given their approval for this research to take place.

**Complaints**

If you have any complaints about any aspect of the project, the way it is being conducted or any questions about your rights as a research participant, then you may contact:

The Manager, Office of Research Integrity, Deakin University, 221 Burwood Highway, Burwood VIC 3125, Telephone: 9251 7129, Facsimile: 9244 6581;

research-ethics@deakin.edu.au

Please quote project number [2011-019].
PLAIN LANGUAGE STATEMENT AND CONSENT FORM for Children Participants

TO:          Parent/Legal Guardians

Third Party Consent Form

(To be used by parents/guardians of minor children to give informed consent)

Date:        September 2011

Full Project Title: A Qualitative Examination of an Early Intervention of a Mental Health Program Among Children: Comparisons, Openness, Peers and Esteem

☐ I have read and I understand the attached Plain Language Statement.

☐ I freely agree to my child participating in this project according to the conditions in the Plain Language Statement.

☐ I give consent for my child’s interview to be audio-taped

☐ I am aware of my option to review and edit my child’s interview transcript at the conclusion of their interview

☐ I have been given a copy of the Plain Language Statement and Consent Form to keep.

The researcher has agreed not to reveal my identity and personal details, including where information about this project is published, or presented in any public form.

I give my permission for ................................................. (name of participant) to participate in this project according to the conditions in the Plain Language Statement.

I have been given a copy of Plain Language Statement and Consent Form to keep.

The researcher has agreed not to reveal my identity and personal details, including where information about this project is published, or presented in any public form.

Participant’s Name (printed) ..........................................................

Name of Person giving Consent (printed) ...........................................

Relationship to Participant: .........................................................

Signature .................................................. Date ............................

Plain Language Statement & Consent Form to Parents/Legal Guardian for Children Participants
[Project ID: 2011-019]; version n: [September 2011]
Researchers:
A/Prof Lina Ricciardelli: 9244 6866 or email: lina@deakin.edu.au
Emily Prytula: 0417 345 954 or email: erp@deakin.edu.au
PLAIN LANGUAGE STATEMENT AND CONSENT FORM for Parent Participants

TO: Parents/Legal Guardians

<table>
<thead>
<tr>
<th>Plain Language Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Date:</strong> September 2011</td>
</tr>
<tr>
<td><strong>Full Project Title:</strong> A Qualitative Examination of an Early Intervention of a Mental Health Program Among Children: Comparisons, Openness, Peers and Esteem (COPE).</td>
</tr>
<tr>
<td><strong>Principal Researcher:</strong> Associate Professor Lina Ricciardelli</td>
</tr>
<tr>
<td><strong>Associate Researcher:</strong> Emily Prytula</td>
</tr>
</tbody>
</table>

**Your Consent:**
You are invited to participate in a follow-up study about the COPE program. This Plain Language Statement contains detailed information about the study. If you wish to participate in the study, please complete and sign the consent form and return it to your child's class teacher.

**Purpose and Background:**
The purpose of this follow-up study is to gain an understanding from the children, parent/legal guardian’s perspective, facilitators of the program and teachers about the COPE program in which your child took part in 2009 and 2010. The program was designed to improve children’s self-esteem and other self-concepts they have about school, friends, their body image and children’s resiliency. It was devised to help children become more positive in how they compare themselves to others, in terms of their self-esteem and other self-concepts.

The current follow-up study will help further our understanding on how to further improve the COPE program. We would like to interview 12 children, 12 parents, the children’s class teachers, and the facilitators that assisted with delivering the program.

**Funding:**
School of Psychology, Deakin University

Plain Language Statement & Consent Form to Parents Participants
[project ID: 2011-019]; version n: [September 2011]

Page 1 of 4
Procedure:
You are invited to participate in an individual interview to provide your views of the program. The interview will approximately be 10 to 20 minutes and will be conducted during school hours at a time that is agreeable to the parent/s. The interview questions will include: What do you think your child liked about the program? What do you think your child didn’t like about the program? In what ways did you think your children child benefited from the program? What other kinds of activities/training might help your child? A full list can be obtained from the researchers (see below).

To ensure accuracy of your responses, this interview will be audio-taped. A transcript of your interview will be available to provide you with the opportunity to review and give your approval about the accuracy of your responses. You will be asked at the conclusion of the interview if you would like to view your transcript.

Possible Benefits:
This work is important as many children by the age of 8 years are displaying low self-esteem and negative feelings about themselves. We need to help children develop a positive and healthy self-image at an early age. Feedback about the COPE program will help us to improve the program.

Possible Risks:
Participation in the COPE program may have raised children’s awareness of their esteem and some negative feelings they experience. However, there are no anticipated risks to participants in the present follow-up study. In this study, questions will be open-ended and asked in a sensitive way. If you have any concerns, you can discuss these with the school counsellor, your own doctor, or you may contact one of the research team (see below).

Privacy, Confidentiality and Disclosure of Information:
You can be assured that your information will not be identified by name in any way in the reporting of the results. You are welcome to see your interview transcript before we use this information in our research. This research forms part of Emily Prtyula’s thesis for the Doctor of Psychology (Clinical). The information we collect will be stored in a locked cabinet within the School of Psychology at Deakin University for a minimum of 10 years from the date of publication.

Results of Project:
A summary of the findings will be provided to your child’s school and be available for any interested participant to read at the completion of the study. Please contact us below to receive this report (see below).
Participation is voluntary:
Participation in this study is voluntary and you are free to withdraw from the study at any
time up to the point that you review your interview transcript. Please note that not taking
part in the study or withdrawing participation will not affect your or your child's relationship
with the school. A member of the research team will be available to answer any questions
you may have about the research project and/or your involvement. Please do not sign the
consent form until you have had a chance to ask your questions and received satisfactory
answers. If you decide to withdraw from this study, please notify a member of the research
team (see below).

Ethical Guidelines:
The study will be carried out in accordance to the National Statement on Ethical Conduct in
Human Research (2007). In addition, the School Principal and the Department of Education
and Early Childhood Development have given their approval for this research to take place.

Complaints
If you have any complaints about any aspect of the project, the way it is being conducted or
any questions about your rights as a research participant, then you may contact:

The Manager, Office of Research Integrity, Deakin University, 221 Burwood Highway,
Burwood VIC 3125, Telephone: 9251 7129, Facsimile: 9244 6581;
research-ethics@deakin.edu.au

Please quote project number [2011-019].
PLAIN LANGUAGE STATEMENT AND CONSENT FORM for Parent Participants

TO: Parents / Legal Guardian

Consent Form

Date: September 2011

Full Project Title: A Qualitative Examination of an Early Intervention of a Mental Health Program Among Children: Comparisons, Openness, Peers and Esteem (COPE).

Reference Number: TBA

☐ I have read and I understand the attached Plain Language Statement.

☐ I freely agree to participate in this project according to the conditions in the Plain Language Statement.

☐ I give consent for the interview to be audio-taped

☐ I am aware of my option to review and edit my interview transcript at the conclusion of the interview

☐ I have been given a copy of the Plain Language Statement and Consent Form to keep.

The researcher has agreed not to reveal my identity and personal details, including where information about this project is published, or presented in any public form.

Participant’s Name (printed) .............................................................................................................

Signature ........................................................................................................................................ Date ..................................

Contact ph........................................................................................................................................

Researchers:

A/Prof Lina Ricciardelli: 9244 6866 or email: lina@deakin.edu.au

Emily Prytula: 0417 345 954 or email: erp@deakin.edu.au

Plain Language Statement & Consent Form to Parents Participants [project ID: 2011-019]; version n: [September 2011] Page 4 of 4
Appendix M: Plain Language Statement and Consent Form for Teachers

**PLAIN LANGUAGE STATEMENT AND CONSENT FORM** for Teachers

TO: Teachers

<table>
<thead>
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<th>Date:</th>
<th>March 2011</th>
</tr>
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<tbody>
<tr>
<td><strong>Full Project Title:</strong></td>
<td>A Qualitative Examination of an Early Intervention of a Mental Health Program Among Children: Comparisons, Openness, Peers and Esteem (COPE).</td>
</tr>
<tr>
<td><strong>Principal Researcher:</strong></td>
<td>Associate Professor Lina Ricciardelli</td>
</tr>
<tr>
<td><strong>Associate Researcher:</strong></td>
<td>Emily Prytula</td>
</tr>
</tbody>
</table>

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**Your Consent:**
You are invited to participate in a follow-up study about the COPE program. This Plain Language Statement contains detailed information about the study. If you wish to participate in the study, please complete and sign the consent form and a member of the research team will collect this on the day that they will be at the school (insert date).

**Purpose and Background:**
The purpose of this follow-up study is to gain an understanding from the children, parent/legal guardian’s perspective, facilitators of the program and teachers about the COPE program in which your student’s were involved, in 2009 and 2010. The program was designed to improve children’s self-esteem and other self-concepts they have about school, friends, their body image and children’s resiliency. It was devised to help children become more positive in how they compare themselves to others, in terms of their self-esteem and other self-concepts.

The current follow-up study will help further our understanding on how to further improve the COPE program. We would like to interview 12 children, 12 parents, the children’s class teachers, and the facilitators that assisted with delivering the program.

**Funding:**
School of Psychology, Deakin University

Plain Language Statement & Consent Form to Teachers [Project ID: 2011-019]
Procedure:
You are invited to participate in an individual interview to provide your views of the program. The interview will approximately be 10 to 20 minutes and will be conducted during school hours at a time that is agreeable to the teachers. The interview questions will include: What do you think the children liked about the program? What do you think the children didn’t like about the program? In what ways did you think the children benefited from the program? What other kinds of activities/training might assist children? A full list can be obtained from the researchers (see below).

To ensure accuracy of your responses, this interview will be audio-taped. A transcript of your interview will be available to provide you with the opportunity to review and give your approval about the accuracy of your responses. You will be asked at the conclusion of the interview if you would like to view your transcript.

Possible Benefits:
This work is important as many children by the age of 8 years are displaying low self-esteem and negative feelings about themselves. We need to help children develop a positive and healthy self-image at an early age. Feedback about the COPE program will help us to improve the program.

Possible Risks:
Participation in the COPE intervention program may have raised children’s awareness of their esteem and some negative feelings they experience. However, there are no anticipated risks to participants in the present follow-up study. In this study, questions will be open-ended and asked in a sensitive way. If you have any concerns, you can discuss these with the school counsellor, your own doctor, or you may contact one of the research team (see below).

Privacy, Confidentiality and Disclosure of Information:
You can be assured that your information will not be identified by name in any way in the reporting of the results. You are welcome to see your interview transcript before we use this information in our research. This research forms part of Emily Prytula’s thesis for the Doctor of Psychology (Clinical). The information we collect will be stored in a locked cabinet within the School of Psychology at Deakin University for a minimum of 10 years from the date of publication.

Results of Project:
A summary of the findings will be provided to your school and be available for any interested participant to read at the completion of the study. Please contact us below to receive a personal copy of this report (see below).

Participation is voluntary:
Plain Language Statement & Consent Form to Teachers
[Project ID: 2011-019]
Participation in this study is voluntary and you are free to withdraw from the study at any time up to the point that you review your interview transcript. Please note that not taking part in the study or withdrawing participation will not affect relationship with the school. A member of the research team will be available to answer any questions you may have about the research project and/or your involvement. Please do not sign the consent form until you have had a chance to ask your questions and received satisfactory answers. If you decide to withdraw from this study, please notify a member of the research team (see below).

**Ethical Guidelines:**

The study will be carried out in accordance to the National Statement on Ethical Conduct in Human Research (2007). In addition, the School Principal and the Department of Education and Early Childhood Development have given their approval for this research to take place.

**Complaints**

If you have any complaints about any aspect of the project, the way it is being conducted or any questions about your rights as a research participant, then you may contact:

The Manager, Office of Research Integrity, Deakin University, 221 Burwood Highway, Burwood VIC 3125, Telephone: 9251 7129, Facsimile: 9244 6581;

research-ethics@deakin.edu.au

Please quote project number [2011-019].
PLAIN LANGUAGE STATEMENT AND CONSENT FORM for Teachers

TO: Teachers

Consent Form

Date: March 2011

Full Project Title: A Qualitative Examination of an Early Intervention of a Mental Health Program Among Children: Comparisons, Openness, Peers and Esteem (COPE).

Reference Number: 2011-019

☐ I have read and I understand the attached Plain Language Statement.

☐ I freely agree to participate in this project according to the conditions in the Plain Language Statement.

☐ I give consent for the interview to be audio-taped

☐ I am aware of my option to review and edit my interview transcript at the conclusion of the interview

☐ I have been given a copy of the Plain Language Statement and Consent Form to keep.

The researcher has agreed not to reveal my identity and personal details, including where information about this project is published, or presented in any public form.

Participant’s Name (printed) ..............................................................................................................................

Signature ........................................................................................................................................ Date .................................

Researchers:

A/Prof Lina Ricciardelli: 9244 6866 or email: lina@deakin.edu.au

Emily Prytula: 0417 345 954 or email: erg@deakin.edu.au

Plain Language Statement & Consent Form to Teachers [Project ID: 2011-019]
Appendix N: Plain Language Statement and Consent Form for Facilitators

PLAIN LANGUAGE STATEMENT AND CONSENT FORM for Facilitators

TO: Facilitators

<table>
<thead>
<tr>
<th>Date:</th>
<th>March 2011</th>
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<tbody>
<tr>
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<td>Principal Researcher:</td>
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<td>Associate Researcher:</td>
<td>Emily Prynula</td>
</tr>
</tbody>
</table>

Your Consent:
You are invited to participate in a follow-up study about the COPE program. This Plain Language Statement contains detailed information about the study. If you wish to participate in the study, please complete and sign the consent form and return it to Deakin University in the supplied pre-paid envelope.

Purpose and Background:
The purpose of this follow-up study is to gain an understanding from the children, parent/legal guardian’s perspective, facilitators of the program and teachers about the COPE program in which you were involved, in 2009 and 2010. The program was designed to improve children’s self-esteem and other self-concepts they have about school, friends, their body image and children’s resiliency. It was devised to help children become more positive in how they compare themselves to others, in terms of their self-esteem and other self-concepts.

The current follow-up study will help further our understanding on how to further improve the COPE program. We would like to interview 12 children, 12 parents, the children’s class teachers, and the facilitators that assisted with delivering the program.

Funding:
School of Psychology, Deakin University
Procedure:
You are invited to participate in an individual interview to provide your views of the program. The interview will approximately be 10 to 20 minutes and will be conducted at Deakin University at a time agreeable to the facilitators. The interview questions will include: What aspects of the COPE program worked best? What aspects of the COPE program didn’t work well? In what ways did the children benefit from the program? What recommendations do you have for improving the program? A full list can be obtained from the researchers (see below).

To ensure accuracy of your responses, this interview will be audio-taped. A transcript of your interview will be available to provide you with the opportunity to review and give your approval about the accuracy of your responses. You will be asked at the conclusion of the interview if you would like to view your transcript.

Possible Benefits:
This work is important as many children by the age of 8 years are displaying low self-esteem and negative feelings about themselves. We need to help children develop a positive and healthy self-image at an early age. Feedback about the COPE program will help us to improve the program.

Possible Risks:
Participation in the COPE intervention program may have raised children’s awareness of their esteem and some negative feelings they experience. However, there are no anticipated risks to participants in the present follow-up study. In this study, questions will be open-ended and asked in a sensitive way. If you have any concerns, you can discuss these with one of the research team (see below).

Privacy, Confidentiality and Disclosure of Information:
You can be assured that your information will not be identified by name in any way in the reporting of the results. You are welcome to see your interview transcript before we use this information in our research. This research forms part of Emily Prytula’s thesis for the Doctor of Psychology (Clinical). The information we collect will be stored in a locked cabinet within the School of Psychology at Deakin University for a minimum of 10 years from the date of publication.

Results of Project:
A summary of the findings will be available to any interested participant at the completion of the study. Please contact us below to receive a copy of this report (see below).

Participation is voluntary:
Participation in this study is voluntary and you are free to withdraw from the study at any time up to the point that you review your interview transcript. Please note that not taking
part in the study or withdrawing participation will not affect relationship with Deakin University. A member of the research team will be available to answer any questions you may have about the research project and/or your involvement. Please do not sign the consent form until you have had a chance to ask your questions and received satisfactory answers. If you decide to withdraw from this study, please notify a member of the research team (see below).

Ethical Guidelines:
The study will be carried out in accordance to the National Statement on Ethical Conduct in Human Research (2007). In addition, the School Principal and the Department of Education and Early Childhood Development have given their approval for this research to take place.

Complaints
If you have any complaints about any aspect of the project, the way it is being conducted or any questions about your rights as a research participant, then you may contact:

The Manager, Office of Research Integrity, Deakin University, 221 Burwood Highway,
Burwood VIC 3125, Telephone: 9251 7129, Facsimile: 9244 6581;
research.ethics@deakin.edu.au

Please quote project number [2011-019].
PLAIN LANGUAGE STATEMENT AND CONSENT FORM for Facilitators

TO: Facilitators

Consent Form

Date: March 2011

Full Project Title: A Qualitative Examination of an Early Intervention of a Mental Health Program Among Children: Comparisons, Openness, Peers and Esteem (COPE).

Reference Number: 2011-019

☐ I have read and I understand the attached Plain Language Statement.

☐ I freely agree to participate in this project according to the conditions in the Plain Language Statement.

☐ I give consent for the interview to be audio-taped

☐ I am aware of my option to review and edit my interview transcript at the conclusion of the interview

☐ I have been given a copy of the Plain Language Statement and Consent Form to keep.

The researcher has agreed not to reveal my identity and personal details, including where information about this project is published, or presented in any public form.

Participant’s Name (printed) .................................................................

Signature ................................................................. Date ............................

Researchers:
A/Prof Lina Ricciardelli: 9244 6866 or email: lina@deakin.edu.au
Emily Prytula: 0417 345 954 or email: erp@deakin.edu.au