

The 'Staying Calm' Programme: An Evaluation of the Impact
of Group Work on Children's Emotional Resiliency,
Behaviour, Anger Control and Social Problem Solving Skills

Claire Whyard

Thesis submitted to the University of Nottingham for the
degree of Doctor of Applied Educational Psychology
May 2010

Contents

List of Tables	9
List of Figures.....	10
Abstract.....	11
1. Introduction to this Research.....	12
2. Literature Review	15
2.1 Introduction to Chapter 2	15
2.2 The 'Staying Calm' Programme.....	15
2.3 Explanation of Terminology and Key Concepts.....	18
2.3.1 Emotional Intelligence.....	18
2.3.2 Emotional Literacy	19
2.3.3 Emotional Competence.....	20
2.3.4 Emotional Regulation.....	21
2.3.5 Emotional Resilience and Resiliency	22
2.4 Review of Evaluation Studies	25
2.4.1 Search Strategy	27
2.4.2 Search Tools	27
2.4.3 Search Terms.....	27
2.4.4 Inclusion and Exclusion Criteria.....	29
2.5 Linking Theory and Practice: Research Evidence.....	29
2.5.1 Emotional Literacy Interventions.....	29
2.5.1.1 Emotional Literacy in British Schools: SEAL	32
2.5.1.2 Review of 'Emotional Literacy' Interventions.....	34
2.5.2 Emotional Resilience Interventions.....	41
2.5.3 An Example of a Specific Emotion: Anger	47
2.5.3.1 Anger as an Emotion and Its Influence on Behaviour	47
2.5.3.2 'Anger Management' Techniques and Approaches	48

2.5.3.3 Anger Studies in Children	50
2.5.3.4 Therapeutic and School-Based Approaches	50
2.6 Rationale for this Study	53
2.7 Hypotheses and Research Questions	54
3. Methodology	57
3.1 Introduction to Chapter 3	57
3.2 Methodological Considerations in Psychological Research	57
3.2.1 Paradigms within Psychological and Educational Research	57
3.2.2 The Influence of Philosophy and Beliefs: Ontology and Epistemology	58
3.2.3 The Constructivist Paradigm	58
3.2.4 The Post-Positivist Paradigm	60
3.2.5 Randomised Controlled Trials: The ‘Gold Standard’?	61
3.2.6 Evaluation Studies	62
3.3 Methodological Considerations for this Study	63
3.3.1 The Role of Stakeholders in the Study	63
3.3.2 The Adoption of a Post-Positivist Approach	64
3.4 Validity and Reliability	64
3.4.1 Validity	64
3.4.1.1 Threats to Internal Validity	65
3.4.1.2 Threats to External Validity (Generalisability)	65
3.4.2 Reliability and Validity of Measures	68
3.4.2.1 Standardised Measures: SDQ and Resiliency Scales	69
3.4.2.2 Non-standardised measures: The ‘Staying Calm’ Questionnaires and Child Evaluation Forms	72
3.5 Ethical Considerations	73
3.5.1 Adherence to Ethical Guidelines for Psychology Professionals and Researchers	73
3.5.2 Additional Ethical Safeguards within this Study	75
3.6 Study Design	76

3.6.1 Design	76
3.6.2 Participants	76
3.6.2.1 Sampling	76
3.6.2.2 Inclusion/ Exclusion Criteria	77
3.6.2.3 Sample Size	77
3.6.2.4 Participant Characteristics.....	79
3.6.2.5 Concurrent or Historical Intervention Exposure	79
3.6.3 Intervention	80
3.6.3.1 Type of Intervention	80
3.6.3.2 Procedure	80
3.6.3.3 Implementers.....	80
3.6.3.4 Training and Support Resources.....	80
3.6.3.5 Integrity of Implementation	82
3.6.3.6 Programme of Comparison Group	83
3.6.4 Measures	83
3.6.4.1 Child Screening.....	83
3.6.4.2 Child Measures	84
3.6.4.3 Teacher Measures	84
3.6.4.4 Parent Measures	85
4. Results	86
4.1 Introduction to Chapter 4	86
4.1.1 Data Selection.....	86
4.1.2 Approach to Data Analysis.....	86
4.1.2.1 Selection of Parametric and Non-Parametric Techniques.....	88
4.1.2.2 Selection of Appropriate Statistical Techniques.....	88
4.1.2.3 Assumptions of ANOVA: Homogeneity of Variance and Sphericity	89
4.2 Outcomes from the Resiliency Scales	90
4.2.1 Research Question and Hypotheses	90
4.2.2 Descriptive Statistics	90

4.2.3 Assumption Testing: Normality	91
4.2.4 Testing for Equivalent Groups	91
4.2.5 Comparing means using ANOVA	93
4.2.5.1 ANOVA Design	93
4.2.5.2 Assumption Testing: Homogeneity of Variance	93
4.2.5.3 Outcomes of ANOVA.....	93
4.2.5.4 Summary.....	95
4.3 Measures of Behaviour Change: SDQ	96
4.3.1 Research Question and Hypotheses	96
4.3.2 SDQ Results	98
4.3.2.1 Descriptive Statistics	98
4.3.2.2 Assumption Testing: Normality	98
4.3.2.3 Testing for Equivalent Groups	99
4.2.3.4 Comparing Groups: Wilcoxon Signed-Ranks Test	99
4.3.4 Summary.....	101
4.4 Measures of Anger Control and Social Skills: ‘Staying Calm’	
Questionnaires	102
4.4.1 Research Question and Hypotheses	102
4.4.2 Descriptive Statistics	103
4.4.3 Assumption Testing: Normality and Homogeneity of Variance..	103
4.4.4 Testing for Equivalent Groups	104
4.4.5 Comparing means using ANOVA	104
4.4.5.1 ANOVA Design	104
4.4.5.2 Outcomes of ANOVA.....	104
4.4.6 Summary.....	106
4.5 Adult Session Evaluations	107
4.5.1 Research Question	107
4.5.2 Results	107
4.6 Child Evaluations	107
4.6.1 Research Question	107
4.6.2 Results	107

4.7 Overall Summary of Results	110
4.7.1 Research Question 1	110
4.7.2 Research Question 2	110
4.7.3 Research Question 3	111
4.7.4 Research Question 4	112
4.7.5 Research Question 5	113
5. Discussion	114
5.1 Introduction to Chapter 5	114
5.2 Research Findings	114
5.2.1 Summary of Outcomes	114
5.2.2 Effects on ‘Resiliency’ Skills.....	114
5.2.3 Behaviour Change: SDQ	119
5.2.4 Anger, Social Skills and Social Problem Solving Measures: ‘Staying Calm’ Questionnaires.....	122
5.2.5 The ‘Staying Calm’ Experience.....	125
5.3 Links to Previous Research Evidence	125
5.3.1 The Quality of Research Evidence: Are Positive Effects what they Seem?.....	126
5.3.2 Do Actual Outcomes Match Intended Outcomes?.....	128
5.4 Implications for Future Interventions	130
5.5 Limitations of this Research	133
5.5.1 The use of Multi-element Hypotheses.....	133
5.5.2 Internal and External Validity	133
5.5.3 Reliability and Validity of Measures	137
5.5.3.1 Participant and Observer Error.....	137
5.5.3.2 Participant and Observer Bias.....	137
5.5.3.3 Construct Validity.....	138
5.6 Ethical Considerations	139
5.6.1 Confidentiality and Anonymity.....	139
5.6.2 The ‘Waiting List’ Control Group	139

5.6.3 Feedback to Participants	140
5.7 Implications for Future Research	140
5.7.1 Future Areas of Focus and Further Questions.....	140
5.7.2 Alternative Approaches: Returning to Epistemology and Methodology.....	142
5.7.2.1 The Attraction of Experimental Designs within Evaluation Research	142
5.7.2.2 The Drawbacks of a Post-Positivist Approach: What are the Alternatives?.....	143
5.7.2.3 The Researcher's Journey	144
6. Conclusions.....	145
6.1 Main Findings	145
6.2 The Unique Contribution of this Research.....	145
7. References	148
8. Appendices	158
8.1: Introductory Sheets from 'Staying Calm'	158
8.2: SDQ (Pre-test Version)	161
8.3: SDQ (Post-test Version).....	163
8.4: Practice Questions and Response Strip for Resiliency Scales	165
8.5: Resiliency Scales: Administration Guidelines.....	166
8.6: Teacher 'Staying Calm' Questionnaire.....	168
8.7: Parent 'Staying Calm' Questionnaire (Pre-test version)	169
8.8: Parent 'Staying Calm' Questionnaire (Post-test version)	170
8.9: Child Evaluation Sheet.....	171
8.10: Child Consent Form.....	172
8.11: Parent Consent Letter.....	173
8.12: Data Form Regarding 'Prior Exposure'	175
8.13: 'Staying Calm' Session Structure.....	176

8.14: ‘Staying Calm’ Session Contents	177
8.15: ‘Staying Calm’ Staff Training Materials	178
8.16: ‘Staying Calm’ Staff Guidance	183
8.17: Adult Diary Sheets	185
8.18: Session Observation Checklist	186
8.19: Parent Data Request Letter and Evaluation Sheet	187
8.20: Parent Follow-up Letter	189
8.21: Raw Data	190

List of Tables

Table 2.1: Details of databases searched and search terms used as part of the ‘Staying Calm’ study literature search	30
Table 2.2: Table showing inclusion and exclusion criteria for paper selection in the ‘Staying Calm’ study literature search.....	31
Table 2.3: The social and emotional aspects of learning addressed by Wave 2 SEAL (from Humphrey et al., 2008) and evaluation outcomes (key themes in bold).....	39
Table 3.1: Threats to validity within the study and measures used to reduce them.....	67
Table 3.2: Key characteristics of children participating in the study.....	78
Table 4.1: Explanations for the number of children included as part of each data set according to the measures used.....	87
Table 4.2: Shapiro-Wilk statistics for pre-test data from the Resiliency Scales measures	91
Table 4.3: Descriptive statistics for pre- and post-test measures of the Resiliency Scales sub-scales.....	92
Table 4.4: Comparison of ratio of variances between experimental and control groups for Resiliency Scales data	94
Table 4.5: Descriptive statistics (median and range) for pre- and post-test SDQ scores.....	97
Table 4.6: Shapiro-Wilk statistics for pre-test data for SDQ scores.....	98
Table 4.7: Shapiro-Wilk statistics for pre-test data for Teacher and Parent ‘Staying Calm’ Questionnaires.....	103
Table 4.8: Descriptive statistics for pre- and post-test data for Teacher and Parent ‘Staying Calm’ Questionnaires.....	105
Table 5.1: Summary of research questions, outcomes and conclusions for the ‘Staying Calm’ study.....	215
Table 5.2: Threats to validity, controls used and implications for the research design.....	135

List of Figures

Figure 2.1: Definitions of the main concepts assessed by the Resiliency Scales.....	26
Figure 2.2: Summary of the plan for the literature search strategy for the ‘Staying Calm’ study	28
Figure 3.1: Diagram devised by the researcher to summarise the relationships between ontology, epistemology and methodology as discussed within this research study.....	59
Figure 3.2: Threats to Internal validity and their definitions.....	66
Figure 3.3: Factors influencing the reliability and validity of measures in the ‘Staying Calm’ study	70
Figure 4.1: Pie chart showing analysis of group leaders’ ratings (percentages) of effectiveness of delivery for each session.....	108
Figure 4.2: Pie chart showing analysis of responses from children involved in ‘Staying Calm’ regarding their experience of session attendance	109
Figure 5.1: Examination of results obtained for Resiliency Scale measures and possible explanations of these results	116
Figure 5.2: Examination of results obtained for SDQ measures and possible explanations of these results	120
Figure 5.3: Summary of results obtained for ‘Staying Calm’ Teacher and Parent Questionnaire measures and possible explanations of these results	123
Figure 5.4: Alternative and unanswered research questions arising from the ‘Staying Calm’ study, including potential methods of investigation .	141

Abstract

'Staying Calm' is a small group programme designed to promote emotional skills, anger control and social problem solving skills in children. This study outlines an evaluation of the programme completed with 48 Year 5 and 6 children in two schools within a large shire county in the Midlands.

The study begins by examining previous research and literature relevant to children's emotional and social skills. A range of concepts and interventions that influence children's emotional literacy, regulation, competence and resilience are discussed and anger is used as an example of the ways in which regulation of a specific emotion can be understood and promoted within schools.

A randomised controlled trial design is used to evaluate the effects of the programme upon measures of children's emotional 'resiliency' (using the Resiliency Scales, Prince Embury, 2007), behaviour (using teacher versions of the Strengths and Difficulties Questionnaire, Goodman, 1997) and teachers' and parents' views of children's anger control, social skills and problem solving (using questionnaires designed for the 'Staying Calm' programme, Clifford & Davies, 2009).

Results from the study show that 'Staying Calm' had a statistically significant positive impact upon teachers' perceptions of children's overall behaviour difficulties, peer relationship problems and prosocial skills. Teacher ratings of conduct problems showed a significant improvement for the children who had not taken part in the intervention. There was no evidence of a statistically significant impact on children's perceptions of their 'resiliency' skills or adults' ratings of emotional symptoms, hyperactivity, anger control and social skills.

The results are discussed in relation to the material presented in the Literature Review and are examined in relation to implications for future provision and research. The study concludes with critical reflections upon the researcher's personal approach to the study and choice of methodology.

1. Introduction to this Research

The introduction of 'Every Child Matters' (Department for Education and Skills, 2003) and the Children Act (2004) led to a greater focus on relating evaluation of professionals' work within the children's workforce to specific outcomes for children. The 'Every Child Matters' materials were based around five key themes ('the five outcomes'), which aimed for all children to:

1. Be healthy
2. Stay safe
3. Enjoy and achieve
4. Make a positive contribution
5. Achieve economic well-being.

The focus on achieving these outcomes therefore had an impact upon the ways in which all Local Authority professionals worked with children. One new initiative, which was a main focus of the Children Act (2004), was that agencies should work together in a more 'multi-agency' format, as part of newly formed 'Children's Services' departments within Local Authorities.

Within schools, these changes also led to a greater awareness that education and learning should include those skills and competencies that would achieve 'the five outcomes' for children. These five outcomes are now included within the Framework for Inspection of Schools (Ofsted, 2010). The implications of this for schools include the fact that their success will be evaluated not only in relation to the ways in which they support their pupils to achieve academically, but also in relation to the ways in which they promote achievement and well-being in any areas affecting 'the five outcomes'.

At a similar time to the introduction of 'Every Child Matters', there was also a drive within schools to promote and improve behaviour and attendance, which was partly driven by the introduction of the Primary Behaviour and Attendance Pilot (Hallam, Shaw & Rhamie, 2006). This pilot included an explicit focus on

programmes designed to promote social and emotional well-being in children and young people, such as the SEAL (Social and Emotional Aspects of Learning) materials for Primary schools. Over the last six years, the use of this SEAL curriculum has become widespread within Primary schools in England. The curriculum includes materials for use at a whole-school and class level ('Wave 1'), at a small group level ('Wave 2') and an individual level ('Wave 3'). As will be seen in the Literature Review (Chapter 2), such programmes have been shown to influence the emotional and social skills of the children involved. It could therefore be argued that improvement in these skills will also have an overarching impact upon children's overall behaviour and achievement in the areas covered by 'the five outcomes' from 'Every Child Matters'.

At a similar time to the introduction of the SEAL initiative, the profession of Educational Psychology also recognised the importance of the need to play a part in promoting the outcomes of 'Every Child Matters' and the ways in which this could take place were examined (Farell *et al.* 2006). Within the researcher's present Local Authority, this drive to make a positive difference in relation to 'the five outcomes' and to children's social and emotional well-being led to an explicit focus on the ways in which the Authority's Educational Psychologists could contribute to promoting the emotional and social skills of children within Primary schools. This resulted in the creation of small group materials to complement the Wave 2 SEAL curriculum (the 'Primary Group Work' packages, Clifford & Davies, 2009), including the 'Staying Calm' package, which is the focus of this study. These programmes were piloted during the academic year 2007/8 and have since been revised to produce the final version, which was released in autumn 2009. The selection of the 'Staying Calm' materials as the focus of this study was therefore partly influenced by the recent release of these new materials within the Local Authority in which the researcher works, and by a need to evaluate their efficacy.

However, the study's topic is also an area of particular interest to the researcher which, as has been illustrated above, has been an area of focus within the profession during her time spent teaching and training as an Educational

Psychologist. Emotional health and well-being and the promotion of social skills in Primary school-aged children are also a personal and professional interest that the researcher has developed through experience gained as a Lead Behaviour and Attendance Professional and Key Stage 2 class teacher within a Primary school setting. This previous experience of working with adults and children within a Primary school context influenced the choice to complete the research within the familiar environment of Primary schools. It was hoped that the researcher's knowledge and understanding of the Primary curriculum, familiarity with the needs of children within Key Stage 2 and the understanding of the ways in which Primary schools may function, both culturally and practically, would facilitate the smooth running of the project in a way that would benefit all stakeholders. The fact that the schools chosen were the researcher's link schools for her Local Authority practice also meant that good working relationships had been established with key members of staff within the schools selected prior to the beginning of the project.

The researcher's account of the study now continues with Chapter 2 (Literature Review), in which existing literature and research regarding children's emotional and social skills and resilience is examined, using anger as a specific example. Research hypotheses and questions are derived from the Literature Review and then used as a basis for the details covered within subsequent chapters. Chapter 3 (Methodology) looks at general issues relating to the methods, design and ethics of the research and offers details of the specific design and measures used. Chapter 4 (Results) presents the results of data analysis and summarises the outcomes of the research in relation to the research questions and hypotheses. Chapter 5 (Discussion) relates these results to relevant issues considered within the Literature Review and Methodology chapters. The study concludes with Chapter 6 (Conclusions), which summarises the main findings of the study and examines the unique contribution offered by this research.

2. Literature Review

2.1 Introduction to Chapter 2

This chapter begins by introducing the 'Staying Calm' programme, its theoretical stance and its relationship with other targeted school-based programmes. The literature review then presents the key theoretical concepts and research evidence related to emotional literacy and resilience interventions for children, with a particular focus on those interventions used in small group and school contexts. The methods used for gathering the evidence analysed are outlined in a description of the literature search process. In discussing the links between theory and intervention, the emotion of anger is used as a specific example to illustrate ways in which work on emotional skills may be put into practice. To conclude the section, the contents of the research intervention chosen are linked to the theoretical and research evidence previously discussed. Research hypotheses and questions to be investigated are then outlined.

2.2 The 'Staying Calm' Programme

As was discussed in the Introduction (p.13), the 'Staying Calm' programmes (Clifford & Davies, 2009) were created as one part of a set of targeted eight week, small group, school-based interventions designed by Educational Psychologists in the researcher's Local Authority, as a response to a nationwide increase in interest in promoting emotional health and wellbeing in schools. The specific focus of each of the programmes was selected in light of the Educational Psychologists' experiences of schools' requests for more intensive support with promoting children's emotional regulation, self-esteem, behaviour and social skills than was available through general whole class (Wave 1) materials.

Following initial creation of the programmes, materials were piloted in 2007/2008 in a number of primary schools and later modified on the basis of feedback from staff and children. The programmes use the same session format as Primary SEAL Wave 2 interventions (e.g. using transition activities, core

activities and relaxation), although the content varies from SEAL, using materials specifically designed for use in each programme. The materials are designed for both Key Stage 2 and Key Stage 1 children, in the form of two separate programmes in each topic area. The theoretical basis for the programmes is broadly similar to that of the small group SEAL interventions, the evidence base for which is discussed in Section 2.5.1, p.29.

The Primary Group Work materials are intended to be used in situations where staff feel children may benefit from a targeted intervention to influence either emotional regulation (with a focus on anger using 'Staying Calm'), self-esteem (using the 'Feeling Good' programme) or social skills (using the 'Getting Along Together' programme). Despite there being separate programmes within the package, all of the programmes have core aims, which are described in the generic introduction to each programme:

The following materials aim to support children to:

- *Find out more about themselves and others.*
- *Feel confident and contribute ideas.*
- *Explore issues in more depth.*
- *Practise skills in a safe environment.*
- *Recognise that they have choices and help them to make the right ones.*
- *Learn to get on with other people.*
- *Learn to be reflective.*
- *Develop empathy.*
- *Develop coping skills (resilience).*

(Clifford & Davies, 2009, p.2, reproduced with permission of Leicestershire County Council.)

The materials also provide details of the benefits of group work in developing positive mental health and resilience (although this would perhaps be better described as 'resiliency', as discussed in Section 2.3.5, p.22). Further details of the programme's aims can be seen in Appendix 8.1, p.158.

This study will focus on the Key Stage 2 'Staying Calm' programme, which has a focus on '*developing skills and strategies to stay calm when things get tough*' (Clifford & Davies, 2009, p.1). This looks at identifying feelings, controlling and regulating emotions (with a focus on anger) and problem solving in situations of conflict. Whilst part of the programme concentrates on how to identify and deal with angry feelings, a deliberate choice was taken by the programme's authors to avoid the use of the concept of 'anger management', as it was felt that this was too negative. Instead they chose to use more positive language to describe capacity building (hence 'staying calm' rather than 'avoiding angry outbursts'). This therefore places the programme in the realms of positive psychology (Seligman, 2002). This positive outlook is also evident in the rationale behind the creation of the materials, which looks at building emotional literacy, thus having a potential impact on emotional resilience in those children who take part.

Whilst the materials do not explicitly highlight many of the theoretical underpinnings of the specific activities and techniques included, further research of the programme has made it possible to link the following to the 'Staying Calm' materials:

- Influence of Novaco's (1975) 'firework' model of anger, through examination of triggers for anger.
- Influence from cognitive behavioural techniques in altering negative thoughts and beliefs (Beck, 1991; Ellis, 1962).

Much of the content of the materials also relates to more general work on emotional competence (Saarni, 1997, 1999) and literacy (Mayer & Salovey, 1997; Sharp, 2001; Weare, 2004), as illustrated in the general aims of the programme. The literature review will therefore focus upon the themes that have been highlighted within the 'Staying Calm' materials, such as ways in which emotional literacy, competence and regulation (specifically in relation to anger) might have an influence upon a child's emotional and social skills, behaviour and resilience. Research into similar school-based targeted, small

group programmes will be examined, in order to elucidate the ways in which the efficacy of 'Staying Calm' may best be investigated and outcomes compared with similar interventions. This will allow for specific research aims and hypotheses to be formed in light of both the current research evidence available and in relation to current theoretical understanding of the potential effect of the programme's content upon children's social, emotional and behavioural skills and resilience.

2.3 Explanation of Terminology and Key Concepts

There are a variety of different terms that can be used to describe theoretical concepts in the realm of children's social and emotional skills. In relation to interventions with school-aged children and young people, approaches may be based on the promotion of emotional intelligence, emotional literacy, emotional competence, emotional regulation, emotional resilience or resiliency. The variety of terms used can reveal much about the ways in which these concepts may be seen as similar or different and, where used accurately, the choice of wording may offer some insight into how these concepts may be applied in a practical context. However, in other cases, some of these terms may be used interchangeably, and perhaps erroneously, offering little in relation to a clear theoretical foundation for an intervention. When discussing these different understandings of emotional skills in childhood, it is therefore necessary to be clear about which theoretical concepts are being used and how these can be accurately understood and identified. The following sections will explore the background to these terms and elucidate the different ways in which the development of emotional skills and understanding in children may be conceptualised and understood.

2.3.1 Emotional Intelligence

'Intelligence' has traditionally been defined as '*the aggregate or global capacity of the individual to act purposefully, to think rationally and to deal effectively with his environment*' (Wechsler, 1944, p.3). In this form, intelligence was seen as a pre-determined and fixed set of qualities which could be quantified using an 'IQ'

(Intelligence Quotient) test, resulting in a measurement of a person's innate intelligence, or IQ.

However, in more recent years, the work of Gardner (1993), examining the idea of 'multiple intelligences', popularised the view that many different areas of intelligence may exist, rather than just one. Of the seven areas he highlighted, two forms of 'personal intelligence' were included: the ability to understand others ('interpersonal intelligence') and the ability to understand oneself ('intrapersonal intelligence'). This concept was further developed by Goleman (1996), whose work can be credited with introducing the idea that emotion is key to all human experience and that 'emotional intelligence', the ability to exercise self-awareness, impulse control, persistence, zeal, motivation, empathy and social deftness, may be a better measure of potential success than the traditional qualities measured as part of IQ.

However, the view of these emotional skills or qualities as a form of 'intelligence' presents some problems with the ways in which the concepts can be used to promote success in a practical context. Goleman (1996) criticises the idea of IQ as it is seen as a genetically pre-determined, fixed entity that is a poor predictor of a person's future success. This is, however, not so much an argument in support of the use of emotional intelligence as a simple criticism of the view of IQ as being stable and predictive in nature- a view which has long been discredited in the realms of Educational Psychology. In fact, through conceptualising the idea of 'emotional intelligence' as an 'intelligence', Goleman is also adopting terminology that is limiting- in adopting the term 'intelligence', he is also perhaps implying that these skills and abilities exist within a person, to some extent relying on pre-determined 'potential', rather than viewing it as a set of competencies or skills that can be developed and influenced by later experiences.

2.3.2 Emotional Literacy

Originally attributed to Steiner and Perry (1997), the term 'emotional literacy' has become popular in the British education system as a term for describing the

ways in which the skills and competencies of emotional intelligence and the managing of our own and others' feelings may be learned and developed (Sharp, 2001). In synthesising the work of key authors in the area of emotional intelligence and literacy such as Salovey & Mayer (1990), Goleman (1996, 1998) and Steiner and Perry (1997), Sharp (2001) suggests that 'emotional literacy' can encompass the skills of:

- Self-awareness
- Managing emotions
- Motivating oneself
- Empathy
- Handling relationships.

It has been suggested that viewing emotional skills and understanding in this way promotes the possibility that, rather than being a fixed entity, emotional literacy encompasses a set of skills that can be pursued, taught and encouraged (Weare, 2004). The idea of emotional literacy may therefore offer a useful way of applying the concept of emotional intelligence practically in the school context.

2.3.3 Emotional Competence

Another key area of study in the development of emotional skills and understanding is that of 'emotional competence'. This is defined as '*the demonstration of self-efficacy in emotion-eliciting social transactions*' (Saarni, 1997). The concept of emotional competence is therefore much more like emotional literacy than intelligence, in that it examines the use of emotional understanding and skills and how these may be developed in practical contexts. However, emotional competence is explicitly concerned with a child's emotional development and self-regulatory ability and therefore offers the opportunity to examine skills within the context of a child's social, emotional, cognitive and physical development. This therefore offers a more holistic view than concentrating on the development of a more isolated set of skills, which the term emotional literacy may imply.

The skills of emotional competence (summarised from Saarni, 1999, p.5) include:

1. Awareness of one's own emotional state.
2. Ability to work out others' emotions based on contextual cues (expressive and situational).
3. Ability to use the vocabulary of emotion.
4. Ability to be involved in others' experiences both empathically and sympathetically.
5. Ability to understand that outer expressions do not always correspond to a person's inner emotional state.
6. The ability to use self-regulatory strategies to manage emotional states (e.g. through reducing intensity or duration of feeling).
7. Awareness that the nature of relationships is largely defined by how emotions are communicated within that relationship.
8. The ability to control one's own emotions (self-efficacy), in line with one's own moral and personal theories of emotional balance.

The effects of the successful development of these skills are thought to include the ability to effectively manage emotions, an increase in self-esteem and the possession of a greater capacity for coping and resilience (Saarni, 1999).

The concept of emotional competence, much like emotional literacy, focuses mainly on the skills and inner abilities of an individual. However, it also begins to take account of a more interactionist view, in that it acknowledges the potential influence of contextual and environmental variables, such as the dynamics of relationships and the cultural context (as reflected in points 7 and 8).

2.3.4 Emotional Regulation

The study of the development of emotional regulation in infants and young children has contributed to an understanding of how emotional competence and the building of emotional literacy may take place. Thus, any discussion of emotional competence and literacy would not be complete without some

attention to emotional regulation. Developmental perspectives on emotional regulation (e.g. Mascolo & Griffin, 1998; Saarni & Harris, 1991; Saarni, Mumme & Campos, 1998) highlight that there are many different influences upon a child's emotional state and their ability to process social cues, including their physical maturity (brain mechanisms and chemistry), cognitive and linguistic development, as well as their social, emotional and personality development.

So, rather than seeing emotional regulation as a set of skills or abilities, emotional regulation may be viewed as a process that, in part, occurs and develops unconsciously, out of the direct control of the child. However, there may also be conscious, effortful elements related to emotional regulation, such as a child being able to adopt strategies to help regulate their own behavioural responses to emotion and behave in socially appropriate ways. The skill of regulating one's emotions will require the use of emotional competence through understanding one's own emotions and the ways in which these can be attended to and appropriately expressed. It is perhaps most useful, therefore, to see emotional regulation as one element or sub-skill of emotional competence. However, the understanding required to be able to recognise one's own emotions may also be seen as a part of being emotionally intelligent or literate and emotional regulation could be seen as one of the intrapersonal aspects that contributes to emotional literacy skills. Therefore, in trying to promote emotional literacy and emotional competence, emotional regulation is also an area that will require consideration.

2.3.5 Emotional Resilience and Resiliency

The term resilience, in a psychological context, refers to the process or attainment of '*positive adaptation despite exposure to significant adversity or trauma*' (Luthar, 2006, p.742). Rutter (1987) has been a key author in examining the factors which may affect resilience- those 'protective' factors that help mediate the effects of adversity and those 'risk' factors which may increase the likelihood of negative outcomes.

In some literature, the idea of 'emotional resilience' is used to refer to an

individual's ability to cope effectively in relation to emotional and social situations. However, some authors criticise this use of the term 'resilience' as being part of a 'single location discourse' (Pianta & Walsh, 1998) - the idea that resilience can be located solely within the individual. Instead, to truly understand resilience, the interaction of systems around the child must also be considered, rather than a set of individual qualities or 'skills' that can be explicitly taught.

In addition to the objection to the use of the term 'emotional resilience' to describe an individual's skills or qualities on the grounds that a more systemic, contextual perspective is needed, the definition of 'resilience' itself also suggests that it cannot be used to describe a set of individual characteristics. In order for a child to be seen as resilient, two sets of conditions need to be met: 1) that there is some exposure to adversity and 2) that positive adaptation results despite exposure to these circumstances (Luthar, Cicchetti & Becker, 2000). Thus, resilience can only logically be seen as either an outcome of a set of circumstances, or as a process that ensures adaptability in the face of adversity (Miller & Daniel, 2007). 'Resilience' is therefore, by definition, a concept or phenomenon, rather than a fixed entity and it is therefore inaccurate to use the term 'resilience' to refer to a set of individual skills or characteristics, even when referring to 'emotional resilience'.

So, in the face of this, to what might the term 'emotional resilience' refer? The salutogenic model of resilience emphasises the positive protective factors that may promote the resources for successful coping regardless of any exposure to risk factors (Sun & Stewart, 2007). It may be, then, there are some components that contribute to resilience that can be promoted and taught in the context of trying to promote the circumstances for 'emotional resilience'. It may then be more helpful to look at promoting resilience as a process or desired outcome, rather than seeing it as a trait.

Alternatively, it has also been suggested that by overcoming threats to well-being through positive adaptation, a child may be described as 'resilient'. The

term 'resiliency' may be more helpful in describing any personal traits or characteristics that have helped contribute to this successful adaptation (Luthar *et al.*, 2000). Therefore, when examining the intrapersonal factors that promote emotional resilience, the term emotional resiliency can be used as an umbrella term for those skills and competencies that contribute to successful outcomes, regardless of the presence of risk.

There is potential, then, to use the idea of emotional resiliency as a means for promoting overall resilience, through a focus on protective factors. The suggestion that resilience is an 'ordinary' rather than 'extraordinary' process has been put forward by Masten (2001) and Masten & Reed (2002), who suggest that rather than viewing resilience and resiliency as something exhibited or possessed by only a few exceptional youngsters, instead it is a set of abilities that all people ordinarily develop in the normal process of development. Thus, personal resiliency is something that every person will possess in varying degrees and it is therefore something that can be seen from a positive point of view, rather than taking a purely deficit-based approach. This viewpoint therefore brings the idea of resiliency into line with a more contemporary realm of positive psychology (e.g. Seligman, 2002), within which the focus of intervention should be viewed as building competencies (or in this case resiliency), rather than seeing things from the point of view of compensating for deficits or weaknesses, as the traditional 'resilience in the face of risk' model may do. It can therefore be argued from one viewpoint that any resiliency interventions should be targeted to those most at risk as a compensatory or 'protective' mechanism. However, there are also grounds to suggest that universal approaches may be of benefit, since personal resiliency is something that all possess, which can therefore be promoted in all children.

In line with the exploration of personal resiliency as a positive phenomenon, Prince-Embury (2007) identified the personal qualities and attributes that contributed to young people being more able to thrive in the face of difficult circumstances (i.e. those personal qualities, traits and competencies that contribute to resilience or a child being resilient). Thus, whilst environmental

influences were acknowledged, the key factors considered were those relating to the intrapersonal qualities that an adolescent may possess. In work related to the creation of a set of 'Resiliency Scales', Prince-Embury (2007) was able to identify, categorise and assess the protective and vulnerability attributes that each individual possesses, which were outlined as three key constructs: a Sense of Mastery, a Sense of Relatedness and Emotional Reactivity. Later work (Prince-Embury, 2007) confirmed that these constructs and categories were also applicable to pre-adolescent youngsters, including children from the age of nine. Figure 2.1, p.26, defines these concepts and gives details of the content assessed within each of the scales.

2.4 Review of Evaluation Studies

In order to be able to evaluate the current evidence available in relation to interventions, a literature search and review of evaluation studies was completed for selected topic areas.

The areas covered were:

- Interventions related to anger and aggression in children and adolescents.
- School-based interventions related to emotional literacy.
- School-based interventions related to emotional resilience/competence.

The following section outlines the ways in which these searches were conducted and briefly describes the key information sources consulted.

Concepts Assessed by the Resiliency Scales

Adapted from Prince-Embury (2007, p.10-14)

Sense of Mastery

Optimism: *Positive attitudes about the world/ life in general and about one's own life specifically.*

Self-efficacy: *Developing problem solving attitudes and strategies.*

Adaptability: *Ability to be personally receptive to criticism and to learn from one's mistakes.*

Sense of Relatedness

Sense of trust: *The degree to which others are perceived as reliable and accepting and the degree to which an individual can be authentic in these relationships.*

Perceived access to support: *The individual's belief that there are others to he or she can turn to when dealing with adversity.*

Comfort with others: *The degree to which an individual can be in the presence of others without discomfort or anxiety.*

Tolerance: *An individual's belief that he or she can safely express differences within a relationship.*

Emotional Reactivity

Sensitivity: *The threshold for a reaction and the intensity of a reaction.*

Recovery: *The ability to bounce back from emotional arousal or disturbance of emotional equilibrium.*

Impairment: *The degree to which a youth is able to maintain an emotional equilibrium when aroused.*

Figure 2.1: Definitions of the main concepts assessed by the Resiliency Scales

2.4.1 Search Strategy

Details regarding literature search methods were obtained from a variety of sources (including Fink, 2005; Galvan, 2006; Khan, Kunz, Kleijnen & Antes, 2003 and Petticrew & Roberts, 2006). The information gathered was then used as a guideline for evaluation of papers (see Figure 2.2, p.28 for a summary of the search strategy).

Once an initial practical screen was employed, selected papers were evaluated in more detail, using the 'PICO' strategy suggested by Petticrew & Roberts (2006):

- 1) Population- who were the participants?
- 2) Intervention- what was done?
- 3) Control- what is the study's design? Was a control group used?
- 4) Outcome Measures- how was the effect of the intervention measured?
- 5) Results- What was the outcome? Was the intervention effective?

Details of the exact search criteria and techniques used for each area of interest are given in the sections that follow.

2.4.2 Search Tools

The literature search completed included searches using 'PsycINFO' and 'ISI Web of Knowledge' databases. Searches within these databases often utilised terms from the engine's thesaurus and the use of 'exploded terms' (see Section 2.4.3 below). Manual searches were also completed of the paper journals 'Educational Psychology in Practice' and 'Educational and Child Psychology'. Some papers were also found through searches of reference lists from papers uncovered in the database, manual search and use of Google Scholar.

2.4.3 Search Terms

Table 2.1, p.30, illustrates the search terms used, with thesaurus terms in italics. Some 'exploded terms' were used, which involved selecting one term and

Summary of Plan for a Literature Search Strategy

- Decide aims for each search.
- Search at least two databases (e.g. Psych Info and ISI Web of Science).
- Reference lists from key review papers also need to be searched.
- Use the thesaurus from the database where possible to find search terms. If this is not possible, select a general term (e.g. 'anger management').
- Narrow down searches from broad to more specific by combining search terms (e.g. 'anger management' plus 'school' and 'group').
- Inclusion/ exclusion criteria initially should include a practical screen only e.g. English language, years searched, content of the papers (topic).
- Then apply a more rigorous practical screen and a screen for methodological quality e.g. populations, outcomes, type of study, use of control group etc.
- Use the 'PICO' (population, intervention, control, outcomes) strategy (Petticrew & Roberts, 2006) to analyse abstracts.

Figure 2.2: Summary of the plan for the literature search strategy for the 'Staying Calm' study

'exploding' it, so that, in addition to the chosen term, many other narrower but related terms would also be searched (so the 'exploded' search for 'schools' also searched for items including 'elementary schools', 'middle schools' and 'high schools', for example). Truncation of words is indicated by an asterisk (*), meaning that any word containing those letters would be searched for (for example 'Child*' would produce searches for child, children, childhood etc.).

2.4.4 Inclusion and Exclusion Criteria

Table 2.2, p.31, highlights the inclusion and exclusion criteria used to select or reject papers for use in the review. These criteria were chosen to ensure that the search uncovered a high quality, relevant body of literature upon which to base the literature review.

2.5 Linking Theory and Practice: Research Evidence

This section focuses on research evidence gathered in studies and evaluations of school-based interventions, specifically approaches dealing with anger, emotional literacy and emotional resilience. It is necessary to examine the methodology and outcomes of previous research in order to ascertain which approaches have been used, with whom and with what success. This information will then offer crucial insights into which types of programme or type of research may be of most benefit to children in differing situations and contribute to a better understanding of the effects and outcomes that may be achieved using the 'Staying Calm' programme.

2.5.1 Emotional Literacy Interventions

The following section will examine school-based research into SEAL (Social and Emotional Aspects of Learning) and other programmes used to boost 'emotional literacy'. Whilst the focus will mainly be upon small group interventions, many of the interventions, including SEAL, involve both universal (e.g. whole school or population, regardless of risk or difficulty) and targeted (e.g. small group, for those at risk of or showing evidence of social and emotional problems) elements, and it is therefore also necessary to pay some attention to the universal applications of such interventions.

Topic	Psych Info	Web of Knowledge
Anger and aggression	<i>Anger control</i> AND child* <i>Anger control</i> AND school	Anger control AND child* AND school*
Emotional Literacy	<i>Emotional literacy</i> AND <i>Emotional intelligence</i> AND child* <i>Emotional literacy</i> AND <i>Emotional Intelligence</i> AND intervention	Emotional literacy AND child* AND school*
Emotional Competence/ Resilience	Emotional resilience AND child* <i>Resilience (psychological), [exploded term]</i> AND child* AND schools [<i>exploded term</i>] Emotional competence AND child* AND school AND intervention	Emotional resilience AND child* AND school* Emotional competence AND child* AND school*

Table 2.1: Details of databases searched and search terms used as part of the ‘Staying Calm’ study literature search

Area	Inclusion Criteria	Exclusion Criteria
Type of Literature	Journal research articles only	Book reviews, opinion pieces, books
Language of Publication	English	Languages other than English.
Date of Publication	Any	None
Population	Children of school age (4-16). Not related to specific populations or conditions (e.g. relevant to general school population).	Adults, children below 4, teens above 16. Focus on narrow population with particular conditions (e.g. visually impaired, autism).
Relevance of Topic	Must relate to anger control, emotional literacy/ competence/ resilience or studies of interventions that relate to these outcomes.	Information not related to anger control, emotional literacy/ competence/ resilience (e.g. just looks at aggressive behaviour but not related to anger control).

Table 2.2: Table showing inclusion and exclusion criteria for paper selection in the ‘Staying Calm’ study literature search

2.5.1.1 Emotional Literacy in British Schools: SEAL

Emotional literacy has become a key focus for Primary schools within the UK education system, particularly through the introduction of the 'SEAL' (Social and Emotional Aspects of Learning) curriculum by the DfES, which was initially introduced as part of the Primary Behaviour and Attendance Pilot in the years 2003-2005 (Hallam, Rhamie & Shaw, 2006; Hallam, Shaw & Rhamie, 2006). Whilst not compulsory, the SEAL curriculum, now designed for Early Years, Primary school and Secondary school settings, has been widely adopted as a way of promoting emotional literacy and social skills in schools. It exists both as whole school input (e.g. assemblies), whole class input (e.g. lessons, 'Wave 1'), small group input (the 'silver set' or 'Wave 2' materials), individual work ('Wave 3'), work with parents and development work for staff.

The Department for Children, Schools and Families (DCSF) states that the social and emotional skills taught in Primary and Secondary SEAL are based upon the 'five-fold categorisation' of social and emotional skills developed by Goleman (1996). These skills involve both personal and social domains (DCSF, 2009):

- Personal:
 - Self-awareness
 - Managing feelings
 - Motivation
- Social:
 - Empathy
 - Social skills

This idea of emotional literacy therefore seems to be in line with many of the areas highlighted by Sharp (2001) (see Section 2.3.2, p.19). Within SEAL, these broad domains have then been *“unpacked” into a wide range of universal learning outcomes and to more specific ones which are appropriate for particular age groups and particular learning opportunities used in the*

curriculum materials' (DCSF, 2009, p.2). Rather than using the terms 'emotional intelligence' or 'emotional literacy', however, the package is intended to promote what Weare and Michel (2008) prefer to call 'social and emotional aspects of learning'.

However, whilst the SEAL package has been made available to all schools, the extent to which the curriculum materials and learning opportunities have been created using a solid evidence base or theoretical foundation has been called into question. In searching for the information upon which the Primary SEAL programme was originally based as part of this thesis, it was not possible to find any extensive details of references or explanations of the theoretical bases of any of the activities suggested within the Primary SEAL materials themselves. This raises inevitable questions regarding whether there is research and theoretical evidence upon which the materials are based. In addition, it can be seen through the studies described below, much of the content of SEAL was not fully tested or evaluated until it had been rolled out nationwide, leaving questions over whether its introduction can be seen as promoting good quality, evidence-based practice, or whether it is a vehicle that was chosen as part of a zeitgeist related to the new interest in emotional intelligence, which followed the emotional intelligence debate begun by Gardner (1993) and Goleman (1996). The SEAL programme and its creators have been criticised by some authors for these reasons, amongst others (Craig, 2007).

However, in a robust defence of these types of comments as part of a paper directed specifically towards Craig's criticisms, Weare and Michel (2008) respond by outlining the evidence base for the SEAL materials. According to Weare and Michel (2008) SEAL is partly based upon a review conducted by Weare and Gray (2003) into 'What Works in Promoting Children's Social and Emotional Competence'. In addition, material is also influenced by a review by Wells, Barlow and Stewart-Brown (2003) regarding mental health promotion, which suggested the need for both universal and targeted mental health promotion programmes. In addition, work by Elias *et al.* (1997), relating to the promotion of social and emotional learning through the CASEL (Collaborative

for the Advancement of Social and Emotional Learning) network, research into emotional literacy (Mayer & Salovey, 1997), anger management (Novaco, 1975), cognitive-behavioural theory and problem solving approaches are also cited as influencing the programme content. Thus, there is, in fact, a clear rationale behind the contents of the SEAL materials. Many of these studies and concepts will be covered below in an exploration of the literature relating to emotional literacy.

2.5.1.2 Review of 'Emotional Literacy' Interventions

Many of the literature reviews that address group interventions related to emotional literacy take a mental health focus, looking at promoting mental health and 'wellbeing' within schools, rather than 'emotional literacy' as such. Key reviews in this area include those completed by Wells, Barlow and Stewart-Brown (2003) and Shucksmith, Summerbell, Jones and Whittaker (2007).

Wells *et al.* (2003) examined in detail the 17 most carefully controlled studies, from a total of 425 which were found to address universal approaches to mental health promotion. The majority of these were based in the United States of America (USA) and most showed that the use of school-based mental health promotion programmes had a *'positive impact on children's mental health'* (Wells *et al.*, 2003, p.217). They also found that certain types of programme were likely to have more impact than others: *'long-term interventions promoting positive mental health of all pupils and involving changes to the school climate are likely to be more successful than brief class-based mental illness prevention programmes'* (Wells *et al.*, 2003, p.197). Thus, it is suggested that whole school, systemic approaches may be preferable to targeted, short-term programmes. However, it is also suggested that this type of universal programme, in combination with targeted intervention, *'might in some circumstances represent the optimum approach'* (Wells *et al.*, 2003, p.218).

In contrast to the examination of universal approaches in Wells *et al.* (2003), a review by Shucksmith *et al.* (2007) examined the efficacy of targeted interventions for promoting mental health and wellbeing in primary-aged

children. They found 32 studies that met inclusion criteria, including school-based programmes that had been randomised and controlled. Again, the majority of studies were based in the USA, which is likely to limit the applicability to the United Kingdom's (UK) school system. However, evaluation of the studies showed that, regardless of the types of problem being addressed (depression, anxiety, oppositional defiant disorder or conduct disorder), multi-component approaches that use '*CBT and social skills training for children... training of parents [and teachers] in appropriate reinforcement and better methods of discipline*' are the most effective (Shucksmith *et al.*, 2007, p.41). The majority of the studies cited also used psychologists, rather than school staff, in the implementation of the programmes. In relation to aggressive children, programmes that involved the use of '*normal*' role models...to demonstrate more prosocial skills' (Shucksmith *et al.*, 2007, p.41) led to improved outcomes for the aggressive children. Thus, there is clear evidence that there are certain types of targeted intervention that may be preferable in ensuring positive outcomes.

A key work that brought together the idea of mental health promotion, emotional and social competence and wellbeing, emotional intelligence and emotional literacy is that of Weare and Gray (2003). Their paper suggests that the theme of 'emotional literacy' may be used, but that it is preferable to use the alternative terms 'emotional and social wellbeing' to refer to the '*environments and underlying determinants that enable the competences to be developed*' and 'emotional and social competence' to refer to the '*learning and teaching of knowledge, attitudes and skills*' (Weare & Gray, 2003, p20). In examining ways of applying research from these areas to educational settings, they called for the use of evidence-based practice in what is taught and highlighted the need for explicit programmes that teach such emotional and social competence in schools. In calling for such programmes, the authors also make a strong case for the need to develop more rigorous and systematic evaluation of programmes in order to contribute to a reliable evidence base for effective interventions in England.

The first evaluation of the use of SEAL materials can be found in the work of

Hallam, Shaw *et al.* (2006), which involved an evaluation of whole class and small group SEAL within 25 pilot Authorities. Results showed positive impacts of the whole school work, with pre- and post-intervention measures showing that teachers perceived positive changes in children's well-being, confidence, social and communication skills, relationships, bullying, playtime behaviour, prosocial behaviour, attitudes towards school, awareness of emotions in others, learning and attainment (Hallam, Shaw *et al.*, 2006). However, these measures only take into account staff perceptions. The measures used with children showed clear gender differences in response (girls responding better than boys) and that any changes may in fact be age-related, rather than being due to the input given, as responses became more negative as age increased.

Despite multiple regression analyses showing that positive changes in social skills, emotional awareness and relationships were due to the pilot, the lack of a control group in the study makes it difficult to credit any of the positive perceived changes as being definitely due to the pilot, as other influencing factors cannot be ruled out. Hallam (2009) gives a detailed explanation of the reasons for the use of the repeated measures design, illustrating the need for this within the larger framework of the behaviour and attendance pilot, designed to assess the impact of several initiatives on behaviour and attendance, rather than just the impact of SEAL on emotional and social skills and wellbeing.

A similar problem with methodology arises in the evaluation of the small group intervention, which was completed with targeted groups, with children chosen due to '*poor behaviour, risk of exclusion, lack of response to rewards and sanctions, withdrawn behaviour, social difficulties in relation to other children, or fears attending school*' (Hallam, Shaw *et al.*, 2006, p.5). Pre- and post-measures (using the Goodman Strengths and Difficulties Questionnaire or SDQ) showed that there was a statistically significant improvement in emotional symptoms and prosocial behaviour. Whilst this was backed up by parent perceptions of change (82% feeling the programme had made a positive difference), the lack of control group again makes it difficult to ascertain whether such changes are, in fact, due to the pilot or may be attributed to other

influencing factors.

So, there is some evidence, though limited due to limitations in the methodology used, to show that perceptions of school staff are that SEAL can be effective and that it can have a positive influence upon targeted children through small group work. Despite the caution with which the outcomes of the pilot should be treated, due to methodological considerations, the study does offer some practical insights into the implementation of universal and targeted SEAL programmes and the ways in which it may be helped to be more successful. For example, the following points could be applied to future implementation (summarised from Hallam, Shaw *et al.*, 2006):

- Commitment of the senior management team is key to success.
- Staff need to be given sufficient time to become familiar with the content and purpose of the programmes.
- Taking a whole school approach is most successful.
- The use of the schools' own staff (e.g. teaching assistants) helped implementation of small group work.
- School staff running small group work would require formal training, rather than receiving it as part of the groups.
- There is a need to include a mixture of children in the small groups, not just those with difficult behaviour.

Thus, despite the flaws in the methodologies for the initial pilot in relation to evaluating outcomes, the studies provide a good starting point for further investigation into the efficacy of the different elements of the SEAL package.

In addition to the 'Wave 1' intervention, there have also been research evaluations of small group SEAL (also known as 'Wave 2' SEAL or the 'silver set') in schools in England. Research by Humphrey *et al.* (2008) involved a quantitative evaluation of the impact of the small group work in 37 Primary schools, in addition to interviews across 12 Local Authorities and the selection of six 'lead practice schools' from the North West. Each programme involved

groups made up of a mixture of 'target' children and 'role model' children, in groups that took place for 30-40 minutes, once per week for between six and eight weeks.

In evaluating two topic areas from the SEAL small group materials- ('New Beginnings', 'Going for Goals'), a pre-test post-test control group design was used, and for a further two areas ('Getting On and Falling Out', 'Good to be Me'), a single group phase change design was used, with data collection from staff, parents and children, thus allowing triangulation of data. Data gathering took place at three different time points. Despite there not being a control group in the single group phase change designs, the design is described by the authors as allowing the baseline phase to serve as the group's own control. The measures used included a measure of emotional literacy (the Emotional Literacy Assessment Instrument), behaviour (SDQ), social skills (Child Role Play Measure) and emotional understanding (Kusché Affective Interview).

The quantitative evaluation showed that there was a statistically significant positive impact, with improvements being found in at least one of each of the four topic areas implemented, which was sustained on follow-up seven weeks later. Table 2.3, p.39, illustrates the intended effects of the different areas of the programme evaluated and the actual positive impacts found.

Overall, average effect sizes were small and some anomalous findings also resulted, for example in the 'Getting On and Falling Out' programme there was a *'significant reduction in staff-rated empathy during the intervention phase'* (Humphrey *et al.*, 2008, p.7). Thus the results illustrate a rather *'complicated picture...regarding the impact of the primary SEAL small group interventions'* (Humphrey *et al.*, 2008, p.6). There is some evidence of positive impact, although this appears to be very patchy depending on the exact nature of the intervention being used, and does not always seem to be related to the actual outcomes intended.

Another intervention designed to promote social and emotional skills that has

Themes	Aspects of learning	Results of evaluation
New beginnings	Empathy , self-awareness, motivation, social skills	Increase in overall pupil emotional literacy in experimental group (small/medium effect size)
Getting on and falling out	Self-regulation , empathy, social skills	Pupil social skills increased in intervention phase (but non-significant)
Going for goals!	Motivation , self-awareness	Staff perceptions of self-regulation and peer problems in experimental group. Increase in empathy, self-regulation, social skills and overall emotional literacy (medium effect size)
Good to be me	Self-awareness, self-regulation , empathy	Peer problems in intervention phase (but non-significant)

Table 2.3: The social and emotional aspects of learning addressed by Wave 2 SEAL (from Humphrey et al., 2008) and evaluation outcomes (key themes in bold)

been evaluated within English schools is the Promoting Alternative Thinking Strategies (PATHS) curriculum (Kusché & Greenberg, 1998). In a similar way to SEAL, the programme seeks to promote skills related to emotional literacy (as listed in Section 2.5.1.1, p.32), although it could be argued that it '*represents a more structured and rigorous programme*' than SEAL (Curtis & Norgate, 2007). Following positive evaluations in the USA (e.g. Greenberg, Kusché, Cooke & Quamma, 1995), psychologists in the UK have also introduced the programme to schools.

A small scale (N=25) exploratory qualitative study was completed in a Scottish Primary school by Kelly, Longbottom, Potts and Williams (2004). This highlighted the potential benefits of the programme in promoting '*positive emotional, social and behavioural changes at a class and individual level*' (Kelly *et al.*, 2004, p.221). However, this was only one small study with no control group, so it is possible that any effects could be due to other factors and any effects of the study may be unique to the context that was studied. Despite this, the exploratory nature of the study allowed detailed information to be gathered regarding implementation and the potentially positive perceptions of school staff regarding such programmes. It has also highlighted the key role that context (e.g. a school's adoption of the underlying beliefs and values of the curriculum) can play in potential efficacy of programmes such as PATHS.

In relation to future studies of similar curricula, the Kelly *et al.* (2004) study introduces the notion that emotional competence (defined as '*emotional understanding and emotional regulation*', p.225), rather than emotional intelligence, should be promoted, since the term more accurately represents developmental and cognitive skills, where intelligence may more narrowly be associated with IQ. It also strongly argues for the positive contribution that taking account of staff perceptions may make to research, since information about '*user perceptions of...appropriateness and effects...helps bridge the gap between academic theory and credibility and effective practice in context*' (Kelly *et al.*, 2004, p.237). So, rather than being dismissed as flawed due to potential bias, information on staff perceptions of effectiveness in these types of study

can be seen as making a valuable contribution to understanding 'what works' in schools.

A much larger (N=287) evaluation study, completed by Curtis and Norgate (2007), used a pre-test, post-test equivalent groups design, in which control groups were used but participants were not randomly allocated. Measures included the use of the SDQ and semi-structured interviews with teachers and were taken at the beginning and end of an academic year in which the PATHS curriculum was introduced. The results showed that the PATHS programme had a significant overall effect, with children in the intervention group showing *'significant improvements on all five behavioural and emotional constructs [emotional symptoms, conduct problems, hyperactivity, peer problems and consideration, as measured by the SDQ]'* (Curtis & Norgate, 2007, p.42).

However, there are some caveats to the study. The age range examined was limited to children within Key Stage 1, so no child above Year 2 would have been involved. It would therefore be necessary to complete further research to ascertain whether the positive effects may also be seen in older pupils. It would also be desirable to use other sources of data, such as parent and child measures, in addition to teacher perceptions as measured by the SDQ, in order to triangulate any data obtained.

2.5.2 Emotional Resilience Interventions

This section examines those studies and approaches that purport to look at promoting a child's 'emotional resilience'. As will be seen later, there is considerable overlap between what is considered to be 'resilience'-based work and those studies discussed above that are intended to promote emotional or mental health and wellbeing. Therefore in examining 'resilience'-based interventions, it is intended that it will be possible to draw out which aspects are similar to emotional and social skills interventions and the ways in which 'resilience' interventions may have something more to add. Key to this discussion will be an understanding of the meaning of the terms 'resilience' and 'resiliency', which were discussed previously in Section 2.3.5, p.22.

One programme, the FRIENDS programme (Barrett, Webster & Turner, 2002), is intended to reduce anxiety and promote emotional resiliency in order to reduce psychological distress (Barrett, Sonderegger & Xenos, 2003). This programme, which was designed and first evaluated in Australia, is a cognitive behavioural programme for Primary school-aged children and teenagers that aims to promote:

Important personal development skills such as building self-esteem, problem-solving, self-expression of ideas and beliefs. Through the establishment of good relationships with peers, parents, and adults, FRIENDS serves to teach children and adolescents how to cope with anxiety and depression, preventing the development of serious mental disorders, emotional distress and impairment in social functioning (Barrett et al. 2003, p.246).

Thus, the programme takes a preventative approach, but appears firmly rooted in a mental health perspective, using clinical approaches to resolving potential health problems or impairment- quite a deficit-based model.

The programme has been extensively evaluated within Australia, both with English speaking and non-English speaking populations and cultural groups (e.g. Barrett et al., 2003; Farell & Barrett, 2007). Results showed that use of the programme as a universal intervention leads to positive outcomes, such as reduction in anxiety and depression, in children. The programme was found to be particularly useful for Primary-school aged children, girls and 'high risk' students, with work with High school aged students judged to be 'too late' (Farell & Barrett, 2007, p.62). Thus, it appears that the intervention may be most effective when it is used within the Primary school years and there may be an argument for targeting certain children, for example those at greatest risk.

Whilst UK-based studies are currently limited for this particular intervention, some studies have evaluated the programme as used in the UK's schools. Stallard et al. (2005) evaluated the impact of FRIENDS in a sample of 213

children aged nine and ten in six Primary schools. Measures included assessments of anxiety, self-esteem and treatment acceptability. Thus, in this case, the definition of 'emotional resilience' is narrow, with its promotion being seen as reducing anxiety and increasing self-esteem. The findings were consistent with the results obtained in Australian studies, showing that there were significant reductions in anxiety, significant increases in self-esteem and improvement in over half of the children with emotional problems. However, the study used pre- and post-measures with one group only, meaning that there was no control group. It is therefore not possible to determine whether the positive changes were actually due to the intervention or due to other contextual factors and maturation in the children studied. This programme would therefore benefit from further controlled studies in order to gain a better, more scientifically robust assessment of its impact.

As Farrell & Barrett (2007) highlight, many of the studies completed to date focus on depression and anxiety symptoms, rather than focusing on evaluating the impact upon 'emotional resilience' and 'psychosocial protective factors'. Thus there may be a future role for measures of a child's emotional resiliency and strengths within such evaluations, in order to really determine whether these programmes do promote emotional resilience (or resiliency if measuring child characteristics) as they claim to.

Work in the United States related to emotional resilience has also focused very much on the mental health, deficit model of 'resilience', with a key programme, the Penn Resiliency Programme (PRP), arising originally out of the prevention of adolescent depression (Challen, Noden, West & Machin 2009). The programme is a cognitive behavioural therapy programme, based upon Ellis' theories of rational emotive psychotherapy (Ellis, 1962) and the 'Activating-Belief-Consequences' model, in which beliefs are seen to affect both emotional and behavioural responses. Participants are also taught to monitor and challenge negative beliefs, a concept which draws on Beck's principles of cognitive behavioural therapy (Beck, 1991). The programme is also designed to teach participants about *'positive social behaviour, assertiveness, negotiation,*

decision-making and relaxation' (Challen *et al.*, 2009, p.4).

The programme has been extensively evaluated (see Challen *et al.*, 2009 for a review), including 13 randomised controlled evaluation studies across several different countries, showing that it has a positive effect on symptoms of anxiety and depression in children aged 8 to 15, with these effects generally being maintained at follow up. Thus, the programme can be judged to be effective in reducing symptoms of anxiety and depression. However, there is little information regarding the other areas that the programme is purported to influence, for example social skills, problem solving and other areas of social and emotional competence. Whether the evaluations of the programme actually present evidence regarding impacts on overall emotional 'resiliency' (as is suggested in the programme's title) is debatable, since they have focused so strongly on anxiety and depression symptoms. There is very little attention paid to whether the programme affects more externalising behaviours or areas of emotional literacy and competence that have been implicated in supporting true emotional 'resiliency'.

The PRP has also been adopted in the UK under the title of the 'UK Resilience Programme' (UKRP) (Challen *et al.*, 2009). This is described as being a UK adaptation of the PRP, which is intended to enhance wellbeing of those involved, in addition to the possibility of improving behaviour, attendance and attainment (Challen *et al.*, 2009). The UK evaluation of the programme therefore goes further than previous evaluations, through using a much larger sample size (across 22 schools) and also addresses both psychological (measures of depression, anxiety and life satisfaction) and behavioural outcomes (pupil and teacher SDQs, attendance and exclusions). Thus the evaluation broadens the measures used to include those for behaviour, which is necessary to give a clear picture of the overall impact beyond just internalising symptoms.

However, in a similar way to the PRP, information given regarding the UKRP does not give a clear rationale behind why the programmes are thought to

enhance 'resiliency' (PRP) or 'resilience' (UKRP). This is concerning, since they both quite clearly claim to enhance resilience/ resiliency. In the UKRP, there is no discussion regarding why the programme should be thought to have a wider impact on 'resilience' outside of the reduction of depression and anxiety, as previously evaluated. As the details given above regarding resilience, emotional literacy and social and emotional competence show, the promotion of 'resiliency' as a personal quality is likely to involve many more skills than can be measured by assessment of internalising symptoms or behaviour alone.

In addition, one main point of criticism of the UKRP is the choice of the use of the term 'resilience', rather than 'resiliency', as used in the PRP. Whilst potentially a small change in terminology, this could have a clear impact on what may be expected of the programme- in purporting to affect resilience rather than resiliency, there is some implication that environmental or contextual risk factors also need to play a role in the lives of those involved. In the absence of a clear explanation of their notion of 'resilience' within the UKRP evaluation, it is left to readers to determine what 'resilience' may mean in this context. From the information previously considered, it would appear then that the use of a universal 'resilience' programme is misguided, since, as discussed in Section 2.3.5, p.22, to be resilient a person needs to have been exposed to risk. Therefore, the intervention would necessarily be a targeted intervention (toward those who are likely to be exposed to such risk factors), rather than a universal programme for all, as the UKRP is described. It is likely that what the UKRP aims to influence is, in fact, the 'resiliency' of an individual- their ability to use social and emotional skill to deal with any environmental stressors or risks.

In line with the idea of the programme addressing resiliency, it is again questionable whether the intended measures truly assess those skills most crucial to the development of emotional resiliency or the 'wellbeing' discussed in the study. Whilst there are behavioural and psychological measures, there is no measure of the pupils' own perceptions of their abilities to use social and emotional skills, self-regulation or problem solving skills. Instead this can only be inferred from the psychological and behavioural data. Measures of

behaviour, anxiety and depression therefore do not give a full assessment of a child's 'wellbeing'.

Whilst the evaluation of the UKRP is only in the early stages (with further reports due to be published following later periods of data collection in 2009/2010), some data from the evaluation study has been published (Challen *et al.*, 2009). The evaluation has taken place with children aged 11 and 12 years. This in itself raises potential questions regarding efficacy, as previous evaluations of similar programmes (e.g. FRIENDS) have shown that introducing programmes in the High school years is too late and that interventions are more effective in Primary-aged children. There is no information given within the study to explain the rationale behind conducting the programme with this age group.

The methodology of the study is also less than ideal, with no control groups being used and an 'as-if' randomisation being relied upon. However, within some schools, this 'as-if' randomisation did not occur, with pupils being targeted or assigned deliberately to certain groups. This therefore raises questions regarding the extent to which the evaluation can be seen to be controlled, and thus limits the extent to which any positive or significant results can be shown to be due exclusively to the programme, rather than other variables.

The data from the study regarding impact upon behaviour (e.g. SDQ scores) has not yet been analysed or reported. However, initial results obtained from the evaluation showed (summarised from Challen *et al.*, 2009, p.3):

- Both pupils and staff were positive about the skills taught and the programme in general.
- Significant positive impact on depression and anxiety scores where treatment and control groups were well matched.
- Effects were greater for those with lower attainment and worse initial depression and anxiety scores.

Thus, there may be an argument for using the programme in a targeted, rather

than universal way, in order to gain the greatest impact. In relation to implementation, some negative issues were highlighted, including the intellectually demanding nature of the content and the fact that much of the programme time was taken up with 'teacher talk'. This raises questions regarding whether the programme would be suitable for use with younger pupils and those pupils that struggle with concentration, attention or learning.

2.5.3 An Example of a Specific Emotion: Anger

The section that follows examines the emotion of anger and how it may be viewed within psychological literature and school-based interventions. It is intended that, through a specific focus on this one area of emotion, the reader will gain a clearer understanding of how educating children regarding emotions involves a complex interplay between their experience, feelings, thoughts and behaviour. Through examining anger, the links between different theoretical approaches and corresponding interventions can also be explored.

2.5.3.1 Anger as an Emotion and Its Influence on Behaviour

Anger can be described as an emotion that has an influence upon our emotional selves, physical state and behaviour. It has been described by some as a 'secondary emotion' that arises from primary emotions such as fear, embarrassment, disappointment, injury, exploitation, envy or loss, and is a response to threat (Faupel, Herrick & Sharp, 1998). It is erroneous to think that all anger should be seen as negative and the idea that anger is a wholly negative emotion can be attributed partly to the historical view of anger as a destructive form of passion (Novaco, 1994a). However, in a modern context, anger can be seen as having both adaptive (useful) and maladaptive (non-useful) functions (Novaco, 1975).

Anger, then, is an emotion that represents both a useful and detrimental influence on our behaviour, depending on the context and ways in which it is expressed. As Novaco (1975, p.6) summarises, it may serve one of six functions:

- 1) *Energizing* behaviour, through intensifying any behavioural response.
- 2) *Disrupting* behaviour through disruption of information processing and attention, thus leading to impulsivity.
- 3) *Expressing* negative feelings to others.
- 4) *Defending* oneself from threat by pre-empting anxiety and externalising conflict.
- 5) *Instigating* antagonism as a learned stimulus for aggression.
- 6) *Discriminating* events as provocation, thus serving as a cue to adapt to stress.

Whilst anger can serve adaptive functions, it can still create problems for those that experience it frequently or intensely, or are unable to adapt their behaviour in ways appropriate for the context. This has therefore led to the concept of 'anger management', a means of teaching those who experience excessive anger to better control and mediate their anger responses.

2.5.3.2 'Anger Management' Techniques and Approaches

One approach to anger is to see it as a stressor, the response to which can be influenced by stress coping skills (Novaco, 1994b). This view has led to the 'stress inoculation' or stress coping skills approach to managing anger and aggressive behaviour, which aims to address environmental, behavioural, somatic and cognitive influences on emotion and behaviour (Novaco, 1994b). Adapted from work on cognitive behavioural modification for anxiety control (Meichenbaum, 1979), the cognitive behavioural approach can be used both as treatment and preventively, through addressing three areas:

- 1) Cognitive modification
- 2) Arousal reduction
- 3) Behavioural skills.

In a similar way, cognitive behavioural approaches developed by Beck (1991), linking thoughts, feelings and behaviour, can be used to address anger and the 'maladaptive' assumptions or beliefs that may lead to angry outbursts. This can

also be linked to the work of Ellis (1962), in which similar 'irrational' beliefs are thought to lead to angry behaviour.

Other authors suggest that anger becomes a problem, not because of the content of thoughts, but as a consequence of the ways in which we process information. Dodge (1986) outlines the ways in which social cognitions in anger-related situations are linked to social behaviour, suggesting that any intervention will need to involve targeted work to make changes in the ways in which children encode, represent, decide about and enact their responses to social cues. Alternatively, social learning approaches, such as those of Bandura (1973) take the stance that angry behaviour can be learned through modelling and reinforcement, and, therefore, so can alternative behavioural responses that are more socially acceptable.

Novaco's 'firework' model of anger can be used to explain the ways in which anger arousal can escalate from triggers to mental reactions (thoughts and feelings) to bodily reactions, both internal and external (Feindler & Ecton, 1988). The idea of anger being a step-wise response to particular perceptions of situations can also be linked to escalation of some situations into incidents of aggressive behaviour. Aggression, in a similar way to anger, can also be triggered by a threat situation, in which both physical arousal and the release of the hormone adrenaline can be related to violent behaviour (Breakwell, 1997). The Breakwell 'assault cycle' (Breakwell, 1997) illustrates how these responses can lead to a triggering of a cycle of events that escalates from initial perception of threat to violent behaviour. Thus, events that trigger anger (where situations are perceived as threatening) may also be linked to the escalation of aggressive and violent behaviour. It may be, then, that any skills which allow the diffusing of anger, altering of perceptions of 'threat' and building in positive ways to deal with these thoughts and feelings, can also have an impact upon subsequent development of the cycle of aggressive behaviour. It would therefore be expected that any programmes related to the management of anger would also see a corresponding influence on the management of externalising problems, such as aggressive and violent behaviour.

2.5.3.3 Anger Studies in Children

Some studies into anger and aggression in children draw a distinction between anger as expressed through aggressive behaviour and the ways in which anger may be regulated. For example, a study by Dearing *et al.* (2002) suggests that, in relation to emotional regulation in anger, a distinction should be made between the internal experience of emotion regulation and the regulation of external expression of emotion. Thus, when examining the ways in which children may be able to regulate and control their own feelings of anger and behavioural responses, it is necessary to employ separate measures of anger regulation (internal regulation) and anger expression (behavioural expression).

In relation to the link between anger and conduct problems or difficult behaviour in children of primary school age, a study by Kim, Walden, Harris, Karrass and Catron (2007) showed that anger is a significant predictor of behaviour problems. In linking this to emotional regulation and aggressive behaviour, Musher-Eizenmann *et al.* (2004) found that social cognitions mediate responses to anger and aggressive behaviour. In relation to 'what works' in reducing anger in children, Rice and Howell (2006) showed that the most effective method is a process of anger reflection/ control, rather than encouraging children to express their anger ('anger out'). Other studies have also shown that emotional competence can be linked with levels of anger expression and aggressive behaviour (Bohnert, Crnic & Lim, 2003). Thus, it could be argued that any interventions that address emotional regulation, emotional competence, anger expression and aggressive behaviour will have an impact on anger-related behaviours, but should also include work on reflection.

2.5.3.4 Therapeutic and School-Based Approaches

In light of the theoretical support for the use of cognitive behavioural approaches in helping to manage anger, it is unsurprising that a key element of intervention programmes has been that of cognitive behavioural interventions. A meta-analytic study of cognitive behavioural therapy for children and adolescents completed by Sukhodolsky, Kassinove and Gorman (2004),

showed that, of the 40 studies examined, the mean effect size was in the medium range, with skills training, problem solving and multi-modal approaches being marginally more effective than affective education. It was also shown that the use of modelling behaviour, feedback and homework tasks led to greater positive impact (Sukhodolsky *et al.*, 2004). This would suggest that, in general, CBT-based interventions are effective in reducing aggressive behaviour and improving anger regulation, particularly where some social learning approaches (such as modelling) are incorporated.

A more recent meta-analysis of 20 general school-based anger programmes (Gansle, 2005) again showed a medium effect size for the interventions, which was unaffected by the type of setting in which the programme took place, how pupils were selected or by whom the programme was delivered. This seems to suggest, therefore, that it is the content of a programme that has the most influence on its success, rather than its mode of delivery or the context in which it is delivered. One important finding from this analysis was that, whilst many of the studies (approximately 60 %) discussed treatment integrity and highlighted it as important, only five percent of the articles actually measured this. This therefore highlights the need to address treatment integrity in more explicit ways within future studies of this type.

Evidence from studies conducted in the UK appears more limited. One small-scale study (N=8), conducted in Bristol, assessed the impact of a targeted 20 week multi-component social skills and anger management programme, which used a mixture of cognitive behavioural therapy, behaviour therapy and experiential approaches (Maddern, Franey, McLaughlin & Cox 2004). The results obtained showed that following the programme '*children showed a significant reduction in their anxiety, parents reported a significant reduction in oppositional behaviour and teachers a significant reduction in attention-deficit hyperactive difficulties type behaviour*' (Maddern *et al.*, 2004, p.135). Thus, multi-component programmes can be seen as being effective for children with severe emotional and behavioural problems, when used in a targeted way, as was done in this study. However, due to the lack of control group, it is difficult to

be certain that the improvements seen were in fact due to the intervention and not due to any other contextual variables. In addition, the fact that the study has a very small sample size also limits the degree to which the results could be generalised to other situations.

Whilst it is not an evaluation study as such, an evaluative article regarding the relationship between emotional literacy and anger management groups, written by Sharp & Herrick (2000), is particularly useful in elucidating how anger management interventions may be implemented effectively in English schools. Through giving details of emotional literacy work and small group work conducted by Educational Psychologists within schools in Southampton, several positive influences of using anger management group work are highlighted. These benefits include a reduction in school exclusions, a reduction in aggressive outbursts, pupils taking responsibility for their own behaviour, changing staff perspectives on working with pupils and on working with parents (Sharp & Herrick, 2000).

Information given about the running of groups also suggests that the giving of refreshments during group activities can be successful in fostering a nurturing atmosphere, which then leads to a better climate for responding to the emotional needs of others. This idea would be supported by ideas from Maslow (1954) that basic physiological needs, such as the need for food, and safety needs, such as feeling safe and secure, need to be met before children will be able to participate in the relationship building related to their needs for 'love and belongingness'. This therefore suggests that it is important for the group work to take place in a nurturing environment in order to achieve the conditions that will allow work to be effective.

In reviewing the first 40 groups run within Southampton, it was found that the following areas are central to the groups' success (Sharp & Herrick, 2000, p.139):

- Commitment of school staff to the process
- The voluntary nature of participation of the children and young people

- Adhering to the programme but tailoring it to the literacy and cognitive level of the group
- Parental encouragement for children's participation.

Thus, it is likely that it would be good practice to ensure that these conditions are met as far as possible in any school based anger management groups to be run in future, in order to make their success more likely.

2.6 Rationale for this Study

Overall the literature review has highlighted that there is a need to further scrutinise the evidence base for targeted and small group interventions in relation to emotional, social and behavioural skills. For example, many of the studies examined offer mixed evidence regarding the efficacy of small group programmes in changing those outcomes for which they are designed (e.g. Hallam, Shaw *et al.*, 2006; Humphrey *et al.*, 2008). There is therefore a need to further investigate the difference between 'intended' and 'actual' effects of such programmes.

Some of the studies examined (e.g. Challen *et al.*, 2009; Hallam, Shaw *et al.*, 2006; Kelly *et al.*, 2004; Stallard *et al.*, 2005) give details of the fact that programmes had positive outcomes, despite the fact that they methodology did not provide sufficient evidence to determine whether the results obtained are due to the intervention or to other variables, as they were poorly controlled or did not use an effective control or comparison group. The completion of further studies, such as this one, that have been well designed and controlled, will help to inform understanding of the evidence base regarding school-based emotional literacy or 'resilience' programmes.

In addition, there is a need to further investigate the link between measures of emotional and behavioural skills and impact upon a child's resiliency and resilience, in light of the fact that more recently released programmes (e.g. the PRP or UKRP) clearly claim to impact 'resilience' or 'resiliency' without making explicit links with any measure of this construct. It therefore seems pertinent to

evaluate the Staying Calm programme's outcomes in relation to children's social and emotional skills and emotional resiliency, in addition to taking pre- and post-measures of actual behavioural impact. Thus, in addition to using the SDQ (Goodman, 1997) with school staff, as many similar studies have done, the 'Resiliency Scales' (Prince-Embury, 2007) will also be used with children.

The 'Staying Calm' programme is intended to influence anger control, through the use of CBT based materials, to promote problem solving in social situations and to promote social skills through general involvement in the programme. Whilst measures such as the SDQ and the Resiliency Scales may pick up on changes in 'resiliency' and behaviour that could be attributed to changes in these skills, it is also necessary to include measures that evaluate change in the specific areas of anger control, social problem solving and social skills. Questionnaire measures of social skills and anger expression will therefore also be used with parents and staff.

It has been highlighted within the Literature Review that staff perceptions of the programme have an impact upon its perceived efficacy in a school context (e.g. Kelly *et al.*, 2004). Therefore measures of success of use (for staff) and child satisfaction will also be taken following conclusion of the programme, in order to be able to evaluate its ease of use in a 'real world' context.

The aims of this research are therefore to determine the efficacy of 'Staying Calm' in relation to its purpose of effecting changes in a child's emotional resiliency, behaviour, anger control, social problem solving and social skills.

2.7 Hypotheses and Research Questions

The following research questions are derived from ideas and concepts explored in the Literature Review. These are presented here, together with the research hypotheses, in order to clarify the relationship between the general aims and overall questions of the research, the study's specific hypotheses and the measures that will be used to investigate these.

Research Question 1:

Does 'Staying Calm' have a positive impact upon a child's perception of their emotional 'resiliency' skills?

Hypothesis 1:

There will be a statistically significant difference in 'resiliency' scores between pre- and post-test (i.e. a change over time in Mastery, Relatedness and Reactivity scores) in the experimental group. This change will not be observed in the control group.

Null Hypothesis 1:

There will be no significant difference between 'resiliency' scores for the experimental and control groups between pre- and post-test.

Research Question 2:

Does 'Staying Calm' have a positive effect on a child's behaviour?

Hypothesis 2:

There will be a statistically significant difference in teachers' overall SDQ ratings and on sub-scale scores for the experimental group between pre- and post-test. This change will not be observed in the control group.

Null Hypothesis 2:

There will be no significant difference between SDQ scores for the experimental and control groups between pre- and post-test.

Research Question 3:

Does 'Staying Calm' have a positive effect on a child's ability to recognise and control anger, use appropriate social skills and problem solve in social situations?

Hypothesis 3:

There will be a statistically significant difference in teachers' ratings of a child's

anger control, social skills and social problem solving skills for children in the experimental group between pre- and post-test. No significant change will be observed for children in the control group.

Null Hypothesis 3:

There will be no significant difference in teachers' ratings of a child's anger control, social skills and social problem solving skills in either the experimental or control groups between pre- and post-test.

Hypothesis 4:

There will be a statistically significant difference in parents' ratings of a child's anger control, social skills and social problem solving skills for children in the experimental group between pre- and post-test. No significant change will be observed for children in the control group.

Null Hypothesis 4:

There will be no significant difference in parents' ratings of a child's anger control, social skills and social problem solving skills in either the experimental or control groups between pre- and post-test.

Research Question 4:

Are the 'Staying Calm' sessions easy and effective to deliver?

Research Question 5:

Is 'Staying Calm' a positive experience for children that take part?

The remaining Chapters illustrate the study methodology used and results obtained from the study designed to investigate these questions. The discussion that follows then evaluates the outcomes of the study in relation to the material considered within this Literature Review. It is hoped that this process will offer more clarity regarding the efficacy of small group work in promoting emotional resiliency, behaviour change, anger control and social problem solving skills in children.

3. Methodology

3.1 Introduction to Chapter 3

The following chapter outlines the methodology and design of the study. It begins by giving an overview of the paradigms that are currently prominent within educational and psychological research and links these to potential methodological choices. The influence of ontology and epistemology upon these is discussed and the final choice of methodology is justified in relation to current debates regarding different research approaches and the research questions to be investigated. Issues of validity and reliability are considered in relation to the chosen research design. Ethical considerations of educational and psychological research are considered and the ethics of this particular study are then related to these. The section concludes with details of the study design and implementation.

3.2 Methodological Considerations in Psychological Research

3.2.1 Paradigms within Psychological and Educational Research

In order to determine the most appropriate methodology and design for the study, it was first necessary to consider the different paradigms (or 'world views') from which these may be derived. The examination of different paradigms for research necessarily involves consideration of the different philosophical and ideological influences upon each different approach. The following areas of knowledge and beliefs have an influence upon the choice of approach (synthesised from details in Mertens, 2010 and Cohen, Manion and Morrison, 2009):

Ontology: beliefs about the nature of the world and reality.

Epistemology: beliefs about the nature of knowledge.

Methodology: the methods of exploring questions about the world in a systematic way.

The following sections examine the ontological, epistemological and

methodological influences upon two main paradigms within psychological research: *Post-positivism* and *Constructivism*.

3.2.2 The Influence of Philosophy and Beliefs: Ontology and Epistemology

'Research methods [are] informed by how we view our worlds [ontology], what we take understanding to be, and what we see as the purposes of understanding [epistemology].' As Cohen *et al.* (2009, p.5) highlight, both the ontological and epistemological beliefs of a researcher influence their 'world view', such that any decisions regarding design and measures will be similarly influenced.

Ontological and epistemological viewpoints within the social sciences can be viewed as existing somewhere on a continuum between two opposing sets of assumptions, such as nominalism and realism (ontology) and anti-positivism and positivism (epistemology) (Burrell & Morgan, 1979). Figure 3.1, p.59, displays these concepts diagrammatically, linking them to the different paradigms and potential methodologies to be discussed in later sections.

Nominalism relates to the view that no objective reality exists and that reality is instead the product of individual thought and consciousness. This contrasts sharply with the realist view that things exist in their own right, without depending upon the thoughts of others to do so (Cohen *et al.* 2009, p.7). Since epistemology is concerned with the nature of knowledge within these 'realities', anti-positivism and positivism concern themselves with the debate over whether knowledge is '*personal, subjective and unique*' (Cohen *et al.*, 2009, p.7) or exists in just one, objective form. As Figure 3.1, p.59, illustrates, the paradigms of constructivism and post-positivism can be seen to be influenced by these views, resulting in methodological approaches that are markedly different from one another.

3.2.3 The Constructivist Paradigm

Also known as a 'naturalistic', 'relativist' or 'interpretive' approach, the constructivist position rejects the positivist idea that there is one objective

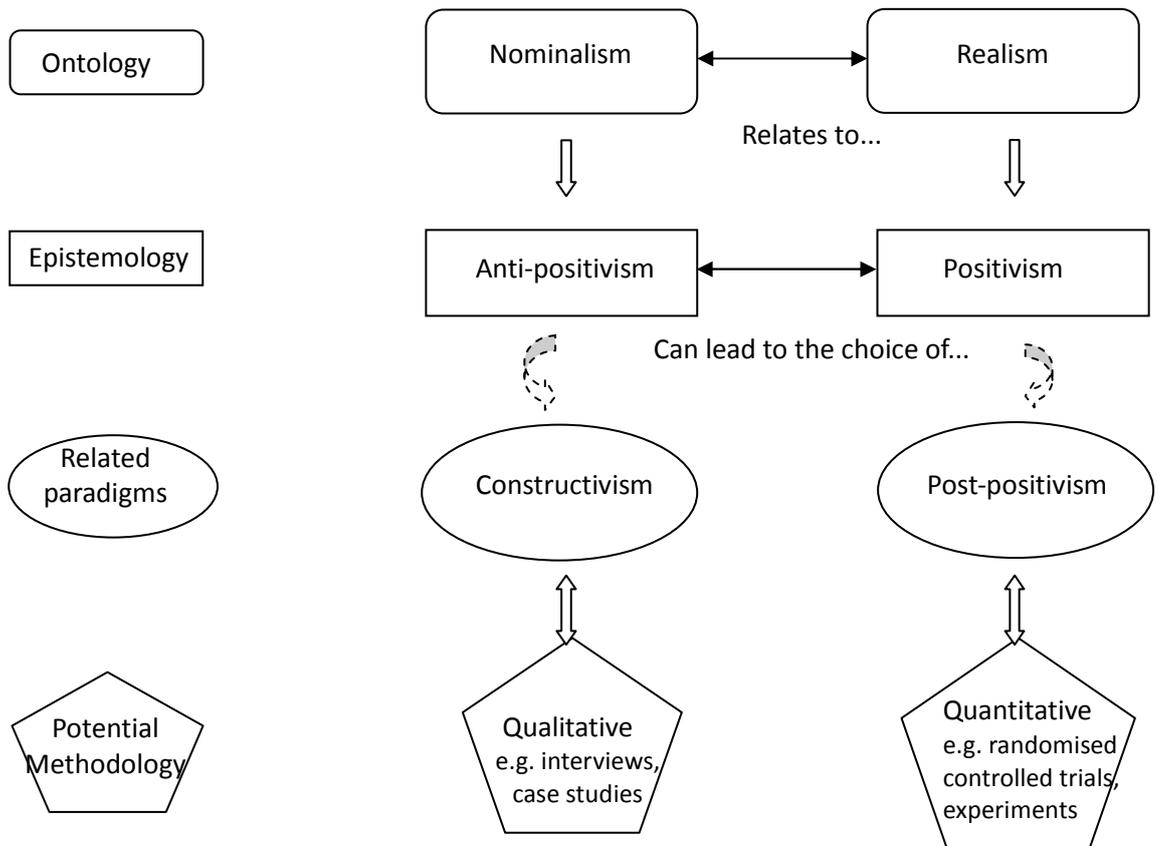


Figure 3.1: Diagram devised by the researcher to summarise the relationships between ontology, epistemology and methodology as discussed within this research study

reality, instead suggesting that there are '*multiple, socially constructed realities*' (Mertens, 2010, p.11). Thus, any research completed is interactive in nature, using predominantly qualitative approaches, such as interviews, observation and documentary evidence, designed to capture the participants' views of their own reality. Rather than beginning with a definitive theory to be tested, constructivist researchers seek to understand the concepts that emerge through the research itself. Proponents of the constructivist view suggest that it is more effective for conducting social research, as it is more effective in uncovering the 'reality' of situations for those involved in them, rather than searching for the 'true' reality that does not exist.

3.2.4 The Post-Positivist Paradigm

In stark contrast to constructivism, the post-positivist approach stems from positivism, the belief that only science can give an objective and value-free view of the workings of the world, and that general laws can be uncovered to explain causal relationships (Mertens, 2010). Now, although the positivist view is somewhat discredited within social science research, partly due to its insistence on purely 'observable' evidence and belief in the independence of researcher and participants, post-positivists still retain the positivist belief that there is one objective reality that can be discovered through systematic enquiry. However, post-positivists also accept that bias can be introduced into enquiries, for example through the influence of the researcher, and that whilst one reality does exist, '*it can be known only imperfectly and probabilistically because of the researcher's limitations*' (Robson, 2007, p.27).

The post-positivist approach generally utilises the experimental method to examine research questions, which involves assigning participants to different groups, manipulating one variable (known as the independent variable) and measuring the effect of this on a second variable (the dependent variable). This therefore usually results in quantitative approaches to data collection (that is, approaches which yield numerical data) and the use of statistical tests to establish the probability of results being due to chance or due to the effect of the independent variable. Whilst the most robust experimental designs involve

random assignment of participants (for example, as in randomised controlled trials, RCTs, discussed in Section 3.2.5 below), quasi-experimental designs can also be employed, which allow the application of the scientific method without the need for random assignment of participants (for example, in situations where this is not practical, desirable or ethical).

There are many different viewpoints regarding taking a quantitative, experimental approach to educational and psychological research, including debate regarding the advantages and disadvantages of the use of experimental designs such as RCTs. Some of these benefits and caveats are discussed in Section 3.2.5 below.

3.2.5 Randomised Controlled Trials: The ‘Gold Standard’?

RCTs have been described as the ‘gold standard’ of psychological and evaluation research (Robson, 2007), since they are ‘*recognized to be the best and most definitive way of demonstrating that an intervention is effective*’ (Kazdin, 2003, p.137). RCTs are thought to confer advantages compared with less controlled designs (Cook, 2006), as their approach has been empirically and theoretically validated; their design allows for causal inference (determining whether the effect is due to the independent variable) and the minimisation of bias; results provide an experimental ‘evidence base’ and any limitations in the method are clear and well documented (Cook, 2006). Thus, in looking to evaluate the effect of a programme such as ‘Staying Calm’ and answer research questions related to causality, an RCT appears to be the preferred approach.

However, this is by no means a universally accepted view, and as Cook (2007, p.333) highlights, it is necessary to take into account several criticisms when considering RCTs as evidence. These include:

- ‘*Philosophical arguments*’, such as the idea that causality can never be fully established in an experiment,
- ‘*Practical arguments*’ that experiments cannot be effectively realised

within a real-life school context,

- Issues regarding '*undesirable trade-offs*' such as maximising internal validity at the expense of external validity,
- Arguments that schools and education professionals do not find experimental results useful,
- Arguments that other methods, such as qualitative case studies and quasi-experiments, are '*better alternatives to the experiment*'.

However, despite a robust consideration of the above caveats, Cook (2007) remains committed to the experimental approach, acknowledging that whilst criticisms are valid enough to decide that RCTs may not be the 'gold standard', they are still of value, as they are the best way of establishing causality and are the most widely '*credible*' form of design within research circles (Cook, 2007, p.251).

3.2.6 Evaluation Studies

As has been highlighted thus far, this study is related not only to social and psychological domains, but also to educational research. As such, it can be seen as requiring an approach that encompasses ideas and approaches from both psychological and educational domains, particularly in relation to approaches to evaluation of programmes in an educational context. As Mertens (2010, p.54) highlights, evaluation research must be considered as a separate and unique approach to enquiry, which should be seen as a '*major genre of systematic enquiry that borrows and enhances the methodologies developed in the research community*'. Thus, whilst an evaluation requires special consideration, it may also use any of the methodologies described above.

In planning an evaluation, the key influences upon the approach chosen will be the type of programme being evaluated, the purpose of the evaluation, the needs and views of stakeholders involved and the constraints that may be part of the evaluation (Mertens, 2010). The following sections examine the different elements that have been considered in the design of the study.

3.3 Methodological Considerations for this Study

3.3.1 *The Role of Stakeholders in the Study*

As Mertens (2010) suggests, stakeholders have an important influence upon planning of evaluation research. In this study, stakeholders have played a role in determining the focus of the study, the potential resources available (practical, human and time) and the constraints that influence implementation.

These key stakeholders are:

- The researcher as a practising Trainee Educational Psychologist.
- The researcher's Local Authority and Educational Psychology Service.
- Staff in the researcher's 'link' practice schools.
- The University of Nottingham.
- The Development and Research (D&R) Collaborative Programme in Educational Psychology.
- The wider community of educational and psychological research.

Some stakeholders have also directly influenced the type of study completed and methodology and design to be used. For example, the researcher's professional interest in the topic of emotional well-being and resilience led to the choice of the 'Staying Calm' programme and her personal ontological, epistemological and methodological views mean there is a preference for a more realist, positivist approach and the use of an experimental design, rather than a more constructivist approach. The key influence upon methodology has been the University of Nottingham since this has led to a focus on the suitability of the research in relation to academic quality and the influence of the preferred ontological, epistemological and methodological views of the doctoral course, on which there is a preference for quantitative methodologies. The University also had an influence in encouraging the researcher to adhere to guidelines of the D&R collaborative programme, which requires researchers to maximise the number of participants, to obtain quantitative data and to use a common measure, the SDQ, to allow for aggregation of data.

3.3.2 The Adoption of a Post-Positivist Approach

As a consequence of the researcher's own personal views, the influence of stakeholders, evaluation of methodology of previous research studies in the area of emotional and social skills programmes and the need to generate credible academic results, the choice was made to conduct the evaluation of the programme within the context of the post-positivist paradigm. This is not only influenced by the reasons given above, but also by the researcher's ontological and epistemological beliefs or 'world-view'. The researcher has previously been trained within an environment heavily influenced by positivism and the belief that the most credible, 'scientific' form of psychological research is that of conducting experiments. Whilst it is acknowledged that other researchers may take a different approach, this experience has led to the researcher subscribing to the view that, where programme evaluation is required, an experimental approach will offer a high quality evidence base regarding a programme's efficacy.

Whilst a variety of quasi-experimental and experimental approaches were investigated, the decision was made to use a pre-test, post-test randomised controlled trial (RCT) design. Since the evaluation of 'Staying Calm' involves research questions that relate to causality, and is intended not only to be of value to participants, but also to be of value to other stakeholders and the wider research community, it is the researcher's view that the use of an RCT is justified and appropriate in this case. It will be necessary, however, to be aware of the potential caveats and criticisms related to the methodology chosen throughout implementation of the study, in order to allow for critical reflection regarding the appropriateness of these choices within discussion of the results.

3.4 Validity and Reliability

3.4.1 Validity

Validity within the post-positivist paradigm can be separated into two key areas: internal validity and external validity. Internal validity relates to the question of whether results can truly be attributed to the effect of the experimental

treatment. As Mertens (2010, p.126) summarises: '*Internal validity means that the changes observed in the dependant variable are due to the effect of the independent variable, not to some other unintended variable*'. In contrast, external validity (generalisability) refers to '*the extent to which the findings of the enquiry are more generally applicable outside the specifics of the situation studied*' (Robson, 2007, p.93), such as the extent to which results are generalisable to other populations ('population validity') or other environments or contexts ('ecological validity'). The following sections examine the specific threats to validity that may arise within experimental research.

3.4.1.1 Threats to Internal Validity

'Threats' to internal validity are those things which may lead to results not being valid, due to variables other than the independent variables influencing results. Figure 3.2, p.66, illustrates the potential threats to internal validity within any experimental design and defines each of the terms used. Table 3.1, p.67, highlights the main potential threats to internal validity within this study and outlines the measures that have been taken to try to eliminate or reduce these. Where it is not possible to eliminate the threats, it is necessary to gather sufficient information such that any threats can be identified and taken into account in the analysis.

One main safeguard within the study to maintain internal validity is the fact that subjects were randomly allocated, and that a control group is being used. This means that it would be expected that changes occurring in the children's scores due to many of the above factors (rather than the intervention) would happen approximately equally in both groups.

3.4.1.2 Threats to External Validity (Generalisability)

There are many potential threats to the external validity of results within experimental research. Cohen *et al.*, (2009) list the following as threats to external validity:

Cohen, Manion and Morrison (2009) list the following as threats to internal validity (author's own definitions):

- *History:*
The effect of previous exposure to variables that affect results, other than the independent variable.
- *Maturation:*
The effect of time passing between pre- and post-tests.
- *Statistical regression:*
Regression to the mean can occur- those participants that have very high or low scores at pre-tests are likely to obtain a score that is closer to the mean score at post-test. This can give a misleading picture of increases or decreases in post-test scores.
- *Testing:*
The use of pre-tests can make subjects more sensitive to the aims of the research. Practice effects (where prior experience of the test can improve performance) may also occur.
- *Instrumentation:*
Problems with validity and reliability of measures and scoring procedures can introduce inaccuracies in results.
- *Selection:*
There may be unintended bias in the selection or allocation of participants to groups.
- *Experimental mortality:*
The loss of participants through drop-out (e.g. illness, non-attendance, choosing not to take part).
- *Instrument reactivity:*
The measures used in the experiment may exert unintended effects.

Cook and Campbell (1979) have also suggested that the following will affect validity:

- *Experimental treatment diffusion:*
The transmission (intended or unintended) of ideas and effects from participants in the experimental group to those in the control group.
- *Compensatory rivalry:*
Also known as the 'John Henry' effect, this relates to the idea that those in the control group will make a special effort to 'outdo' or be better than the experimental group.
- *Compensatory equalisation of treatments:*
The offering of additional resources to the control group to 'compensate' for the fact that they are not receiving the intervention.

Figure 3.2: Threats to Internal validity and their definitions

Threats to validity	Measures that reduce threats to validity
<ul style="list-style-type: none"> ➤ History 	<ul style="list-style-type: none"> • Information will be gathered regarding any historical or concurrent interventions that may affect children’s emotional literacy, resiliency or behaviour.
<ul style="list-style-type: none"> ➤ Maturation ➤ Experimental mortality 	<ul style="list-style-type: none"> • The fact that the study takes place over a relatively short period of time (a maximum of 10 weeks between pre- and post- tests) means that any threats regarding mortality and maturation are likely to be minimised.
<ul style="list-style-type: none"> ➤ Selection 	<ul style="list-style-type: none"> • The use of SDQ scores to select participants and the use of random allocation to groups will help to reduce any selection bias.
<ul style="list-style-type: none"> ➤ Instrument reactivity ➤ Testing ➤ Instrumentation ➤ Invalidity or unreliability of instruments 	<ul style="list-style-type: none"> • The use of standardised instruments (Resiliency Scales, SDQs) will help to reduce any threat from unreliability of instruments used. • Where non-standardised measures are used (e.g. the ‘Staying Calm Questionnaire), these have been extensively piloted as part of a pilot implementation of the ‘Primary Group Work’ programmes. • Where different adults complete pre- and post-test information, these scores will be identified and any compromised data will be removed from the analysis.
<ul style="list-style-type: none"> ➤ Statistical regression 	<ul style="list-style-type: none"> • The use of appropriate statistical techniques in the analysis will contribute to the validity of results obtained. • Statistical checks will be carried out to ensure that groups are equivalent prior to analysis.
<ul style="list-style-type: none"> ➤ Experimental treatment diffusion ➤ Compensatory rivalry ➤ Compensatory equalisation of treatments 	<ul style="list-style-type: none"> • Measures will be employed to ensure that diffusion of treatments is minimised. For example adults will be explicitly asked not to use the materials or ideas from ‘Staying Calm’ with children other than those in the experimental group. • The children in the control group and their parents will be aware that they will receive the intervention after the experimental groups, rather than offering anything additional to the control group during the study.
<ul style="list-style-type: none"> ➤ Ecological validity 	<ul style="list-style-type: none"> • Details will be gathered regarding the participant sample and population from which they were drawn, so that any conclusions regarding impact can be related to suitable contexts and populations.

Table 3.1: Threats to validity within the study and measures used to reduce them

- Failure to describe independent variables explicitly.
- Lack of representativeness of available and target populations.
- The Hawthorne effect (the fact that participating in a study will have an effect on participants).
- Inadequate operationalizing of dependent variables.
- Sensitization/ reactivity to experimental conditions.
- Interaction effects of extraneous factors and experimental treatments.
- Invalidity or unreliability of instruments.
- Ecological validity (whether experimental evidence can be applied effectively to 'real life' contexts).

The ways in which these threats have been addressed in this study are outlined in Table 3.1, p.67.

In order to try to reduce threats to external validity as far as possible, the possibility of using a comparison group in addition to experimental and control groups was considered. This would help ascertain whether any effect of the intervention was due to its content rather than additional attention or access to group work. However, it was determined, through discussion with school staff, that this would not be feasible in this case as it was unreasonable to ask schools to devote staff and children's time and resources to groups that would not be intended to produce any beneficial effect.

The external validity of the results of this study will necessarily be limited by the fact that it was conducted with relatively small numbers of participants and from a small sample of schools.

Issues relating to treatment fidelity were also taken into account, in order to ensure that all groups received similar intervention and that all intervention was 'true' to the programme. These issues are further discussed in Section 3.6.3.5, p.82.

3.4.2 Reliability and Validity of Measures

Reliability relates to the *'stability or consistency with which we measure*

something' (Robson, 2007, p.101). The reliability of a study therefore relates directly to the reliability of the measures used. Figure 3.3, p.70, illustrates the factors (listed by Robson, 2007) that need to be considered in relation to the reliability and validity of measures used in this study, in addition to the ways in which these issues have been addressed. The following sections then examine the rationale behind the selection of the measures and instruments used in this research.

3.4.2.1 Standardised Measures: SDQ and Resiliency Scales

The standardised measures chosen for this study were the Strengths and Difficulties Questionnaire (SDQ, Goodman, 1997) and the Resiliency Scales (Prince-Embury, 2007). The use of standardised measures offers the benefit of construct validity having already been established for the measures, i.e. it has been established that the scale '*measures what you think it measures*' (Robson, 2007, p.102). In addition the materials have been piloted and their suitability for use with specific populations (in this case with children aged nine to eleven) has been checked.

The SDQ was selected for this study as it has been extensively used in evaluation research (as exemplified by its use in many studies discussed in the Literature Review). Its use was also recommended as part of the D&R Programme, as the questionnaires are widely available, thus allowing for their use and the aggregation of data across a number of studies. Examples of pre- and post-test versions of the SDQ are included in Appendices 8.2 and 8.3, p.161-164). The dependent variable to be measured by the SDQ is children's behaviour, as rated by school staff. Parent and child versions of the SDQ are available, although the children's version is not standardised for young people below the age of eleven, so its use was not appropriate in this research. The SDQ parent version was also rejected on the basis that some of the topics contained in it, for example questions about stealing, were felt to be ethically unsuitable to present to parents in this type of study.

Participant error and Participant bias	<ul style="list-style-type: none"> • Child-friendly response measures (e.g. practice questions and pictorial response strips, included in Appendix 8.4, p.165) were designed, piloted and used to ensure that children were able to respond as accurately as possible.
Observer error and Observer bias	<ul style="list-style-type: none"> • A standard procedure was used for the administration of questionnaires (such as all adults receiving the same instructions through the use of instruction sheets, included in Appendix 8.5, p.166, for administration of Resiliency Scales). • All questionnaire items will be administered in the same order to each participant. • All scoring procedures and calculations related to the scoring of measures will be double checked.
Construct validity of measures	<ul style="list-style-type: none"> • Standardised, published measures will be used that have been widely piloted and are suitable for use with the age group studied (SDQ, Goodman, 1997; Resiliency Scales, Prince-Embury, 2007). • The measures used are relevant to the constructs being studied (SDQ for behaviour, Resiliency Scales for emotional resiliency) or have been specifically designed to relate to the skills taught in 'Staying Calm' (Parent and Teacher Questionnaires). • Where non-standardised measures are used these were piloted and tested prior to use. For example the 'Staying Calm' Questionnaires had been previously designed and piloted as part of the original implementation groups, leading to changes to their content and structure prior to their inclusion in the final 'Staying Calm' materials.

Figure 3.3: Factors influencing the reliability and validity of measures in the 'Staying Calm' study

Overall scores and sub-scale scores will be calculated for the SDQ, meaning that data will be obtained for teacher perceptions of the following outcome measures:

- Overall behaviour difficulties
- Emotional Symptoms
- Conduct Problems
- Hyperactivity and Inattention
- Peer related problems
- Prosocial skills

It is hoped that analysing sub-scale scores will allow analysis of a variety of different types of behaviour that might be affected by the programme, rather than obtaining only one broad measure of behaviour such as 'overall difficulties score'.

The content of the Resiliency Scales was discussed in Section 2.3.5, p.22 and Figure 2.1, p.26. These scales were selected as they offered the opportunity to gain information regarding children's own views of the constructs encompassed by the term 'emotional resiliency', in a form that has been standardised and piloted with children aged nine and above. Due to copyright of the materials it is not possible to include a copy of the Resiliency Scales in this document.

The children involved in the research are at the younger end of the age range for which the Resiliency Scales are standardised (aged nine plus). Thus, in addition to the use of standard instructions for administration of the scales (in Prince-Embury, 2007), the researcher also created a set of instructions for this study, including practice questions and a children's visual response scale (included in Appendix 8.4, p.165). These were piloted with one child participant and their presentation altered prior to use with children in the main study. The Resiliency Scales are designed for administration on a one-to-one basis with adults being allowed to offer clarification to children regarding the meaning of test items. However, it was felt that in this study consistency was needed in the types of response that could be given by the two adults administering the

scales, so a focus group of four Educational Psychologists was used to identify any test items that might be misunderstood by younger or less able children. A list of alternative explanations was then produced for these items (included in Appendix 8.5, p.166).

3.4.2.2 Non-standardised measures: The ‘Staying Calm’ Questionnaires and Child Evaluation Forms

The ‘Staying Calm’ Questionnaire (teacher version) was created as part of the original ‘Primary Group Work’ materials. It was then included unchanged in the revised materials (Clifford & Davies, 2009). Prior to inclusion in the revised materials, the questionnaires were used in the pilot groups in four Primary schools within the researcher’s Local Authority. The questionnaires were included in the updated materials without alteration as they had been deemed by those involved in evaluation of the groups to be appropriate for use in assessing programme outcomes, both in terms of content and ease of completion.

Whilst the Parent Questionnaire was created by the researcher for use in this study, it is identical to the original Teacher Questionnaire, other than the re-wording of some items to make them more appropriate to parents and a home context. Following this re-wording the Questionnaires were shown to the programme’s original creators and piloted with two volunteer parents. Their responses showed that further alteration of the Parent Questionnaire was not needed. The Teacher Questionnaire is included in Appendix 8.6, p.168, and pre- and post-intervention Parent Questionnaires are included in Appendices 8.7 and 8.8, p.169-170.

The ‘Staying Calm’ Questionnaires contain a mixture of items designed to relate directly to the content of sessions within the programme, with a focus on the following topics:

- Social Skills
- Emotional Regulation
- Anger Control

- Social Problem Solving.

It is hoped that by linking measures so closely to programme content it will be possible to examine in detail the effects that the programme has on these areas of skill.

Following the final intervention session, children were asked to complete an evaluation form for the sessions. This is taken directly from the 'Staying Calm' materials and includes Likert response scales (1-5) to record children's views of the group and whether they had noticed changes in their behaviour. An example of the form is included in Appendix 8.9, p169.

3.5 Ethical Considerations

3.5.1 Adherence to Ethical Guidelines for Psychology Professionals and Researchers

The design and implementation of this study adheres to the professional and ethical standards required of practising Educational Psychologists and researchers. These standards include taking account of published guidelines, including the British Psychological Society (BPS) *Ethical Principles for Conducting Research with Human Participants* (BPS, 2000), *BPS Guidelines for Minimum Standards of Ethical Approval in Psychological Research* (BPS, 2004), the Health Professions Council (HPC) *Standards of Conduct, Performance and Ethics* (HPC, 2008) and the University of Nottingham (UoN) *Code of Research Conduct and Research Ethics* (University of Nottingham, 2009). The specific ethical considerations that relate to this study are explained below with reference to the application of specific sections of these guidelines. Discussion of the ways in which these issues have been addressed in this study is also included.

Obtaining ethical approval (BPS, 2004, 3.1; UoN, 2009, 9.1) is required in doctoral and psychological research. In this study the submission and assessment of the researcher's Research Proposal, submitted in August 2009,

allowed scrutiny of the design and ethical safeguards within the research by University staff and Local Authority supervisors.

Acting in the best interests of participants and protecting them is required at all times (BPS, 2004, 3.2; HPC, 2008, 1; UoN, 2009, 7.2, 7.3), including safeguarding health and safety, minimising harm to participants (UoN, 2009, 3.2, 3.11), exercising an appropriate duty of care towards those involved and safeguarding vulnerable participants, for example through using appropriate exclusion criteria (BPS, 2004, 3.7 3.8, 3.9, 3.10). In this study, school staff were fully trained prior to implementing the sessions, such that they were able to deliver them in a way that minimised any potential harm. Regular contact was made with schools regarding the impact of the research, to allow any necessary changes if harm resulted. Children and staff were also given the chance to 'debrief' as part of programme evaluation, giving the opportunity for feedback of results. The needs of the children involved (who could be seen as a 'vulnerable') were considered through gaining consent from both parents and children. All adults and researchers working with children as part of the study had Criminal Records Bureau clearance.

Informed consent is required from all staff, parents and children within the study (BPS, 2004, 3.3; HPC, 2008, 7, 9). Letters to parents requesting consent and child consent forms are included in Appendices 8.10 and 8.11, p.172-174, which illustrate the fact that parents and children were given sufficient information to be able to make an informed choice about the implications of participation. Child participants were informed of what was involved in the study by researchers using a standardised description of the study and were given the opportunity to ask questions. Verbal consent and written consent was gained from them prior to the completion of pre-measures. Prior to taking part in the study, school staff were also fully informed regarding the level of participation required and what would be requested of them.

Whilst consent was not requested prior to staff completing SDQ responses as part of screening, the data obtained through screening was retained by schools

rather than the researcher. SDQ responses linked to names were only obtained by the researcher once children were selected and parental consent requested.

It is important that participants are free to choose whether to be involved (i.e. there is no coercion) and they are able to withdraw their involvement at any time (BPS, 2004, 3.4, 3.5; HPC, 2008, 7; UoN, 2009, 3.10). In gaining consent from adults and children it was emphasised that they had the right to withdraw from the study at any time (see consent forms in Appendices 8.10 and 8.11, p.172-174, for examples).

The anonymity and confidentiality of participants must be ensured in any research (BPS, 2004, 3.6; HPC, 2008, 2, 10; UoN, 2009, 3.5, 4.1, 4.2, 4.3). As far as possible, all information and data gathered will remain confidential throughout this study and will be anonymised in any data retained or reports produced.

It is necessary for student researchers to have access to appropriate supervision and for any other professionals actively involved in the research to be appropriately supervised (BPS, 2004, 3.12; HPC, 2008, 8; UoN, 2009, 7.1, 7.2, 7.3). In this study the researcher has been supervised both by University tutors and qualified Educational Psychologists within her Local Authority. Any adults involved in data collection and programme delivery have been supervised by the researcher through training, observation and ongoing telephone contact.

3.5.2 Additional Ethical Safeguards within this Study

As a consequence of consideration of the above guidelines, the following ethical issues have also been considered in design of the study:

- The use of a 'waiting list' control group, rather than 'no intervention'. The 'target' children identified that are placed within the control group will have been identified as possibly benefiting from intervention, although they will not receive this as part of the study. It will therefore be

necessary to ensure that schools offer the programme to control participants once the study has been completed. An agreement has been secured from the staff in each school that they will run further groups later in the school year so that all study participants have access to 'Staying Calm'.

- Role model children were selected and were involved in the groups, despite the fact that they have been identified as possibly not needing any intervention. Anecdotal reports following pilot studies (completed by the Educational Psychologists who designed the programme) have shown, however, that the role model children also benefited from taking part in the group. It is therefore likely that there will be benefits in group attendance for all involved.
- Where parental consent was gained for more participants than was required for the experimental and control groups, these children were treated in the same way as participants in the waiting list control group, although they did not take part in the study or take part in measurement (i.e. they will be offered the chance to participate in the groups at a later date).

3.6 Study Design

3.6.1 Design

The study uses a two group pre-test, post-test randomised controlled trial design in which, following screening, participants were randomly allocated to the experimental (receiving 'Staying Calm') or control (waiting list) groups.

3.6.2 Participants

3.6.2.1 Sampling

The participating schools were selected opportunistically, meaning that they were a '*sample of convenience*' and were selected because they were easily available at the time at which they were required (Kazdin, 2003, p.153). Initially six Primary schools were approached from suburban areas of a large shire county. Head teachers and Special Educational Needs Coordinators (SENCOs) were given details of the project and then asked to volunteer for further

involvement. Of the six schools, four consented to further involvement, although one was later discounted due to having no children of Year 6 age. The first two schools to respond with a firm commitment to the project were then selected as participating schools.

Children were selected for screening on the basis of their being on roll in either Year 5 or Year 6 in the two participating schools. Children were then screened using the SDQ (Goodman, 1997), as completed by class teachers (in the case of four class groups, with one class group's being completed by a Learning Support Assistant, due to staff absence).

Following screening, children were selected on the basis of their SDQ scores, as described in Section 3.6.2.2 below. Parental consent for involvement was sought for 16 children per year group per school (ten 'target' children and six 'role model' children per group). Of those that responded by the deadline, forty 'target' children and eight 'role model' children were selected for inclusion in the study, with only four children in total who returned consent forms not being selected. These children were included on the waiting list for intervention with the control group but not included in the study. Children were then randomly allocated to experimental (intervention) and control (waiting list) groups through the drawing of initials out of a hat by a fellow researcher.

3.6.2.2 Inclusion/ Exclusion Criteria

Children were selected for the study on the basis of being in Year 5 or 6 within the schools selected. Screening took place of all children meeting these criteria as described above. The ten children per year who score the highest total 'overall difficulty' score on the SDQ were selected (the 'target' children), as were the six children who obtained the lowest 'overall difficulty' score (the 'role model' children). Any of these children that did not return parental consent forms, or for whom parental consent was refused, were excluded.

3.6.2.3 Sample Size

In total 139 children (67 male, 72 female) were selected for screening. A total of 48 children participated in the study, with 24 in the experimental and 24 in the

	School 1		School 2		Total
	Year 5*	Year 6**	Year 5*	Year 6**	
Males	9	6	7	10	32
Females	3	6	5	2	16
Ethnicity (white British)	11	11	11	12	45
Ethnicity (other)	1	1	1	0	3
Primary Language (English)	12	12	12	12	48
Primary Language (other)	0	0	0	0	0
Entitled to Free School Meals	0	0	1	0	1
Special Educational Needs (statement)	0	0	0	1 (medical)	1
Special Educational Needs (School Action or School Action Plus)	4 (3 learning, 1 behaviour)	3 (3 learning)	4 (3 learning, 1 behaviour)	3 (1 medical, 2 behaviour)	14

* Aged 9-10 in September 2009.

**Aged 10-11 in September 2009.

Table 3.2:Key Characteristics of children participating in the study

control group. In total there were 32 males and 16 females (ratio 2:1).

3.6.2.4 Participant Characteristics

Table 3.2, p.78, illustrates the key characteristics of the children participating in the study.

3.6.2.5 Concurrent or Historical Intervention Exposure

None of the participants had received small group interventions related to emotional literacy, emotional regulation, resiliency or anger in the past academic year or during the time of the study.

School staff trained in the use of 'Staying Calm' were asked not to use the material or techniques or discuss this with children not in the group during the time of the study. They were also provided with a form to record details of children's previous exposure to similar material (included in Appendix 8.12, p.175).

All classes within the study received their usual whole class emotional literacy sessions (SEAL sessions and PSHE teaching) during the period of intervention. In School 1 this took the form of a total of one hour per week in both year groups, with all SEAL units being covered every term. In School 2 this varied by class. The Year 6 children received approximately one lesson per week input on the SEAL themes 'All About Me' and 'Getting on and Falling Out'. In the Year 5 class approximately one lesson per month was received on the topic of 'Getting on and Falling Out'.

One individual in the study received individualised behaviour support (both one-to-one sessions and in-class) during the period of the study. However, this child's data will be removed from the final analysis as they were asked by school staff to leave the intervention group and therefore did not attend sufficient number of sessions for adequate exposure to the intervention.

3.6.3 Intervention

3.6.3.1 Type of Intervention

The 'Staying Calm' intervention was used in this study as a targeted intervention for those children who were showing signs of difficult behaviour. However, it can also be considered as a universal prevention programme as its effect on 'role model' children was also studied.

The 'Staying Calm' groups were run in the school setting, with children being withdrawn from class to participate as part of the school day. The groups were run over a period of eight weeks during the autumn term 2009. Each group received the 'Staying Calm' sessions for between 45 minutes and 1 hour 15 minutes per session on a weekly basis. Session lengths varied slightly from session to session due to their varying content.

3.6.3.2 Procedure

For copyright reasons, it is not possible to give a full procedural manual for the implementation of the programme. However, Appendix 8.13, p.176, contains a summary of the procedure followed for each session and Appendix 8.14, p.177, contains a summary of the topic areas covered in each session.

3.6.3.3 Implementers

The adults who delivered the programme were four Learning Support Assistants (one per year group per school), all of whom were female. They had been selected by school staff (e.g. Headteacher, SENCo) on the basis of being the Learning Support Assistants that worked most with each respective class or year group.

3.6.3.4 Training and Support Resources

The staff responsible for delivering the programme attended a one day training session in September 2009, led by two Educational Psychologists who had designed and previously delivered the primary group work packages (including 'Staying Calm'), including previously delivering in-school training for these. The use of experienced trainers allowed the sharing of their prior experience and

expertise with group leaders regarding implementation and what might make the groups run most successfully. Examples of the training materials used are included in Appendix 8.15, p. 178.

The running of the programme was supported by a manual containing full session plans, activity suggestions and resources required for implementation. The staff were also provided with a sheet of hints and tips specific to the research being conducted, such as how to maintain treatment integrity (see Appendix 8.16, p.183). They were given a set of diary sheets and evaluation sheets, adapted from the standard evaluation sheets within the 'Staying Calm' package, for use after each session (see Appendix 8.17, p.185).

All group leaders were given contact details of the researcher, who was also the schools' Link Educational Psychologist, such that any difficulties could be raised easily by telephone. The school SENCOs were also able to contact the researcher as required. During the period of gaining parental consent the researcher offered contact details to parents in order to field any queries or questions about the research.

In the training and implementation phase, the researcher was present at the group work training and also visited staff the week prior to the implementation of the programme, in order to answer any questions. Telephone calls were also made in the first two weeks of implementation to offer encouragement and check progress. The next face-to-face visits completed were as part of the monitoring of the treatment integrity in weeks four and five of the programme. Approximately ten minutes was set aside following observations to discuss the session observed and review progress of the sessions. This was used by the group leaders as an opportunity to comment on the materials, how they felt the sessions had been going and to raise any problems or worries. Final visits took place at the end of the programme, at which time group leaders were thanked for their participation.

Feedback sessions for staff, parents and children regarding the results of the study are being planned for the summer term 2010, so that their contributions

can formally be acknowledged and outcomes can be shared.

3.6.3.5 Integrity of Implementation

All staff delivering the programme had access to identical training, session plans and resources. They were encouraged to deliver each session on a weekly basis, at the same time and in the same place (see notes given to adults in Appendix 8.16, p.183).

The following measures were used to monitor treatment fidelity:

- Staff running the groups completed weekly diaries detailing what sessions they had completed, what was included in the sessions and an evaluation of the sessions. Blank examples of these sheets are included in Appendix 8.17, p.185.
- Staff were asked to keep a record of the children that attended each session.
- Each group was observed by the researcher for one complete session, in either the fourth or fifth week. This involved a check on whether the manual was being adhered to (e.g. if each section and activity was completed as outlined) and the taking of a narrative written record of the observation. Following this, a checklist was completed examining the key features of the learning environment and adult's interaction with the group, using adapted sub-sections of the Inventory of Practices for Promoting Social Emotional Competence (The Center for the Social and Emotional Foundations for Early Learning, CSEFEL, 2009). An example of the adapted version used can be seen in Appendix 8.18, p184.
- Any child who missed more than two sessions of the group was removed from the analysis. This means that all data analysed from the experimental group is from children that attended at least 75 percent of the sessions.
- Full details were requested from school staff regarding any possible prior or concurrent exposure to similar interventions.

Results from the observations conducted showed that all adults delivering the

sessions were faithful to the content and delivery of the session as described in the manual. Diary sheets from each session also revealed that this was the case for 21 out of 24 of the sessions with 'Staying Calm' content (not including introductory and evaluation sessions). Where sessions were not faithful to the session plan, the 'relaxation' activity at the end of sessions had not been recorded as completed.

Examination of the checklists adapted from the Inventory of Practices for Promoting Social Emotional Competence (CSEFEL, 2009, in Appendix 8.18, p.186) showed that whilst there were some variations in the style of delivery of adults (e.g. in the ways in which they communicated directions and the extent to which they directed discussions), all adults delivering the programmes demonstrated the skills and competencies included on the checklist either 'occasionally' or 'consistently'.

Information regarding group attendance showed that, of the 24 children in the group sessions, only one was present for fewer than six of the eight sessions (less than 75% of the programme). This child's data will therefore be removed from the final analysis.

3.6.3.6 Programme of Comparison Group

A waiting list control group was used. Children not selected for the initial phase of intervention were informed that they would have access to the group later in the school year. School staff committed to running further intervention groups later in the school year (to include 'control' children) as part of their agreement to participate in the research.

3.6.4 Measures

The reader is referred to Section 3.4.2, p.68, for full information regarding validity, reliability and piloting of the measures described.

3.6.4.1 Child Screening

All Year 5 and 6 children in each school were screened using the SDQ (Goodman, 1997). Questionnaires were completed in September 2009 by class

teachers in all but one case, where they were completed by the Learning Support Assistant who worked full time with the class, due to the absence of the class teacher. In order to ensure confidentiality and anonymity, staff only provided initials of the children, with names only becoming known when named consent was sought for those children selected. The data and questionnaires for children not selected were returned to school staff.

3.6.4.2 Child Measures

All 48 children were individually interviewed on two occasions by the researcher and a research assistant (a Trainee Educational Psychologist), in October 2009 and December 2009 (in the two weeks directly before commencing intervention and the week directly following the 'evaluation' session). Each child was read a set of standardised instructions and practice questions (in Appendix 8.4, p.165) prior to the completion of three subscales of the Resiliency Scales (Prince-Embury, 2007). A set of standardised responses to questions was also used for cases where children sought clarification (see Appendix 8.5, p.166).

3.6.4.3 Teacher Measures

The SDQ responses from screening were used as pre-measures for all 48 children. It was intended that, wherever possible, the same adult would then complete these in December 2009, following implementation. 'Staying Calm' Teacher Questionnaires (see Appendix 8.6, p.168) were also completed in October 2009 and December 2009. For 38 of the children it was possible to obtain responses from the same adult pre- and post-intervention. However, in one school one class teacher had subsequently left the school and been replaced. The new class teacher therefore completed the post-measures SDQ. As a consequence of this, the data from the ten children affected by this change has been removed from the SDQ and 'Staying Calm' Teacher Questionnaire analysis.

A 100% response rate was gained for the staff SDQ and questionnaires (pre and post), although due to staff changes only 76 out of 96 returns (79%) were suitable for analysis.

3.6.4.4 Parent Measures

Parents were given a 'Staying Calm' Parent Questionnaire (see Appendices 8.7 and 8.8, p.169-170) in September 2009 with requests for consent. These were distributed in named envelopes via school staff (given to children, returned to the school office). As a consequence of only selecting children for the study whose consent was received by the deadline (October 2009), a 48 out of 48 (100%) response rate was obtained for those children selected.

At the conclusion of implementation, in December 2009, parents were sent the 'Staying Calm' Parent Questionnaire in the same way, with the addition of an evaluation form (in Appendix 8.19, p.187) for those whose children had been in the experimental group. Where parents had not responded within 3 weeks, a further copy of the Parent Questionnaire and evaluation form was sent by post (January 2010, see Appendix 8.20, p.189, for an example letter). For post-measures a response rate of 41 out of 48 (85%) was obtained.

4. Results

4.1 Introduction to Chapter 4

This chapter presents the results and statistical analysis of data obtained at pre- and post-intervention. The data is arranged in sections according to the measures used: measures of emotional resiliency (Resiliency Scales), measures of children's behaviour (Teacher SDQs and child behaviour ratings), measures of social skills and anger control ('Staying Calm' Questionnaires) and evaluation measures of children's and staff's experience of the programme. Tables of raw data are included in Appendix 8.21, p.190. Relevant research questions and hypotheses are stated and examined in light of the data analysis. The section concludes with a summary of key findings from the study.

4.1.1 Data Selection

Due to factors affecting the reliability of some of the data gathered (e.g. children having insufficient exposure to the intervention, changes in staff completing assessments between pre- and post-tests) and non-return of some results, the total number of children included in data sets varies according to the type of measures used. Details of these numbers are included in Table 4.1, p.87.

4.1.2 Approach to Data Analysis

This study has used a randomised controlled trial design and a hypothesis testing approach. The analysis of the data is therefore based upon the principles of using statistical techniques to determine whether a difference between groups is statistically significant (usually at the $p < 0.05$ level, i.e. a 5% probability or less that results have been obtained by chance). This approach is known as Null Hypothesis Testing (NHT) or Null Hypothesis Significance Testing (NHST) (Dancey & Reidy, 2007, p.138). Within this framework, a statistically significant result (i.e. $p < 0.05$) means that the Null Hypothesis (the assumption that there is no difference between groups) can be rejected, meaning that the difference obtained between scores is most likely to be due to the independent variable (in this case it is due to the 'Staying Calm' intervention). Where a result is not statistically significant (i.e. $p > 0.05$), we fail to reject the Null Hypothesis. In

Measure	No. of participants' data included	Reason
Resiliency Scales	47	1 child's data removed due to non-attendance at sessions
SDQ	37	1 removed due to non-attendance at sessions; 10 removed due to change in teacher between pre- and post-test
Teacher Questionnaire	37	1 removed due to non-attendance at sessions; 10 removed due to change in teacher between pre and post-test
Parent Questionnaire	Pre= 47 Post= 41	1 removed due to non-attendance at sessions; Post-data not returned for 6 participants

Table 4.1: Explanations for the number of children included as part of each data set according to the measures used

this case there is no evidence to suggest that the groups are any more different than they would be by chance- in other words the independent variable has not affected the outcome. Data was analysed using the Statistics Package for Social Sciences (SPSS, Version 17, 2008).

4.1.2.1 Selection of Parametric and Non-Parametric Techniques

As part of preliminary analysis of descriptive statistics, it is necessary to complete assumption testing, such as checking the suitability of data for analysis using either parametric (based on a normally distributed population) or non-parametric statistical techniques. It is inadvisable to use parametric statistics (such as an Analysis of Variance, ANOVA) where data violates the assumption of normality, since these assume that data is 'normal' or '*at least similar in shape*' to the Gaussian distribution (Howell, 2002, p.340). Alternative non-parametric techniques are considered to be less powerful or sensitive than parametric ones, meaning that they may '*fail to detect differences between groups that actually exist*' (Pallant, 2007, p.210). However, their use in cases where data is not normally distributed is preferable to the use of parametric techniques as they make no assumptions regarding the distribution of the data. Since the principles of Null Hypothesis Testing rely on the use of probabilities, it is necessary to ensure that these assumptions are considered, and in most cases not violated, in order to obtain a reliable result.

In this study, the Shapiro-Wilk test for normality has been completed for all pre-test data sets, along with visual checking of box plots and histograms. This test is considered to be the more accurate of the normality tests available within SPSS (Field, 2002, p.51) and was therefore selected rather than the alternative Kolmogorov-Smirnov Test that is available.

4.1.2.2 Selection of Appropriate Statistical Techniques

In order to obtain reliable results, it is necessary to ensure that the most appropriate statistical tests are completed on the data. Thus, the techniques used will vary according to the hypothesis being tested and the nature of the data. In this study, the following tests will be used (from Brace Kemp & Snelgar, 2009):

ANOVA:

- This is a parametric technique that shows '*whether scores vary significantly across conditions*' (p.201). It is used where there is more than one independent variable.
- It can be used to examine interactions between variables.
- It can be used where there is a mixture of between and within subjects variables.

Independent t-test:

- This is a parametric test that is used to compare two independent (unrelated) groups.

Mann-Whitney U:

- This is the '*non-parametric equivalent of the independent t-test*' (p.142), so it is used to compare means of independent groups where data is not normally distributed.

Wilcoxon Signed-Ranks Test:

- This is a non-parametric test, which is usually used to compare means involving repeated measures.
- Where a 'split' test is used (i.e. where a data file is split into two independent groups using the 'split file' command in SPSS), it is possible to analyse data for the two groups separately (Field, 2002, p.54), meaning that results can be compared for both between and within subjects variables.

4.1.2.3 Assumptions of ANOVA: Homogeneity of Variance and Sphericity

Using the SPSS package, it is also possible to ascertain whether the use of Analysis of Variance (ANOVA) is appropriate for some analyses by checking whether data meets the assumptions needed for its use.

The assumption of homogeneity of variance relates to the fact that, to complete an ANOVA, data from different groups should not have variances that are significantly different. Data can be checked for this using Levene's test of

Equality of Error Variances (Brace *et al.*, 2009). In general, where this assumption is violated, the use of ANOVA is inadvisable. However, there are some cases in which ANOVA can still be used where the assumption is not violated to too great a degree (see Section 4.2.5.2, p.93, for further discussion). The same assumption applies to data analysed using an independent t-test, although where the assumption is violated, it is possible to report scores stating that '*equal variances are not assumed*'.

In cases where there are more than two levels of a within subjects factor in the ANOVA, it is also necessary to complete a test of sphericity (e.g. Mauchly's test of Sphericity) to check that correlations between the variables are similar (Brace *et al.*, 2009). However, none of the analyses for this study contain more than two within subjects variables and therefore this assumption cannot be violated and does not need checking.

4.2 Outcomes from the Resiliency Scales

4.2.1 Research Question and Hypotheses

Research Question 1:

Does 'Staying Calm' have a positive impact upon a child's perception of their emotional 'resiliency' skills?

Hypothesis 1:

There will be a statistically significant difference in 'resiliency' scores between pre- and post-test (i.e. a change over time in Mastery, Relatedness and Reactivity scores) in the experimental group. This change will not be observed in the control group.

Null Hypothesis 1:

There will be no significant difference between 'resiliency' scores for the experimental and control groups between pre- and post-test.

4.2.2 Descriptive Statistics

Descriptive statistics for the three different sub-scales of the Resiliency Scales

(Mastery, Relatedness and Reactivity) are presented in Table 4.3, p.92.

4.2.3 Assumption Testing: Normality

The pre-test data for each of the three scales was checked for normality using visual checks of histograms and box plots. The Shapiro-Wilk test for normality was also completed, with results shown in Table 4.2 below.

	Mastery	Relatedness	Reactivity
Shapiro-Wilk statistic	0.984	0.956	0.973
Degrees of Freedom	47	47	47
Significance	0.774	0.073	0.333

Table 4.2: Shapiro-Wilk statistics for pre-test data from the Resiliency Scales measures

Results from these checks showed that the three pre-test data sets met the assumption of normality, with the results of the Shapiro-Wilk tests being statistically non-significant ($p > 0.05$). This allows for the use of parametric statistics in comparing the pre- and post-test data.

4.2.4 Testing for Equivalent Groups

The pre-test data was also compared between groups (experimental vs. control). An independent t-test was used to assess whether the groups were equivalent prior to intervention. The results showed that for Mastery ($t = -0.013$, $df = 33.26$, $p = 0.990$, two tailed, equal variances not assumed), Relatedness ($t = -1.086$, $df = 35.69$, $p = 0.285$, two tailed, equal variances not assumed) and Reactivity ($t = 1.639$, $df = 45$, $p = 0.108$, two tailed) subscales, there were no statistically significant differences between experimental and control group scores prior to intervention.

Time	Group	Mean/ Standard Deviation (S.D.)	Mastery	Relatedness	Reactivity
Pre- test	Experimental group (N=23)	Mean	52.13	68.43	32.39
		S.D.	11.64	16.44	13.12
	Control group (N=24)	Mean	52.17	72.75	26.38
		S.D.	6.20	9.84	12.04
	Total Sample (N=47)	Mean	52.15	70.64	29.32
		S.D.	9.17	13.51	12.81
Post- test	Experimental group (N=23)	Mean	54.13	70.70	27.17
		S.D.	11.73	14.26	12.35
	Control group (N=24)	Mean	55.50	73.92	24.08
		S.D.	7.24	9.66	10.37
	Total Sample (N=47)	Mean	54.83	72.34	25.60
		S.D.	9.62	12.11	11.37

Table 4.3: Descriptive statistics for pre- and post-test measures of the Resiliency Scales sub-scales

4.2.5 Comparing means using ANOVA

4.2.5.1 ANOVA Design

A mixed 2*2 ANOVA was completed for each of the Resiliency Scales subscales. The within subjects variable (time) had two levels- pre- and post-test. The between subjects variable (group) had two levels- intervention (the experimental group) and no intervention (the waiting list control group). The dependant variables for each ANOVA were the Resiliency Scales scores (either Mastery, Relatedness or Reactivity, one per ANOVA).

4.2.5.2 Assumption Testing: Homogeneity of Variance

Prior to completion of the ANOVA, data was checked for homogeneity of variance. Levene's test of Equality of Error Variances was found to be significant ($p < 0.05$) for Mastery pre-test data ($F = 8.995$, $df = 1, 45$, $p = 0.004$) and Relatedness pre-test data ($F = 9.883$, $df = 1, 45$, $p = 0.003$). This means that these data sets violate the assumption of homogeneity of variance required for ANOVA. However, as the group sizes are similar in this case ($N = 23$ and 24), it is likely that ANOVA will be '*reasonably robust*' to this violation (Pallant, 2007, p.204). In addition, it is considered that '*if the largest variance is no more than four times the smallest, the analysis of variance is most likely to be valid*' (Howell, 2002, p.340). As Table 4.4, p.94, illustrates, the variances of the groups to be compared in the ANOVA all meet this criterion, suggesting that the use of ANOVA is still likely to yield a valid result, despite the violation of the assumption of homogeneity of variance.

4.2.5.3 Outcomes of ANOVA

In relation to Mastery, the main effect of time was significant: $F(1,45) = 8.815$, $p = 0.005$, partial $\eta^2 = 0.16$.

The time by group interaction was not significant: $F(1,45) = 0.551$, $p = 0.462$, partial $\eta^2 = 0.01$.

The main effect of group was not significant: $F(1,45) = 0.072$, $p = 0.790$, partial $\eta^2 = 0.002$.

Time	Group	Variance		
		Mastery	Relatedness	Reactivity
Pre-test	Experimental group (N=23)	135.39	270.17	172.25
	Control group (N=24)	38.49	96.89	145.03
	Ratio of variances (Experimental: Control)	3.52 : 1	2.79 : 1	1.19 : 1

Table 4.4: Comparison of ratio of variances between experimental and control groups for Resiliency Scales data

There is therefore a statistically significant difference between the mean Mastery scores of all children between pre- and post-test. Examination of the descriptive statistics (see Table 4.3, p.92) suggests that the overall mean score for the sample at post-test (\bar{x} = 54.83) is higher than that at pre-test (\bar{x} = 52.15). Thus, all children's Mastery scores increased (reflecting an increase in perceived Mastery) over the period of measurement.

For Relatedness, the main effect of time was not significant: $F(1,45)=2.224$, $p=0.143$, partial $\eta^2 =0.05$.

The time by group interaction was not significant: $F(1,45)=0.224$, $p=0.636$, partial $\eta^2 =0.01$.

The main effect of group was not significant: $F(1,45)=1.12$, $p=0.296$, partial $\eta^2 =0.02$.

Thus, there was no significant difference in Relatedness scores over time for either group.

In relation to Reactivity, the main effect of time was significant: $F(1,45)=10.85$, $p=0.002$, partial $\eta^2 =0.19$.

The time by group interaction was not significant: $F(1,45)=1.647$, $p=0.206$, partial $\eta^2 =0.04$.

The main effect of group was not significant: $F(1,45)= 1.892$, $p=0.176$, partial $\eta^2 =0.04$.

There is therefore a statistically significant difference between the mean Reactivity scores of both experimental and control groups between pre- and post-test. Examination of descriptive statistics (see Table 4.3, p.92) suggests that the overall mean score for the sample at post-test (\bar{x} =25.60) is lower than that at pre-test (\bar{x} =29.32). Thus, all children's Reactivity scores decreased (reflecting a decrease in perceived Emotional Reactivity) over the period of measurement.

4.2.5.4 Summary

A statistically significant change was observed in Mastery and Reactivity scores

for both experimental and control groups from pre- to post-test. No statistically significant change was observed over time in Relatedness scores in either group. There was also no significant difference between experimental and control group scores over time and no significant interactions between time and group variables. This means that there is no statistical evidence to suggest that the intervention affected the scores of those who received it.

The experimental hypothesis that there would be a significant interaction of time by group for Resiliency Scales subscales (i.e. that 'resiliency' sub-scale scores would change significantly over time in the intervention group compared with controls) is therefore not supported. We therefore fail to reject the null hypothesis that there will be no significant difference between 'resiliency' scores for the experimental and control groups between pre- and post-test. There is therefore no statistical evidence to suggest that involvement in 'Staying Calm' has an effect on a child's perception of their 'resiliency' skills.

4.3 Measures of Behaviour Change: SDQ

4.3.1 Research Question and Hypotheses

Research Question 2:

Does 'Staying Calm' have a positive effect on a child's behaviour?

Hypothesis 2:

There will be a statistically significant difference in teachers' overall SDQ ratings and on sub-scale scores for the experimental group between pre- and post-test. This change will not be observed in the control group.

Null Hypothesis 2:

There will be no significant difference in the experimental and control groups' SDQ scores between pre- and post-test.

Time	Group	Statistic	Overall difficulties score	Emotional symptoms	Conduct problems	Hyperactivity / inattention	Peer relationship problems	Prosocial behaviour
Pre-test	Experimental group (N=19)	Median	7.00	0.00	1.00	5.00	1.00	7.00
		Range	26.00	9.00	8.00	10.00	7.00	9.00
	Control group (N=18)	Median	7.50	0.00	1.00	3.50	0.50	7.50
		Range	21.00	7.00	4.00	9.00	6.00	6.00
	Total Sample (N=37)	Median	7.00	0.00	1.00	4.00	1.00	7.00
		Range	26.00	9.00	8.00	10.00	7.00	9.00
Post-test	Experimental group (N=19)	Median	3.00	0.00	0.00	0.00	2.00	10.00
		Range	24.00	6.00	7.00	4.00	10.00	7.00
	Control group (N=18)	Median	5.00	1.50	0.00	0.00	3.00	9.00
		Range	18.00	8.00	3.00	4.00	9.00	6.00
	Total Sample (N=37)	Median	4.00	1.00	0.00	2.00	0.00	9.00
		Range	24.00	8.00	7.00	10.00	4.00	7.00

Table 4.5: Descriptive statistics (median and range) for pre- and post-test SDQ scores

4.3.2 SDQ Results

4.3.2.1 Descriptive Statistics

Descriptive statistics for the different sub-scales of the SDQ are illustrated in Table 4.5, p.97. Non-parametric techniques will be used for this data (see section 3.3.1.2 below) so median and range descriptive statistics are preferred.

4.3.2.2 Assumption Testing: Normality

The pre-test data for each of the SDQ subscales was checked for normality using visual checks of histograms and box plots. The Shapiro-Wilk test for normality was also completed, with results shown in Table 4.6 below.

	Overall difficulties score	Emotional symptoms	Conduct problems	Hyperactivity / inattention	Peer relationship problems	Prosocial behaviour
Shapiro-Wilk statistic	0.902	0.551	0.754	0.875	0.803	0.881
Degrees of Freedom	37	37	37	37	37	37
Significance	0.003	0.000	0.000	0.001	0.000	0.001

Table 4.6: Shapiro-Wilk statistics for pre-test data for SDQ scores

These checks showed that in every case the pre-test data sets did not meet the assumption of normality, with the results of the Shapiro-Wilk tests being highly statistically significant ($p < 0.01$ in all cases). Many of the data sets are skewed as a result of ceiling and floor effects with the data (e.g. many children achieving a minimum score of 0 on the difficulties scales and maximum of 10 on the prosocial scales). In addition a small minority of children scored much higher than their peers in relation to difficulties, creating some outliers in the data.

The nature of the data therefore means that it would be inadvisable to use parametric statistics (such as ANOVA). Instead, non-parametric statistical techniques will be used as they make no assumptions regarding the distribution of the data (see Section 4.1.2.1 for an explanation of parametric and non-parametric techniques).

4.3.2.3 Testing for Equivalent Groups

The pre-test data was compared between groups (experimental vs. control). A Mann-Whitney U test was used to assess whether the groups were equivalent prior to intervention. Results showed that there was no statistically significant difference between experimental and control scores at pre-test for any of the SDQ following categories:

- total difficulties score (U=153.5, N₁=19, N₂=18, p=0.599, two tailed)
- emotional symptoms (U=166.5, N₁=19, N₂=18, p=0.893, two tailed)
- conduct problems (U=169.0, N₁=19, N₂=18, p=0.964, two tailed)
- hyperactivity and inattention (U=144.0, N₁=19, N₂=18, p=0.425, two tailed)
- peer relationship problems (U=148.5, N₁=19, N₂=18, p=0.499, two tailed)
- prosocial behaviour (U=161.0, N₁=19, N₂=18, p=0.775, two tailed).

4.2.3.4 Comparing Groups: Wilcoxon Signed-Ranks Test

A Wilcoxon signed-ranks test was used to compare the difference in scores over time between conditions. The first independent variable is time, with the data being split to show the influence of the second independent variable (group). The dependent variables are individual SDQ subscale scores.

For the total difficulties score:

- There was a statistically significant decrease in scores from pre to post-testing in the experimental group (z=-2.75, p=0.006, two tailed).
- There was no significant difference in scores in the control group (z=-1.20, p=0.232, two tailed).

Thus, teacher perceptions of overall behavioural difficulties showed a statistically significant improvement for the children in the intervention group, but not for those who did not receive the intervention.

For emotional symptoms:

- There was no significant difference in scores over time for the experimental group ($z=-1.07$; $p=0.287$, two tailed).
- There was no significant difference in scores over time for the control ($z=-1.24$, $p=0.216$, two tailed) groups.

Thus, teacher perceptions of emotional symptoms did not vary significantly over time for either group.

For conduct problems:

- There was no significant difference in scores over time for the experimental group ($z=-1.26$, $p=0.207$, two tailed).
- There was a significant decrease in scores over time for the control group ($z=-2.01$, $p=0.045$, two tailed).

Thus, teacher perceptions of conduct problems showed a statistically significant improvement for the children in the control group from pre- to post-testing, but not for those who received the intervention.

For hyperactivity and inattention:

- There was no significant difference in scores over time for the experimental group ($z=-0.84$; $p=0.399$, two tailed).
- There was no significant difference in scores over time for the control group ($z=-0.95$, $p=0.343$, two tailed).

Thus, teacher perceptions of hyperactivity and inattention did not vary significantly over time for either group.

For peer related problems:

- There was a statistically significant decrease in scores from pre to post-testing in the experimental group ($z=-2.02$, $p=0.044$, two tailed).
- There was no significant difference in scores in the control group ($z=-1.86$, $p=0.063$, two tailed).

Thus, teacher perceptions of peer related problems showed a statistically significant improvement for the children in the intervention group, but not for those who did not receive the intervention.

For prosocial behaviour:

- There was a statistically significant decrease in scores from pre to post-testing in the experimental group ($z=-2.34$, $p=0.019$, two tailed).
- There was no significant difference in scores in the control group ($z=-1.73$, $p=0.083$, two tailed).

Thus, teacher perceptions of prosocial behaviour showed a statistically significant improvement for the children in the intervention group, but not for those who did not receive the intervention.

4.3.4 Summary

The experimental hypothesis was that there will be a statistically significant difference in teachers' overall SDQ ratings and on sub-scale scores for the experimental group between pre- and post-test. This change will not be observed in the control group. The null hypothesis was that there will be no significant difference between in the experimental and control groups' SDQ scores between pre- and post-test.

The experimental hypothesis was supported for overall difficulties score, peer related problems and prosocial behaviour. The null hypothesis can therefore be rejected for these measures. In relation to Research Question 2, these results show that teachers perceived a positive improvement in overall behavioural difficulties, peer related problems and prosocial behaviour for the children involved in 'Staying Calm' compared with children in the control group.

However, there is also some evidence that does not support the experimental hypothesis, as no significant differences were observed in emotional symptoms and hyperactivity and inattention scores.

A significant improvement was observed in teachers' ratings of conduct problems for children in the control group, with no difference being observed in ratings for the experimental group. This does not support the experimental hypothesis and suggests that there was a greater improvement in perceived conduct problems for the children who were not involved in the 'Staying Calm' groups.

4.4 Measures of Anger Control and Social Skills: 'Staying Calm' Questionnaires

4.4.1 Research Question and Hypotheses

Research Question 3:

Does 'Staying Calm' have a positive effect on a child's ability to recognise and control anger, use appropriate social skills and problem solve in social situations?

Hypothesis 3:

There will be a statistically significant difference in teachers' ratings of a child's anger control, social skills and social problem solving skills for children in the experimental group between pre- and post-test. No significant change will be observed for children in the control group.

Null Hypothesis 3:

There will be no significant difference in teachers' ratings of a child's anger control, social skills and social problem solving skills in either the experimental or control groups between pre- and post-test.

Hypothesis 4:

There will be a statistically significant difference in parents' ratings of a child's anger control, social skills and social problem solving skills for children in the experimental group between pre- and post-test. No significant change will be

observed for children in the control group.

Null Hypothesis 4:

There will be no significant difference in parents' ratings of a child's anger control, social skills and social problem solving skills in either the experimental or control groups between pre- and post-test.

4.4.2 Descriptive Statistics

Descriptive statistics for the Teacher and Parent 'Staying Calm' Questionnaires are illustrated in Table 4.8, p.105.

4.4.3 Assumption Testing: Normality and Homogeneity of Variance

The pre-test data for each of the 'Staying Calm' Questionnaires was checked for normality using visual checks of histograms and box plots. The Shapiro-Wilk test for normality was also completed, with results shown below in Table 4.7.

	Teacher Questionnaire	Parent Questionnaire
Shapiro-Wilk statistic	0.952	0.965
Degrees of Freedom	37	47
Significance	0.110	0.174

Table 4.7: Shapiro-Wilk statistics for pre-test data for Teacher and Parent 'Staying Calm' Questionnaires

These checks showed that the pre-test data sets met the assumption of normality, with the results of the Shapiro-Wilk tests being statistically non-significant ($p > 0.05$). This allows for the use of parametric statistics in comparing the pre- and post-test data.

Levene's test for equality of variances was completed to check that the pre-test data met the assumption of homogeneity of variance. In both the case of Teacher Questionnaires ($F=1.31$, $df=1,45$, $p=0.260$) and Parent Questionnaires ($F=0.47$, $df=1,45$, $p=0.829$), these tests were not significant ($p > 0.05$). Therefore

the assumption of homogeneity of variance has been met.

4.4.4 Testing for Equivalent Groups

The pre-test data was also compared between groups (experimental vs. control). An independent t-test was used to assess whether the groups were equivalent prior to intervention. The results showed that for Teacher Questionnaires ($t=-0.49$, $df=35$, $p=0.961$, two tailed) and Parent Questionnaires ($t=-1.186$, $df=45$, $p=0.242$, two tailed), there were no statistically significant differences between experimental and control group scores prior to intervention.

4.4.5 Comparing means using ANOVA

4.4.5.1 ANOVA Design

A mixed 2*2 ANOVA was completed for both the Teacher and Parent Questionnaires. The within subjects variable (time) had two levels- pre- and post-test. The between subjects variable (group) had two levels- intervention (the experimental group) and no intervention (the waiting list control group). The dependant variables for each ANOVA were the Questionnaire scores (either Teacher or Parent, one per ANOVA).

4.4.5.2 Outcomes of ANOVA

For the Teacher Questionnaire, the main effect of time was significant: $F(1,35)=10.91$, $p=0.002$, partial $\eta^2 =0.24$.

The group by time interaction was not significant: $F(1,35)=2.70$, $p=0.109$, partial $\eta^2 =0.72$.

The main effect of group was not significant: $F(1,35)=0.488$, $p=0.109$, partial $\eta^2 =0.07$.

There is therefore a statistically significant difference between the mean scores of both experimental and control groups between pre- and post-test. Examination of the descriptive statistics (see Table 4.8, p.105) shows that the overall mean score for the sample at post-test ($\bar{x}=45.73$) is higher than that at pre-test ($\bar{x}=41.14$). Thus, overall, children's scores increased (reflecting

Time	Group	Mean/ Standard Deviation (SD) (2d.p.)	Teacher Questionnaire (Experimental N=19, Control N=18)	Parent Questionnaire (Experimental N=20, Control N=21)
Pre-test	Experimental group	Mean	41.05	37.85
		SD	11.40	7.88
	Control group	Mean	41.22	40.38
		SD	9.61	6.07
	Total Sample	Mean	41.14	39.15
		SD	10.42	7.04
Post-test	Experimental group	Mean	47.84	42.50
		SD	7.56	8.50
	Control group	Mean	43.50	43.62
		SD	10.98	6.41
	Total Sample	Mean	45.73	43.07
		SD	9.50	7.43

Table 4.8: Descriptive statistics for pre- and post-test data for Teacher and Parent 'Staying Calm' Questionnaires

teachers' perception of improved anger control, social and social problem solving skills) over the period of measurement, regardless of whether they received the intervention or were on the waiting list.

For the Parent Questionnaire, the main effect of time was significant: $F(1,35)=25.15$, $p=0.000$, partial $\eta^2 =0.39$.

The group by time interaction was not significant: $F(1,35)=0.806$, $p=0.375$, partial $\eta^2 =0.02$.

The main effect of group was not significant: $F(1,35)=0.736$, $p=0.396$, partial $\eta^2 =0.02$.

There is therefore a statistically significant difference between the mean scores of both experimental and control groups, between pre- and post-test. Examination of the descriptive statistics (see Table 4.8, p.105) shows that the overall mean score for the sample at post-test ($\bar{x}=43.07$) is higher than that at pre-test ($\bar{x}=39.15$). Thus, overall, children's scores increased in both groups (reflecting parents' perception of improved anger control, social and social problem solving skills) over the period of measurement.

4.4.6 Summary

A statistically significant change was observed in the Teacher and Parent Questionnaire scores for experimental and control groups from pre- to post-test. There was no significant difference between experimental and control group scores over time and no significant interaction between time and group variables. The experimental hypotheses that there would be a significant interaction of time by group for both Teacher and Parent Questionnaires are therefore not supported and we fail to reject the null hypothesis of no difference between groups. There is therefore no statistical evidence to suggest that involvement in 'Staying Calm' has an effect on teachers' or parents' perceptions of a child's anger control, social and social problem solving skills.

4.5 Adult Session Evaluations

4.5.1 Research Question

Research Question 4:

Are the 'Staying Calm' sessions easy and effective to deliver?

4.5.2 Results

After the completion of each session, the adult who had delivered it was asked to evaluate the effectiveness of the session. The responses obtained in response to the question: 'How well do you think this session worked overall?' is shown in Figure 4.1, p.108. Overall, the adults running the sessions rated two thirds (75%) of the sessions positively as either working very well or well, compared with only 14.3% of sessions being seen as 'OK' or 10.7% as not working very well. No sessions were rated to have gone 'very badly'. Where sessions were rated as having gone 'not very well', all adults commented on the fact that behaviour of the children in the group had made running that particular session difficult.

4.6 Child Evaluations

4.6.1 Research Question

Research Question 5:

Is 'Staying Calm' a positive experience for children that take part?

4.6.2 Results

In the final session of the programme, children were asked to rate their experience as a member of the 'Staying Calm' group using the following scale:

- 1) I really did not enjoy it.
- 2) I did not enjoy it.
- 3) It was OK.
- 4) I enjoyed it.
- 5) I enjoyed it very much.

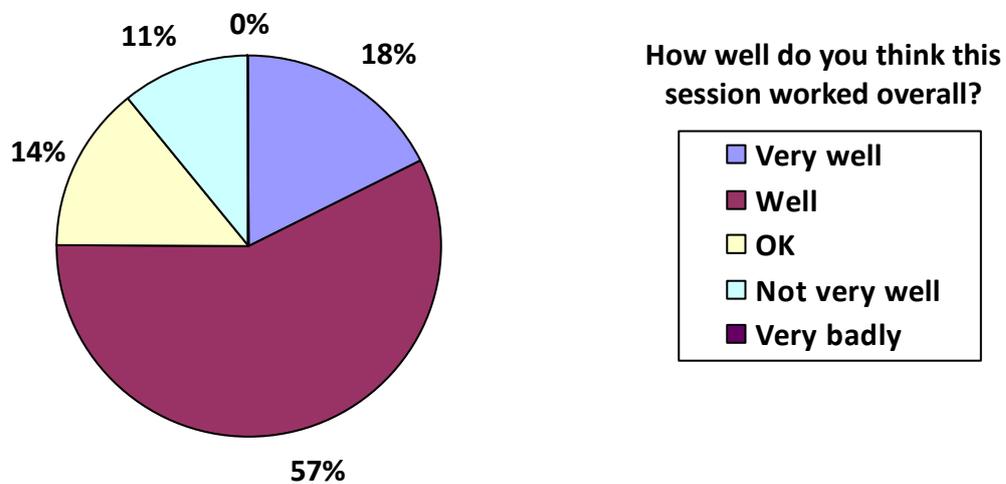


Figure 4.1: Pie chart showing analysis of group leaders' ratings (percentages) of effectiveness of delivery for each session

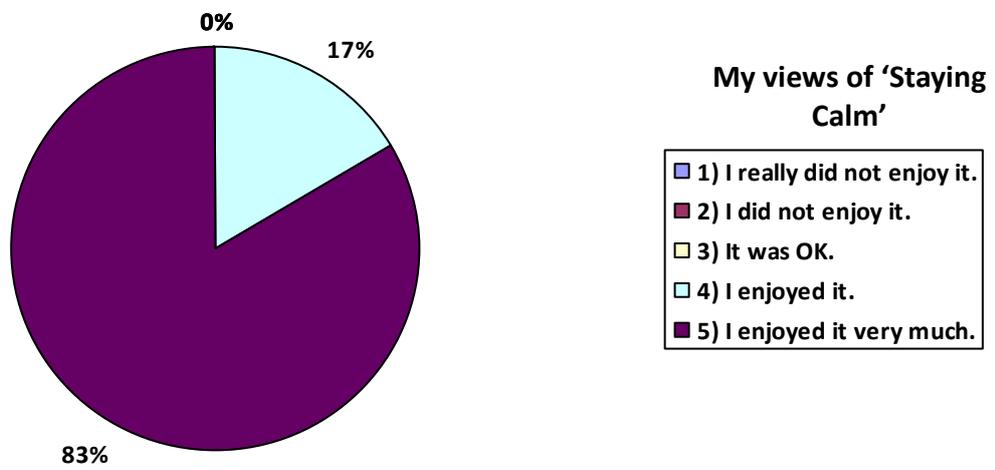


Figure 4.2: Pie chart showing analysis of responses from children involved in 'Staying Calm' regarding their experience of session attendance

Figure 4.2, p.108 illustrates the responses from the 24 children involved in the intervention, who all rated their involvement in the Staying Calm groups as either enjoyable (16.7%) or very enjoyable (83.3%).

4.7 Overall Summary of Results

4.7.1 Research Question 1

Does 'Staying Calm' have a positive impact upon a child's perception of their emotional 'resiliency' skills?

Hypothesis 1:

There will be a statistically significant difference in 'resiliency' scores between pre- and post-test (i.e. a change over time in Mastery, Relatedness and Reactivity scores) in the experimental group. This change will not be observed in the control group.

Null Hypothesis 1:

There will be no significant difference between 'resiliency' scores for the experimental and control groups between pre- and post-test.

Outcomes:

A statistically significant change was observed over time in Mastery and Reactivity scores, although this effect was observed regardless of group. No statistically significant change was observed over time in Relatedness scores. No significant interaction effects were observed between time and group. There is therefore no evidence to suggest that 'Staying Calm' has a more positive impact on a child's perception of their resiliency than no intervention.

4.7.2 Research Question 2

Does 'Staying Calm' have a positive effect on a child's behaviour?

Hypothesis 2:

There will be a statistically significant difference in teachers' overall SDQ ratings and on sub-scale scores for the experimental group between pre- and post-test. This change will not be observed in the control group.

Null Hypothesis 2:

There will be no significant difference between SDQ scores for the experimental and control groups between pre- and post-test.

Outcomes:

The experimental hypothesis was supported for teacher ratings of overall difficulties score, peer related problems and prosocial behaviour, which showed significant positive improvements in the experimental group. No significant differences were observed in emotional symptoms and hyperactivity and inattention and a significant improvement was observed in conduct problems ratings for children in the control group. Thus these results show that 'Staying Calm' can have a positive impact upon some areas of teacher-rated behaviour (overall, peer related problems and prosocial behaviour) but may also impact upon improvements that would occur in the absence of intervention (e.g. leading to no improvement in ratings of conduct problems).

4.7.3 Research Question 3

Does 'Staying Calm' have a positive effect on a child's ability to recognise and control anger, use appropriate social skills and problem solve in social situations?

Hypothesis 3:

There will be a statistically significant difference in teachers' ratings of a child's anger control, social skills and social problem solving skills for children in the experimental group between pre- and post-test. No significant change will be observed for children in the control group.

Null Hypothesis 3:

There will be no significant difference in teachers' ratings of a child's anger control, social skills and social problem solving skills in either the experimental or control groups between pre- and post-test.

Hypothesis 4:

There will be a statistically significant difference in parents' ratings of a child's anger control, social skills and social problem solving skills for children in the experimental group between pre- and post-test. No significant change will be observed for children in the control group.

Null Hypothesis 4:

There will be no significant difference in parents' ratings of a child's anger control, social skills and social problem solving skills in either the experimental or control groups between pre- and post-test.

Outcomes:

Whilst a statistically significant change was observed over time in both sets of scores, there was no significant effect of group or significant interaction between time and group for either Teacher or Parent Questionnaires. The experimental hypothesis is therefore not supported and there is no statistical evidence to suggest that involvement in 'Staying Calm' had an effect on teachers' or parents' perceptions of a child's anger control, social and social problem solving skills.

4.7.4 Research Question 4**Are the 'Staying Calm' sessions easy and effective to deliver?**

Results from adult evaluations of each session show that the adults running the sessions rated two thirds (75%) of the sessions positively, as either working very well or well. Only 14.3% of sessions were rated as 'OK', with 10.7% being rated as not working very well.

4.7.5 Research Question 5

Is 'Staying Calm' a positive experience for children that take part?

Of the children that took part in the 'Staying Calm' groups, 100% rated it as a positive experience (as having either 'enjoyed it' or 'enjoyed it very much').

5. Discussion

5.1 Introduction to Chapter 5

The following chapter examines the study's findings in light of the literature, research evidence and arguments presented in the Literature Review (Chapter 2) and Methodology (Chapter 3). It also examines the implications of these findings for future provision for children and young people. The limitations of the research are highlighted and implications for future research are also considered. The section concludes with some brief reflections upon the researcher's development as a researcher.

5.2 Research Findings

This section summarises the research questions and hypotheses arising from the Literature Review and examines the outcomes of the study in relation to these questions. The individual outcomes are also linked to previous research evidence and literature where relevant. More general or overarching themes that arise from the results of the study are discussed in Section 5.3, p.125.

5.2.1 Summary of Outcomes

Table 5.1, p.115, summarises the research questions investigated and the resulting outcomes.

5.2.2 Effects on 'Resiliency' Skills

The results show that, for Resiliency Scales measures, there were improvements in Mastery and Reactivity scores for both the experimental and control groups between pre- and post-test. However, there were no statistically significant differences between the experimental and control groups' scores over this time. This suggests that 'Staying Calm' does not have an impact upon the 'Resiliency skills' measured by these scales. Figure 5.1, p.116, illustrates the possible explanations for these outcomes, taking into account issues of reliability and validity of measures, as well as issues of internal and external validity.

Research Question	Measures	Outcomes	Conclusions
1) Does 'Staying Calm' have a positive impact upon a child's perception of their resiliency skills?	Resiliency Scales (Children's perceptions of Mastery, Relatedness and Reactivity)	<ul style="list-style-type: none"> Significant changes over time for Mastery and Reactivity in both groups. No significant change in Relatedness scores in either group. No significant difference between groups over time and no interaction between time and group variables. 	'Staying Calm' does not have statistically significant effect on a child's perceptions of their 'resiliency'.
2) Does 'Staying Calm' have a positive effect on a child's behaviour?	SDQ (Teacher perceptions)	<ul style="list-style-type: none"> Significant improvement in overall difficulties score, peer related problems and prosocial behaviour for the experimental group but not the control group. Significant improvement in conduct problems in control group but not the experimental group. No significant differences in either group for emotional symptoms or hyperactivity and inattention. 	<p>'Staying Calm' has a significant effect on some areas of teacher-rated behaviour (overall difficulties, peer-related problems and pro-social behaviour).</p> <p>'Staying Calm' does not affect teachers' ratings of conduct problems, which may change more positively for children not involved with the group.</p> <p>'Staying Calm' has no significant effect on ratings of emotional symptoms or hyperactivity.</p>
3) Does 'Staying Calm' have a positive effect on a child's ability to recognise and control anger, use appropriate social skills and problem solve in social situations?	Teacher Questionnaire	<ul style="list-style-type: none"> Significant change in scores for both groups over time. No significant difference between groups over time and no interaction between time and group variables. 	'Staying Calm' does not have an effect on teachers' perceptions of a child's anger control, social skills and social problem solving skills.
	Parent Questionnaire	<ul style="list-style-type: none"> Significant change in scores for both groups over time. No significant difference between groups over time and no interaction between time and group variables. 	'Staying Calm' does not have an effect on parents' perceptions of a child's anger control, social skills and social problem solving skills.
4) Are the 'Staying Calm' sessions easy and effective to deliver?	Adult session evaluations	<ul style="list-style-type: none"> 75% of sessions rated as working 'very well' or 'well'. 	Adults delivering the programme found it easy to deliver and thought the majority of sessions worked 'well' or better.
5) Is 'Staying Calm' a positive experience for children that take part?	Child evaluation ratings	<ul style="list-style-type: none"> 100% of sessions rated as 'Very enjoyable' or 'Enjoyable'. 	Children taking part in the programme see it as an enjoyable experience.

Table 5.1: Summary of research questions, outcomes and conclusions for the 'Staying Calm' study

Scores on Mastery and Reactivity changed for both groups over time.

- All scores on these scales change as children get older (Maturation).
- Participating in the study has affected all taking part due to 'something different' going on (Hawthorne effect).
- 'Staying Calm' does have an effect on these skills but children in the control group became aware of some elements of the programme; Adults in the classes began to treat all children differently or use material in their practice (Treatment diffusion).

There was no significant difference between the scores of the control and intervention groups over time.

- 'Staying Calm' does not affect Mastery or Reactivity- it is either not effective in boosting a child's perception of this or does not contain material that relates to the construct.

Scores for 'Relatedness' did not change over time for either group.

- The scales are not sufficiently sensitive to detect changes over the short period of time measured.
- The construct of 'relatedness' is such that it remains stable over time for each individual, although it may vary between individuals.
- 'Staying Calm' does not affect Relatedness- it is either not effective in boosting a child's perception of this or does not contain material that relates to the construct.

Figure 5.1: Examination of results obtained for Resiliency Scale measures and possible explanations of these results

A central issue relating to the Resiliency Scales, and, in fact, to the inclusion of a measure of 'resiliency skills' in general, is whether the construct of 'resilience' or 'resiliency' can be captured effectively using any particular scale in a research context. Whilst the constructs of 'Mastery', 'Relatedness' and 'Reactivity' have been confirmed as applicable to pre-adolescent youngsters, including children from the ages of nine plus (Prince-Embury, 2007), there is limited evidence of the use of these scales to assess the outcomes of evaluation studies.

Within literature for the Resiliency Scales (Prince-Embury, 2007), it is suggested that the scales are used for 'clinical application' on a case by case basis, with detailed case studies being offered to explain their use. Whilst it is suggested that the scales are a *'response to the need for field-friendly assessments of personal resiliency in children and adolescents'* (Prince-Embury, 2007, p.8) and as such can be used with *'adolescents or groups for the purpose of preventive screening'* (Prince-Embury, 2007, p.9), there is no suggestion that they have been or could be used as a summative (rather than formative) assessment of a child's resiliency or to measure change over time. It is perhaps best then to view the Resiliency Scales as a clinical instrument that can offer useful information about an individual case or to identify issues to address with groups of young people, rather than as a research instrument in assessing change. Having identified these issues it is perhaps fair to say that the Resiliency Scales are therefore not the best method for assessing the efficacy of 'Staying Calm' on an individual level, as it is not clear whether the measures are appropriate or sensitive enough to assess change over the short period of intervention.

However, if the Resiliency Scales do give an accurate assessment of the change in Mastery, Relatedness and Reactivity over time, why might 'Staying Calm' not have had an effect on these? Perhaps it is unrealistic to expect a short programme of eight weeks to effect change in such complex domains as resilience or 'resiliency'. As was discussed in the Literature Review (Chapter 2), 'resiliency' may describe any personal traits or characteristics that have helped contribute to successful adaptation over time (resilience), whether the presence

of 'risk' is considered or not (Luthar *et al.*, 2000, see Chapter 2, Section 2.3.5, p.22, for definitions and further discussion). It is perhaps likely then that these personal traits, in a similar way to personality traits and other more stable personal qualities, are unlikely to undergo change rapidly enough for this to be detected in a short time period.

It may therefore be better to examine programmes such as 'Staying Calm' in relation to the skills and competencies learned, rather than try to measure its over-arching impact on 'resiliency' (or resilience), since these concepts cannot be easily defined or measured in any reliable normative way. They are perhaps the sum total of a child or young person's strengths, abilities and vulnerabilities, which vary from person to person and can be applied in different ways according to a person's environment. To try to capture 'resiliency' as a single construct or cluster of constructs, even as the 'personal qualities' element of 'resilience', may therefore be too reductionist and perhaps impossible in the context of evaluation research.

In this case, there is therefore no evidence that 'Staying Calm' affected participants' resiliency. However, there is also an argument for the fact that no evaluation or short-term programme is able to reliably demonstrate changes in 'resilience', as the concept requires consideration of each individual's exposure to risk or at the very least environmental influences (Pianta & Walsh, 1998). This is reflected in the fact that, whilst several of the evaluation studies previously examined purport to contribute to enhancing 'resilience' or 'resiliency', they actually offer little or no explanation as to how the content of the programme and measures used will affect such constructs. Instead they focus on deficit-based models of preventing anxiety, depression and mental health problems (e.g. FRIENDS, Barrett *et al.*, 2003; Farrell & Barrett, 2007; Stallard *et al.*, 2005) or offer general over-arching programmes (the Penn Resiliency Programme, The UK Resilience Programme, Challen *et al.*, 2009).

It could be argued that, regardless of the terminology used, these types of programmes offer useful ways of improving a child's emotional health and well-

being. That may be the case, but the point about terminology is an essential one if those setting up and using the programmes are to be clear about the specific ways in which a particular intervention is intended to help support young people. There is a danger that, through the use of the 'resilience' or 'resiliency' label, programmes that may be better targeted at specific at-risk groups or areas of need (e.g. anxiety, depression, emotional competence, anger management) are rolled out in a 'one-size-fits-all' fashion, as they are thought to have a beneficial effect as a universal 'resilience' intervention. Such programmes may instead be of most use in targeting improvements in areas where they are proven to make a difference, for example 'Staying Calm' might be best positioned as a programme to boost overall behaviour, prosocial and peer relationship skills (e.g. in a similar way to social skills and nurture groups), rather than targeting those with other areas of need or claiming to boost overall 'resilience' in an ill-defined way.

5.2.3 Behaviour Change: SDQ

Results from teacher ratings on the SDQ showed significant improvements in overall difficulties score, peer related problems and prosocial behaviour for the experimental group but not the control group. No significant differences were observed in emotional symptoms and hyperactivity and inattention and a significant improvement was observed in conduct problems ratings for children in the control group. It was therefore concluded that 'Staying Calm' has a positive impact upon some areas of teacher-rated behaviour but may also impact upon improvements that would occur in the absence of intervention (e.g. leading to no significant improvement in teachers' ratings of conduct problems). The possible explanations for these findings are outlined in Figure 5.2, p.120.

Since teacher SDQ ratings yielded the only significant results in the study, it could be argued that these results were due to participant/ observer bias, since the adults completing the measures were aware of the aims of the programme, had invested time and effort in ensuring its success and were aware of which children had taken part in the intervention. These adults may therefore have altered their post-test questionnaires to paint a more positive picture of the

<p>Significant improvements occurred in overall difficulties score, peer related problems and prosocial behaviour for experimental group but not in the control group.</p>	<ul style="list-style-type: none"> • ‘Staying Calm’ has a positive impact upon children’s overall behaviour difficulties, peer-problems and prosocial behaviour. • ‘Staying Calm’ may not have an actual effect on behaviour, but it does have a positive effect on teacher’s perceptions of behaviour in these areas. • The teachers involved were aware of the aims of the study from the outset and aware of which child was in which group at post-test. They may therefore have showed some bias (either deliberate or unconscious) in their post-intervention measurements for these subscales.
<p>Significant improvements occurred in conduct problems in control group but not the experimental group.</p>	<ul style="list-style-type: none"> • ‘Staying Calm’ affects children that take part in such a way that potential improvements in conduct problems are attenuated. • For children in the control group, conduct problems improved due to variables that have not been identified or controlled for within this study. • Adults’ expectations for those in the ‘Staying Calm’ group may have been raised during the period of involvement, such that any disappointing behaviour or conduct problems were noticed more keenly than those in the control group (thus masking a potential improvement in scores of those in the intervention group), so adult reports were more negative at post-test.
<p>No statistical differences were found in either group for emotional symptoms or hyperactivity and inattention.</p>	<ul style="list-style-type: none"> • ‘Staying Calm’ does not affect emotional symptoms or hyperactivity and inattention- it is either not effective in boosting a teacher’s perception of this or changing a child’s behaviour in these areas, or the programme does not contain material that relates to these constructs.

Figure 5.2: Examination of results obtained for SDQ measures and possible explanations of these results

outcomes than actually was the case (either consciously or unconsciously). However, it could also be argued that if this were the case, all of the sub-scales would be expected reflect this bias, as would the teacher evaluations of anger control and social skills (see Section 5.2.4, p.122). As only a few of the sub-scales reflect the positive change in perceptions of behaviour, it is logical therefore to assume that the significant results reflect something other than simply respondent bias.

It must be noted that the measures used within this study do not, in fact give an actual measure of children's behaviour at pre and post-tests and therefore any conclusions drawn regarding behaviour change can only be inferred from the perceptions of those involved (teacher, child or parent). From the picture of data obtained so far it may be that there is a difference between the *actual* change that occurred in a child's skills or behaviour and the changes teachers *perceived* there to be in the classroom context, due to their involvement in the programme or increased awareness of and attention to monitoring changes in behaviour. The data required to explore these issues are beyond that obtained within this study, although it would be helpful to explore these ideas further in any future studies, in order to better understand the nature of any change effected by the programme.

The influence of positive teacher perceptions is also reflected in their evaluations of the programme (see Section 5.2.5, .p??). Evidence from previous studies presented in the Literature Review (Chapter 2) suggests that it is not unusual for teacher perceptions to be positive in relation to interventions such as small group SEAL (Hallam *et al.* 2006). It is also suggested that it is valuable to take account of staff perceptions '*since user perceptions of...appropriateness and effects...helps bridge the gap between academic theory and credibility and effective practice in context*' (Kelly *et al.*, 2004, p.237). Thus through having a positive effect on teachers' perceptions of behaviour, Staying Calm is likely to be viewed by staff as having a positive impact within a school.

5.2.4 Anger, Social Skills and Social Problem Solving Measures: 'Staying Calm' Questionnaires

Questionnaire results (completed by parents and teachers) showed no evidence that involvement in 'Staying Calm' has an effect on teachers' or parents' perceptions of a child's anger control, social and social problem solving skills. A statistically significant change was observed over time in both sets of scores, although no significant differences in scores were found between groups over time. Figure 5.3, p.123, examines some potential explanations for these findings.

It is perhaps surprising that, whilst teacher perceptions of behaviour for the intervention group changed over time in relation to overall behaviour, peer relationships and prosocial behaviour on the SDQ, the 'Staying Calm' Questionnaire measures do not show a significant change. It could be expected that, since there is some over-lap in the constructs involved (e.g. peer relationships and prosocial behaviour from the SDQ may be expected to correlate with the social skills and social problem solving elements of the 'Staying Calm' Questionnaire), there may be similar effects for the 'Staying Calm' Questionnaire, at least where teacher perceptions are concerned. The following hypotheses may explain this apparent mis-match in results:

- 1. Including anger control:** Whilst the 'Staying Calm' Questionnaire focuses on social skills and problem solving, it also examines a child's anger regulation. This may not have been altered by 'Staying Calm' and therefore the lack of change in these skills could lead to any increase in total scores being minimal.

There was a significant change in scores for both control and intervention groups over time.

- All scores on these scales change as children get older (Maturation).
- Participating in the study has affected all children taking part due to 'something different' going on, thus altering perceptions of all teachers and parents (Hawthorne effect).
- 'Staying Calm' does have an effect on these skills but children in the control group became aware of some elements of the programme, which then affected their behaviour; Adults in the classes began to treat all children differently or use material in their practice, which affected child behaviour (Treatment diffusion).

No significant differences were found in scores between groups over time.

- 'Staying Calm' does not affect a child's anger control, social skills or social problem solving skills- it is either not effective in boosting these skills or does not contain material that relates to the construct.
- 'Staying Calm' does affect these skills but changes are not sufficient to be detected or recognised by adults (teachers or parents).
- The questionnaire design is not sufficiently effective in capturing adults' perceptions to reflect subtle changes in their perceptions.
- Parents and teachers may have been aware of the aims of the project but misunderstood the design. They may therefore have been inclined to score all participants more highly at post-test than pre-test in the hope of showing it had been effective.

Figure 5.3: Summary of results obtained for 'Staying Calm' Teacher and Parent Questionnaire measures and possible explanations of these results

2. **Issues of construct validity:** The 'Staying Calm' Questionnaires, whilst extensively piloted, have not been standardised or rigorously evaluated in the same way as SDQ instruments. Thus they may not have construct validity, i.e. the 'Staying Calm' Questionnaires may not accurately measure what they are intended to.
3. **Sensitivity of measures:** The 'Staying Calm' Questionnaires only consist of 12 items, rated on a 1-5 scale. It is possible that the measure is not sufficiently sensitive to capture any changes over the short period of time that they were used.

Limitations relating to the reliability and validity of the instruments and measures used are further discussed in Section 5.5.3, p.137. Bearing in mind the constraints that may have arisen from the use of the 'Staying Calm' Questionnaire, and the fact that significant results were obtained through the use of the SDQ, it is perhaps unfortunate that the SDQ was not also used with parents as a more reliable measure of behaviour change from their point of view. This would have allowed more detailed comparison of teacher and parent perceptions. However, given the content of the SDQ and the nature of some questions (e.g. questions about stealing), it was felt that it would be too anxiety-provoking and potentially damaging to obtaining consent to ask parents to complete these questionnaires. So, whilst the use of the SDQ with parents may have been a more effective choice in relation to methodology, ethically it was considered to be inappropriate.

Whilst the explicit elements of the programme relating to anger control have not been seen to have a positive effect on anger measures, results from previous studies support the view that the inclusion of anger related work may have contributed to positive changes in other areas. These areas include children taking responsibility for their own behaviour and changing teachers' perspectives on working with their pupils (Sharp & Herrick, 2000), which can be seen to be reflected in the significant results in SDQ scores.

5.2.5 The 'Staying Calm' Experience

As has been discussed in Section 5.2.3, p.119, the experience of taking part in 'Staying Calm' has an impact upon teacher perceptions of some aspects of child behaviour. In addition to this, evidence from previous studies suggests that it is important to gather information regarding the success of implementation and suitability of the material and programme being used for those that take part, in order to be aware of how effective the programmes or groups are in practice (Kelly *et al.* 2004; Hallam, Shaw *et al.*, 2006; Sharp & Herrick, 2000). So, researchers should not just be concerned with the effectiveness in terms of outcome, although this is crucial to a programme's overall effectiveness, but also need to be concerned with the extent to which it is effective to implement and operationalise.

Due to the quantitative nature of data collection in this study, a limited amount of information has been gathered regarding perceptions of implementation and an individual's and group's experience of 'Staying Calm'. However, examination of these factors did include analysis of staff evaluations of each session and children's evaluations of the experience of taking part. Results from adult evaluations of each session show that overall the adults running the sessions rated two thirds (75%) of the sessions positively as either working 'very well' or 'well', compared with only 14.3% of sessions being seen as 'OK' or 10.7% as not working very well. This suggests that, at least from their point of view, the majority of sessions were successful. Of the children that took part in the 'Staying Calm' groups, 100% rated it as a positive experience (rating it as having either 'enjoyed it' or 'enjoyed it very much'). Overall, this suggests that from the point of view of the adults and children directly involved in the groups, they were a successful and enjoyable experience. This is likely to enhance the extent to which the same schools, or other similar schools, would be interested in running groups in the future, since in a practical sense they are a positive experience.

5.3 Links to Previous Research Evidence

Several links have already been made in this Chapter between areas that were

previously discussed in the Literature Review (e.g. information about resilience and resiliency, the relevance of teacher perceptions to the success and future implementation of programmes). However, there are also some further comparisons that can be drawn between the outcomes of this study and those theories and research evidence presented in Chapter 2.

5.3.1 The Quality of Research Evidence: Are Positive Effects what they Seem?

In their review of existing research evidence, Weare & Gray (2003) emphasised the need to develop more rigorous and systematic evaluation of programmes in order to contribute to a reliable evidence base for effective social and emotional literacy programmes in England. It was against this background that it was decided that evaluation study using a randomised controlled trial (RCT) design may be the best approach to explore the effects of 'Staying Calm', since it was felt that this would offer the 'gold standard' of research evidence (see Chapter 3, with particular reference to Section 3.2.5, p.61, for a fuller discussion). The use of an RCT design in this study has allowed clear conclusions to be drawn regarding causality, the efficacy of 'Staying Calm' and the skills upon which it has a positive effect.

However, many of the previous studies based in the UK, such as Challen *et al.*, 2009 (UKRP); Hallam, Shaw *et al.*, 2006 (SEAL); Kelly *et al.*, 2004 (PATHS) and Stallard *et al.*, 2005 (FRIENDS), draw conclusions regarding positive effects based on pre- and post- measures that do not include suitably randomised control or comparison groups, if a control group is used at all. In light of the fact that almost all results from 'Staying Calm' showed statistically significant changes over time across both control and intervention groups (from pre- to post- test on Mastery, Reactivity, Teacher and Parent 'Staying Calm' Questionnaires), it is likely that significant results would be found over time in many measures used, even where no intervention had taken place. It is therefore questionable whether significant results in the poorly controlled studies reflect anything more than the change that would occur over time with these types of measures in the absence of any intervention. Results from the

'Staying Calm' study therefore reinforce the idea that where a Null Hypothesis Testing approach is used in assessing whether results are statistically significant, a control or comparison group is needed in order to clarify the cause of any positive change.

In addition to caveats regarding the value of results in the studies mentioned above, the results from 'Staying Calm' also raise important questions regarding the use of participant perception measures as the only measure of behaviour change. In the case of 'Staying Calm', the only significant results obtained were those obtained by teacher report, with no significant changes being found in parent or child measures. In previous studies, measures of teacher perceptions have been relied upon either exclusively (Curtis & Norgate, 2007) or offer the most positive results, with other measures yielding less conclusive outcomes (Hallam, Shaw *et al.* 2006).

In cases where teacher perceptions are the only significant positive outcomes (including this 'Staying Calm' study), or where data is not available to triangulate results, the question must be raised regarding the extent to which these outcomes reflect significant changes in behaviour, or whether the effect of the intervention is to change *perceptions* of behaviour, regardless of the *actual* changes in behaviour that have taken place. In this study the use of more detailed measures of behaviour change, for example a more detailed child measure, would have allowed for greater triangulation of data. Also, it would have been useful to obtain a more objective measure of child behaviour, rather than exclusive reliance upon perceptions of behaviour change.

Within the context of a quantitative study such as this it is difficult to determine exactly why and how an intervention may affect adult or child perceptions of behaviour. As will be seen in Section 5.7, p.140, the use of alternative methodologies may help move this discourse on from measuring exactly *what* the outcomes are, to investigating the ways in which these outcomes occur and *why* they occur. This would then give more insight into the nature of change where some participant perceptions, such as those of teachers, yield more

significant positive outcomes than other measures used.

5.3.2 Do Actual Outcomes Match Intended Outcomes?

In the Literature Review (p.18) the point was emphasised that:

There are a variety of different terms that can be used to describe theoretical concepts in the realm of children's social and emotional skills. In relation to interventions with school-aged children and young people, approaches may be based on the promotion of emotional intelligence, emotional literacy, emotional competence, emotional regulation, emotional resilience or resiliency. The variety of terms used can reveal much about the ways in which these concepts may be seen as similar or different and, where used accurately, the choice of wording may offer some insight into how these concepts may be applied in a practical context. However, in other cases, some of these terms may be used interchangeably, and perhaps erroneously, offering little in relation to a clear theoretical foundation for an intervention.

The fact that it is necessary to re-emphasise this point here is testament to the importance of having a clear idea of the terms used to describe an intervention and its intended outcomes. Through the implementation and investigation of the outcomes of 'Staying Calm' it has become clear that, even with the best of intentions, programmes can be mis-sold as effecting a far greater range of outcomes than can be supported by empirical evidence. Where 'Staying Calm' is described as offering children opportunities for '*developing skills and strategies to stay calm when things get tough*' (Clifford & Davies, 2009, p.1) and looks at identifying feelings, controlling and regulating emotions (with a focus on anger) and problem solving in situations of conflict, its main effects appear to be on teacher perceptions of overall behaviour, peer relationships and prosocial skills. Thus, whilst the programme has some positive outcomes, these are not in the areas that it may primarily be expected to influence. There is therefore a need, not only to take care in being clear about the ways in which a programme is intended to have an effect (i.e. the theoretical foundations), but also to adapt one's view of these in light of the evidence of the programme's actual effects.

This is also the case in many of the programmes described in the Literature Review- whilst clear indications are given regarding the intended outcomes of the programmes (e.g. boosting emotional literacy, improving behaviour, boosting resiliency), few of the programmes actually offer clear evidence that these outcomes are what is achieved. This may be due to the fact that the evidence obtained is mixed (SEAL- Humphrey *et al.*, 2008), that they rely purely on teacher report measures (PATHS- Curtis & Norgate, 2007), that links between measures and theoretical concepts are unclear or not well defined or that there is a clear mis-match between the intended outcome and what is actually measured (PRP & UKRP- Challen *et al.*, 2009). In addition, as mentioned above, very few published studies use a reliable RCT design, with many failing to use any effective form of control or comparison group (e.g. Challen *et al.*, 2009; Hallam, Shaw *et al.*, 2006; Kelly *et al.*, 2004; Stallard *et al.*, 2005).

In future evaluation research into the efficacy of similar programmes, it will be necessary to address the issues discussed above by:

- Being clear regarding the theoretical basis of an intervention and being explicit regarding the definitions of the independent and dependent variables being studied.
- Using measures that clearly measure the key dependant variables and that can be directly related back to the traits or skills that are thought to be affected by the independent variable.
- Use of clear explanations of what the programme does not offer, in addition to its positive outcomes. If there is no evidence that a programme has a particular effect, this should be made clear.
- Use of control and comparison groups where possible, in order to use a Null Hypothesis Testing approach.

5.4 Implications for Future Interventions

Due to the small sample size used in this study, the degree to which the outcomes obtained and conclusions drawn can be generalised to the general school population is limited (see Section 5.5.2, p.133, for further discussion of internal and external validity issues). However, whilst these limitations are accepted, there is still evidence obtained from this study that can contribute to a deeper understanding of the ways in which projects similar to 'Staying Calm' may be used to effect change for children and young people within schools.

The fact that 'Staying Calm' had an effect on teacher perceptions of behaviour in certain areas suggests that its future use may be appropriate where there is an interest in improving overall behaviour in school, improving peer relationships and improving prosocial skills for specific children. The positive evaluations from staff and children also suggest that the intervention is a positive and valuable experience for those that take part.

Reflections upon previous studies of small group interventions suggest that the following elements of the 'Staying Calm' programme may have contributed to its effectiveness, both in relation to outcomes and ease of implementation:

- The use of a multi-component approach (e.g. using a mixture of CBT, problem solving, social skills) being used in a targeted way (Maddern *et al.*, 2004; Shucksmith *et al.*, 2007)
- Commitment of school staff to the process (Sharp & Herrick, 2000)
- The voluntary nature of participation of the children and young people (Sharp & Herrick, 2000)
- Adhering to the programme but tailoring it to the literacy and cognitive level of the group (Sharp & Herrick, 2000)
- The use of targeted intervention in addition to the pre-existing universal SEAL programmes used in school (Wells *et al.*, 2003)
- Commitment of the senior management team to the project (Hallam,

Shaw *et al.*, 2006)

- Staff being given sufficient time to become familiar with the content and purpose of the programmes (Hallam, Shaw *et al.*, 2006)
- The use of the schools' own staff (e.g. teaching assistants) to help implementation of small group work (Hallam, Shaw *et al.*, 2006)
- School staff running small group work receiving formal training prior to implementation
- The inclusion of a mixture of children in the small groups, not just those with difficult behaviour (i.e. target and role model children) (Hallam, Shaw *et al.*, 2006)

It would be suggested therefore that the use of the above strategies and approaches are most likely to ensure successful implementation of similar programmes in future.

However, it must also be noted that the ways in which 'Staying Calm' was used and implemented in this research may differ from the ways in which it may be implemented by staff who are using it outside the constraints of a research programme. Discussions with the Educational Psychologists that designed the programme, who have previously implemented it in schools, highlighted that the conditions used to ensure that the study was 'controlled' may have led to a decrease in the programme's efficacy, as compared with using it a more flexible way. In their view the programme is likely to be more effective where:

- Adults are able to bring the ideas and techniques used in the programme into the classroom environment and allow the impact of the materials to be as pervasive as possible through using them with children whenever this is required.
- Children can be selected by school staff to be involved, such that the children who are most likely to benefit have access to the materials.
- Materials can be used flexibly, rather than the use of a 'prescribed' manual and session plan, so as to be more responsive to the needs of the children in the group. This intention is also stated in the materials themselves: "The resource pack sessions have been put together to be

followed in a sequential order, although the contents are flexible and should be adapted to the needs of the children within the group...[including] adding additional activities or sessions, where progress is not being made and where an idea appears to need further development” (Clifford & Davies, 2009, p.4).

Thus, it may be that the use of an RCT design and the associated control of the way in which the programme was used has led to it being used more rigidly than may be recommended by its authors. This therefore has implications for the ways in which the results of this study can be applied to the programme’s use in schools. A further discussion of the implications of the use of an RCT design, including the effects that maximising internal validity may have on external validity, can be found in Sections 5.7.2.1 and 5.7.2.2, p.142-144.

Issues with addressing ‘resiliency’ have previously been discussed in Section 5.2.2, p.114. In light of these discussions, it is perhaps most pertinent to note here that any relationship between the outcomes of ‘Staying Calm’ and impact on ‘resilience’ or ‘resiliency’ need to be considered carefully. Certainly, no direct link has been found between the effects of ‘Staying Calm’ and impact upon ‘resiliency’, as measured by the Resiliency Scales. However, the fact that positive changes were perceived by teachers in certain areas of behaviour may mean that these positive changes will exert a greater protective influence (i.e. serve as ‘protective factors’, Rutter, 1987) upon those who have taken part than it may have, had they not been involved with the programme. Thus, in this way ‘Staying Calm’ may have indirect benefits upon a child’s overall resilience, rather than having a direct measurable effect upon resiliency. In future use of the programme, it will be important to be clear both about the benefits (e.g. adult perceptions of behaviour change, it being a positive experience) and the areas in which ‘Staying Calm’ may not be so effective (e.g. in changing parents’ perceptions of behaviour or children’s perceptions of their resiliency), in order to use the programme in the most appropriate way.

5.5 Limitations of this Research

This section outlines potential limitations and issues that may affect the extent to which the results of this study can be considered to be valid and reliable.

5.5.1 The use of Multi-element Hypotheses

The choice of a Null Hypothesis Significance Testing (NHST) approach in this study was useful in that it allowed for the selection of hypotheses that linked the areas of focus within the programme, and hence the selected Research Questions, to the specific measures used and the ways in which results could be analysed statistically. However, in many cases the hypotheses selected contained multiple elements, or related to multiple subscales of a measure. For example, Hypothesis 1 examined changes in all three elements of the Resiliency scales (Mastery, Reactivity and Relatedness) and Hypothesis 2 related to all different strands of the SDQ, rather than looking at these individually. Since in the analysis phase results from these different sub-scales were all analysed and reported separately, it would perhaps have been more appropriate to include individual hypotheses for each sub-scale. This would therefore have removed the cases where the Null hypothesis was rejected for some elements (e.g. in the case of Hypothesis 2, some SDQ sub-scales yielded significant results and others did not) but not for others. On reflection, therefore, the hypotheses explored would have been more accurate in this study had they been broken down into their multiple elements prior to analysis, in order to more accurately reflect the areas being investigated.

5.5.2 Internal and External Validity

As was discussed in Chapter 3, Section 3.4, p.64, 'validity' within a post-positivist paradigm relates to the question of whether results can truly be attributed to the effect of the experimental treatment (internal validity) and to the extent to which results are 'externally' valid (external validity). Issues of external validity include the extent to which results can be generalised to other populations ('population validity') or other environments or contexts ('ecological

validity'). Specific threats to internal and external validity in experimental research were summarised in Figure 3.2, p.66 and Table 3.1, p.67.

Table 5.2, (p.135-136) highlights the ways in which some of these threats to validity were controlled for, may have affected the outcomes of the study and may need to be considered in future research.

The information given in Table 5.2 (p.135-136) shows that the use of an RCT design (involving the use of a control group and random allocation) played a key role in controlling for some threats to internal and external validity, such as selection bias, maturation and the Hawthorne effect. Through the use of the RCT methodology, one can therefore be more confident that any statistically significant improvements in measures for the intervention group are truly due to the effect of the intervention itself.

However, the use of an RCT design also has some caveats (as outlined by Cook, 2007, discussed in Section 3.2.5, p.61), particularly where measures used to maximise internal validity have an adverse effect upon external validity. Due to the large amounts of time and resources required to accurately gather information from a wide range of measures (looking at resiliency, behaviour, anger measures and social skills), using a range of respondents (parents, children and teachers), there were restrictions on the numbers of children that could be included in the study. This has had an inevitable impact upon the sample size used. With this smaller sample size, ecological and population validity are limited and it is likely that the outcomes from the study can only be confidently generalised to children of similar age ranges within similar schools. The external validity of the results could therefore be increased by repeating the study with a larger sample size.

In addition to the impact of the design and methodology upon the validity of results, the measures used have also had a bearing upon the degree to which results can be considered to be reliable and valid. These issues are discussed in the section that follows.

Issue identified	Possible factors impacting upon study and results	Controls used/ Implications for research design
<p>A change was observed in the majority of measures over time, regardless of group.</p>	<ul style="list-style-type: none"> • Maturation (scores change naturally over time). • Treatment diffusion (the impact of taking part filtered through from adults to other children and from child to child regardless of group). • Hawthorne effect (just participating led to an effect for all participants). 	<ul style="list-style-type: none"> • Use of a control group helped to determine whether changes due to time or other variables (i.e. intervention). • Explore ways of limiting contact between adults and children involved in groups and control group, although to do so may then have an impact upon ability to select children that have similar historical and concurrent exposure to other variables that may influence outcome (e.g. different classroom environment and teaching styles etc.)
<p>In one case a more positive change was observed in the control group than in the experimental group (teacher ratings of conduct problems on SDQ showed a significantly positive increase in ratings for controls vs. intervention group)</p>	<ul style="list-style-type: none"> • Treatment diffusion (the impact of taking part filtered through from adults to other children and from child to child). • Compensatory rivalry on the part of the control group in relation to 'conduct problems'. 	<ul style="list-style-type: none"> • The use of random allocation made it possible to rule out any issues of selection bias. • The use of statistical techniques to compare pre-test scores for both groups (showing no significant differences) shows that statistical regression is unlikely to have occurred and also shows that the difference in post-test scores is unlikely to have been affected by the two groups containing children with significantly different profiles of scores prior to intervention.
<p>A change of class teacher in one class led to the exclusion of some data.</p>	<ul style="list-style-type: none"> • The sample size for all teacher perception measures was reduced from 47 to 37. All 10 children who were excluded from the analysis were of Year 5 age. 	<ul style="list-style-type: none"> • Exclusion of cases led to results being more internally valid and measures being reliable. • Trade-off for ensuring reliability/ internal validity is smaller sample size and lack of equal numbers across age groups, thus compromising generalisability.

Table 5.2: Threats to validity, controls used and implications for the research design

Issue identified	Possible factors impacting upon study and results	Controls used/ Implications for research design
<p>Due to time and resource constraints participating schools were selected opportunistically.</p>	<ul style="list-style-type: none"> • Selection bias- the schools chosen may be more likely to be: <ul style="list-style-type: none"> ○ Sympathetic to the aims of the research ○ Willing and able to support a small group intervention of this type ○ Have parent support for small group work <p>than other primary schools in the area or country wide, by virtue of the fact that they were interested in taking part and able to do so at short notice.</p>	<ul style="list-style-type: none"> • Increase the range and number of different types of school used to increase ecological and population validity. • Use alternative sampling methods. • Details of the two participating schools have been gathered so that it is clear which population they serve and thus to whom the results may be most relevant. • Gather more information regarding whole school attitude and approach to emotional literacy, emotional competence, social skills and anger control, in order to determine how much of this affects outcomes from school to school.
<p>Children were selected on the basis of their ranked SDQ scores (highest scores= target children, lowest= role model children) rather than using absolute cut offs or ranges of scores.</p>	<ul style="list-style-type: none"> • Selection bias- 'role model' and 'target' children were only selected as such compared with the rest of their year group. This has implications for population validity, since 'target' children in different populations may have considerably different scores (i.e. there is no guarantee that a 'role model' or 'target' child in each class group would have scores that were comparable with those from other class groups). 	<ul style="list-style-type: none"> • The use of random allocation and statistical checks of the equivalence of groups at pre-test has ensured that any statistically significant results can be attributed to the effect of the intervention rather than selection effects. • In future, select children on the basis of a definite cut-off, for example only using those that score above a certain 'difficulty score' on the SDQ to determine their need for intervention. This will make it easier to apply any findings to a wider population and also allow for comparisons of impact upon specific groups of children with certain score profiles.

Table 5.2 (cont'd): Threats to validity, controls used and implications for the research design

5.5.3 Reliability and Validity of Measures

As outlined in Section 3.4.2, p.68, reliability relates to the '*stability or consistency with which we measure something*' (Robson, 2007, p.101), with the following needing to be considered in relation to reliability and validity of the measures used:

- Participant error
- Participant bias
- Observer error
- Observer bias
- Construct validity of measures (i.e. does the test measure what you think it measures? Does it truly reflect the construct that is it designed to measure?)

5.5.3.1 Participant and Observer Error

Whilst every effort was made to eliminate errors in recording, some elements of the design have led to deviation from standardised procedures. For example, in relation to the SDQ, it is intended that those completing it base their responses '*on the child's behaviour over the last six months or this school year*' (Goodman, 1997). As the initial completion of the SDQs took place in September, this meant that staff had only had a maximum of three to four weeks to become familiar with the children in their class prior to completion of the pre-test questionnaire. There may therefore be unintended effects as a result of this, for example with their views changing naturally from pre- to post-test completion as they had had more time to become familiar with the children concerned. In future it would be preferable to conduct the pre-testing phase at a later point in the school year so that initial teacher ratings were more accurate.

5.5.3.2 Participant and Observer Bias

The issue of potential bias in adult responses, particularly in relation to the SDQ scores, has been discussed in Section 5.2.3, p.119. It was suggested that whilst

there may have been opportunity for bias in teachers' responses to contribute to the significant results, the fact that this effect was not observed across all measures suggests that there may be other reasons for the outcomes obtained. To eliminate this in future it would be necessary to ensure that teachers were unaware of which children had received the intervention in order to ensure 'blind' completion of both pre- and post-test measures. Whilst this would ensure reliability, it would be extremely disruptive and difficult to implement practically in a classroom situation.

5.5.3.3 Construct Validity

The potential issues regarding construct validity and relevance to 'Staying Calm' of the constructs being measured has been noted both for the Resiliency Scales (Section 5.2.2, p.114) and the 'Staying Calm' Questionnaires (Section 5.2.4, p.122). In respect of the Resiliency Scales, it is possible that, whilst the scales themselves have construct validity when used as directed, they are not necessarily appropriate or valid when used for the purposes of evaluation research over set periods of time. This could be contrasted, for example, with the use of a research instrument such as the SDQ, which is designed for use in pre- and post-testing and has been widely used for such a purpose. It remains to be seen whether the Resiliency Scales will be used or adapted for use in similar types of research, as, to date, there is little evidence of their being used in this way.

Whilst the 'Staying Calm' Questionnaires were specifically designed and piloted for use with the programme, there is still some question regarding their construct validity, test-retest reliability and sensitivity, since none of these have been measured. Whilst the measures have face validity, this does not guarantee that they are suitable for use in measuring perceptions of anger control, social skills and problem solving in a systematic way. It may perhaps be more desirable in future to use a standardised instrument to measure these constructs so that the results can be interpreted with a greater degree of confidence.

5.6 Ethical Considerations

Chapter 3 (Section 3.5, p.73) highlighted the ethical guidelines and safeguards that would be used to ensure that this study complied with all required ethical and professional quality standards. Reflection on the implementation of the project has shown that the close attention paid to these guidelines allowed the project to run in an ethical and professional manner, whilst being sensitive to the needs of those taking part. However, much of the earlier discussion of ethics related to direct implementation of the project and data collection. Thus, at this stage, it is also necessary to consider the ethical issues that have arisen since completion of the first period of intervention.

5.6.1 Confidentiality and Anonymity

During data analysis and writing up, all data has been kept together in a private residence, in a position that does not allow easy access to others. All data that has been converted into an electronic form has been labelled in such a way that schools, staff, children and parents cannot be identified by those viewing it. The electronic data sets will be retained by the researcher, although it is intended that all paper copies (other than those which were original property of the schools involved) will be destroyed as confidential waste at the conclusion of the Thesis examination process.

5.6.2 The 'Waiting List' Control Group

As was described in Section 3.6.3.6, p.83, a waiting list control group was used for this study, meaning that some children identified as having potential behavioural and social difficulties (as identified by SDQ screening) did not initially have access to the intervention, being instead placed on a waiting list. It was the intention that children from this waiting list would then receive the intervention (i.e. be part of a 'Staying Calm' group) later in the school year. Discussions with staff in the two participating schools have confirmed that this is the case and that children from the 'control' groups have been offered the chance to take part in an intervention group.

5.6.3 Feedback to Participants

In order to ensure that all children, school staff and parents involved in the project have the opportunity to receive feedback regarding its outcomes, 'feedback' sessions have been arranged with participating schools. This will involve a brief presentation of the study's key findings to all involved, in addition to celebrating the commitment of those that took part, for example through a certificate ceremony for those children involved in the groups. An opportunity will be offered to the staff most involved with the project to meet with the researcher to discuss their views and ask questions.

It is also intended that the researcher will present her findings to colleagues within the University of Nottingham and to colleagues in the Psychology Service by which she is employed. Details of the final library location of the Thesis will also be given to participating schools and the researcher's present employers so that any interested parties can access the full document if desired.

5.7 Implications for Future Research

Implications for future evaluation research have been discussed throughout the earlier sections of this, as have the implications for future implementation of 'Staying Calm' and potential changes to the design and implementation of the study (throughout this chapter, with particular emphasis on Sections 5.4 and 5.5). However, there is also a need to reflect more generally on the methodological approach used and consider implications for future research in relation to the ways in which the information gathered from this study can be applied.

5.7.1 Future Areas of Focus and Further Questions

Throughout the process of completing this research, several alternative research questions and unanswered questions have arisen regarding 'Staying Calm' and related topics. These questions are illustrated in Figure 5.4, p.141. The questions featured have all been considered at some point in the research process and, in the table, have also been combined with possible ways in which they could be explored or investigated.

<u>Unanswered questions:</u>	<u>Alternative methods of investigation:</u>
<p>What is ‘resiliency’? Can it be measured?</p>	<ul style="list-style-type: none"> • Further investigation of existing research and instruments. • Use of alternative methodology (e.g. exploratory factor analysis) to examine constructs of ‘resilience’/ ‘resiliency’.
<p>Do children’s perceptions of their emotional ‘resiliency’ change over time? Is this a rapidly changing trait or is it stable over time?</p>	<ul style="list-style-type: none"> • Use of mixed methodology to obtain standardised measures and individual interview data to gain better understanding of changes that may occur over time/ through intervention.
<p>What impact does ‘Staying Calm’ (or other emotional resilience/ literacy interventions) have on teacher perceptions of behaviour?</p>	<ul style="list-style-type: none"> • Use of mixed methodology to obtain standardised measures and individual interview data to gain better understanding of changes that may occur over time/ through intervention.
<p>Does ‘Staying Calm’ have an impact over time? Are improvements in behaviour maintained?</p>	<ul style="list-style-type: none"> • Complete follow-up measures with pupils after 3 and 6 months using same measures as this study.
<p>What is the nature of the impact of ‘Staying Calm’ on pupils?</p>	<ul style="list-style-type: none"> • Complete individual interviews with pupils to determine the nature of impact of the group work. • Use more detailed pre- and post-measures with pupils (e.g. SDQ or equivalent).
<p>Does ‘Staying Calm’ have any impact on anger regulation?</p>	<ul style="list-style-type: none"> • Use of mixed methodology to obtain standardised measures and individual interview data to gain better understanding of changes that may occur over time/ through intervention. • Research of other anger measures to measure anger regulation in a more explicit and standardised way. • Compare ‘Staying Calm’ with alternative ‘anger’ interventions.

Figure 5.4: Alternative and unanswered research questions arising from the ‘Staying Calm’ study, including potential methods of investigation

5.7.2 Alternative Approaches: Returning to Epistemology and Methodology

As can be seen from the possible approaches listed in Figure 5.4, p.141, many of the identified 'ways forward' with the Staying Calm project would involve the use of methodologies that lie outside of the post-positivist framework used in this study. The following section therefore re-evaluates the researcher's epistemological and methodological views in light of the issues raised by this study.

5.7.2.1 The Attraction of Experimental Designs within Evaluation Research

Taking a quantitative, experimental approach to this study has achieved many things:

- The RCT design allows for inferences to be made regarding causality, allowing conclusions to be drawn regarding the 'true' impact of the intervention.
- The design has allowed for the close control of threats to internal validity.
- The design offers a framework for hypothesis testing, including Null Hypothesis Significance Testing and the use of statistical techniques in data analysis.

It offers the opportunity for the study to be seen as a contribution to the existing evidence-base for evaluation studies and thus evidence-based practice within schools in the UK. This adds something of value to both the psychological research community and education communities.

- It offers evidence for whether the programme is effective in a way that can be scrutinised, analysed and built upon by the research community, including being added to the body of results for the Development and Research Collaborative Programme in Educational Psychology.

However, despite these advantages, there are also some caveats that have been associated with the use of this approach, which are discussed below.

5.7.2.2 The Drawbacks of a Post-Positivist Approach: What are the Alternatives?

As has been discussed earlier in this chapter, whilst the use of a post-positivist hypothesis testing approach has its advantages, there are also some opportunities that may be missed through adhering to this paradigm. The use of Null Hypothesis Significance Testing (NHST) may reveal whether it is likely that a result has occurred by chance or is due to the independent variable. However, a key drawback of the use of an RCT design and NHST, as indicated by Cook (2007), is that a trade-off is made between internal and external validity- whilst the experiment may be well controlled, to do so may be to remove participants from a setting that is more naturalistic and realistic.

Where research is to be applied in 'real life' settings such as schools, this focus on 'control' may limit the extent to which results can be applied to an everyday context. In the case of 'Staying Calm', for example, it is much more likely that adults within school would decide who to select to be in the groups and would use the programme more flexibly, rather than children being selected using SDQ scores and sticking rigidly to the programme manual. If this were to happen, the results obtained from the programme may be different. So, whilst the use of an RCT means we can be confident regarding assessment of causality, we may be less confident that the way 'Staying Calm' worked in this study is the way it would work in 'real life'.

It is also useful to bear in mind that '*statistical significance does not equal psychological significance*' (Dancey & Reidy, 2007). So, despite statistically significant results, it is up to the researcher to determine whether any effects found are likely to be of significance in the 'real world'. Where the use of an RCT and hypothesis testing has allowed the identification of whether 'Staying Calm' works (i.e. *is it effective?*), it is also relevant to the implementation of a project such as this to know *why* it works and *what processes* are responsible for the results obtained. For example, it is possible that 'Staying Calm' had a greater effect on perceptions of behaviour change than actual changes in behaviour. From the data gathered, and in the absence of additional qualitative information relating to teachers' or children's perceptions throughout the

programme, it is not possible to explore this assertion further. Thus, whilst a post-positivist view allows for the gathering of some useful data regarding efficacy, there may also be many gaps in understanding and questions left unanswered. It is possible, then, that following the use of an RCT or other experimental design such as this, the use of a mixture of quasi-experimental designs and qualitative analysis (perhaps drawing from more constructivist principles and mixed methods) would allow a fuller understanding of *what works, for whom and why* in real-life educational contexts, rather than an exclusive focus on a programme's efficacy.

5.7.2.3 The Researcher's Journey

It is perhaps clear from the final discussions above that the researcher's epistemological and methodological views have changed throughout the course of this research. In beginning this study the researcher's approach was quite clearly situated within the post-positivist paradigm, particularly where evaluation research was concerned. As has been stated above, clear benefits remain in the use of the experimental method, particularly in gathering evidence for evaluation research which allows for clear judgements regarding statistical significance and, hence, causality. However, the use of this approach has also brought with it frustrations and limitations- despite a plethora of data to examine, it has still not been possible to fully understand many of the processes that have taken place as part of the 'Staying Calm' intervention and little has been learnt about the individual's or group's experience of taking part. In addition, the experience of practical constraints in 'real-world' research, and study of the possible epistemological and methodological paradigms that may be utilised within this, has allowed the journey from the perceived 'certainty' and 'logic' of a post-positivist view to a realisation that there are other, equally valid, alternatives. The researcher is now of the view that the use of qualitative approaches, or perhaps a mixture of qualitative and quantitative approaches, can better inform understanding of the psychological significance of results.

6. Conclusions

6.1 Main Findings

This study evaluated the effects of 'Staying Calm', a small group programme designed to promote emotional skills ('emotional resiliency'), social problem solving and anger control skills in children. Outcomes from the study showed that the programme had a significant influence on teacher's perceptions of some aspects of children's behaviour (overall behaviour difficulties, prosocial skills and peer relationships), but did not have a significant effect on children's views of their emotional resiliency, or adults' perceptions of social problem solving skills and anger control. Thus, it can be concluded that, for the context in which it was evaluated, the programme was not effective in influencing those skills and competencies it aims to promote, but may have a more general effect on adult views of children's behaviour within school.

6.2 The Unique Contribution of this Research

This research has shown that 'Staying Calm' was not effective in affecting many of the aspects of children's skills and behaviour which it was designed influence, since the majority of the statistical results were not significant. However, there were also some statistically significant findings in relation to teacher's perceptions of behaviour. So, whilst the majority of results were non-significant, the evidence gained from the research is valuable in a number of ways, both in relation to the application of the programme in Primary schools but also in contributing to the existing knowledge and evidence bases within educational and psychological practice and research.

The findings provide evidence to guide the future use of the programme, through informing school staff and Educational Psychologists regarding its value in effecting change. For example, the use of 'Staying Calm' within similar contexts with similar aged children is most likely to effect change where adults feel that children require support with general behaviour difficulties, social skills or peer relationships. The fact that there was no evidence for the programme's ability to improve anger control skills or emotional resiliency suggests that it

may not be justified for practitioners, such as Educational Psychologists, to recommend it for this purpose.

The outcomes of this study can also be related to the existing body of literature and research relating to school-based interventions for emotional literacy, 'resilience' and anger regulation. The study highlights the fact that 'resilience' and 'resiliency' may not be concepts that can be directly influenced by school-based small group interventions and that further examination of the constructs and their measurement is warranted. The study also emphasises the need to use a range of measures within evaluation studies, for example not just using teacher report or measures or relying exclusively on participants' perceptions. In addition, this study calls into question results from previous studies that have failed to use adequate control groups. In this research, the majority of the measures used detected significant changes in scores over time for all children, not just those receiving the intervention. This suggests that significant results from studies without control groups may be obtaining positive results as a consequence of factors that influence all children, rather than due to the specific effects of the intervention being used.

This research also provides sign posts regarding areas of interest for future research. The questions raised by this study, such as the need to examine the mechanisms influencing a programme's effects on teacher perceptions of behaviour, or the validity of applying the constructs of 'resilience' or 'resiliency' within evaluation studies, could usefully be addressed by future research studies.

Finally, this research has made a positive contribution to the stakeholders involved. Responses from children and staff in participating schools have been positive (as evidenced by their evaluations of the programme) and the researcher's Local Authority has benefited through gaining evidence regarding the efficacy of a programme in which they have invested time and money. The study's results will also be added to the growing evidence base regarding psychological interventions, through contributing to the Development and Research Collaborative Programme in Educational Psychology. From the

researcher's personal point of view, the 'research journey' has been both challenging and enlightening, allowing the development of research skills, the questioning of personal views regarding research methods and the gaining of a deeper understanding of and enthusiasm for the topic areas examined within the study. Involvement in research at a doctoral level has undoubtedly improved the researcher's professional practice and research skills, which, it is hoped, will have lasting influence upon her practice as a qualified Educational Psychologist.

7. References

Bandura, A. (1973). *Aggression: A social learning analysis*. London: Prentice Hall.

Barrett, P.M., Sonderegger, R. & Xenos, S. (2003). Using FRIENDS to combat anxiety and adjustment problems among young migrants in Australia. *Clinical Child Psychology and Psychiatry*, 8, 2, 241-260.

Barrett, P. Webster, H. & Turner, C. (2002). *FRIENDS: Prevention of anxiety and depression for children- Group leader's manual*. Coventry: Learning and Behaviour Support Service.

Beck, A.T. (1991). *Cognitive therapy and the emotional disorders*. London: Penguin.

Bohnert, A.M., Crnic, K.A. & Lim, K.G. (2003). Emotional competence and aggressive behaviour in school-age children. *Journal of Abnormal Psychology*, 31, 1, 79-91.

Breakwell, G.M. (1997). *Coping with aggressive behaviour*. Leicester: BPS Books.

Brace, N., Kemp, R. and Snelgar, R. (2009). *SPSS for Psychologists*, 4th edition. London: Palgrave.

British Psychological Society (2000). *Ethical principles for conducting research with human participants*. Retrieved October 29, 2007, from <http://www.bps.org.uk/the-society/code-of-conduct/ethical-principles-for-conducting-research-with-human-participants.cfm>.

British Psychological Society (2004). *Guidelines for minimum standards of ethical approval in psychological research*. London: BPS.

Burrell, G. & Morgan, G. (1979). *Sociological paradigms and organisational analysis*. London: Heinemann Educational.

Challen, A., Noden, P., West, A. & Machin, S. (2009). *UK Resilience Programme evaluation: Interim report*. Research Report DCSF-RR094, London: DCSF.

Children Act (2004). Retrieved on December 5, 2007, from <http://www.opsi.gov.uk/acts/acts2004/20040031.htm>.

Clifford, H. & Davies, H. (2009). Staying Calm. In Clifford, H. & Davies, H. *Primary Group Work*. Leicestershire: Leicestershire County Council, Educational Psychology Service.

Cohen, L., Manion, L. & Morrison, K. (2009). *Research Methods in Education*. London: Routledge

Cook, T.D. (2006). Describing what is special about the role of experiments in contemporary educational research: Putting the 'gold standard' rhetoric into perspective. *Journal of Multi Disciplinary Evaluation*, 6, 1-7.

Cook, T.D. (2007). Randomized experiments in education: Assessing the objections to doing them. *Economics of Innovation and New Technology*, 16, 5, 331-355.

Cook, T.D. & Campbell, D.T. (1979). *Quasi-Experimentation: Design and analysis for field settings*. Chicago: Rand McNally.

Craig, C. (2007). *The potential dangers of a systematic, explicit approach to teaching social and emotional skills (SEAL)*. Glasgow: Centre for Confidence and Wellbeing.

Curtis, C. & Norgate, R. (2007). An evaluation of the promoting thinking strategies curriculum at key stage 1. *Educational Psychology in Practice*, 23, 1,

33-44.

Dancey, C.P. & Reidy, J. (2007). *Statistics without maths for psychology*. Harlow: Pearson Education.

Dearing, K. F., Hubbard, J. A., Ramsden, S. R., Parker, E. H., Flanagan, K. D., Relyea, N., et al. (2002). Children's self-reports about anger regulation: Direct and indirect links to social preference and aggression. *Merrill-Palmer Quarterly*, 48, 3, 308-336.

Department for Children, Schools and Families (DCSF, 2009). *What are the aspects of learning in SEAL?* Retrieved on June 5, 2009, from <http://nationalstrategies.standards.dcsf.gov.uk>

Department for Education and Standards (DfES, 2003). *Every Child Matters*. London: The Stationery Office.

Dodge, K.A. (1986). A social information processing model of social competence in children. In Perlmutter, M. (Ed), *Minnesota Symposium on Child Psychology, Vol. 18: Cognitive perspectives on children's social and behavioral development*, (pp. 77-125). Hillsdale, NJ: Erlbaum.

Elias, M.J., Zins, J.E., Weissberg, R.P., Frey, K.S., Greenberg, M.T., Haynes, N.M., et al. (1997). *Promoting social and emotional learning: Guidelines for educators*. Virginia, USA: Association for Supervision and Curriculum Development.

Ellis, A. (1962). *Reason and emotion in psychotherapy*. N.J.: Lyle Stuart.

Farell, L.J. & Barrett, P.M. (2007). Prevention of childhood emotional disorders: Reducing the burden of suffering related to anxiety and depression. *Child and Adolescent Mental Health*, 12, 2, 58-65.

- Farell, P., Woods, K., Lewis, S., Rooney, S., Squires, G. & O'Connor, M. (2006). *A review of the functions and contribution of Educational Psychologists in England and Wales in light of 'Every child matters: Change for children'*. Nottingham: DfES.
- Faupel, A., Herrick, E. & Sharp, P. (1998) *Anger management: A practical guide*. London: Plenum
- Feindler, E. & Ecton, R.B. (Eds) (1988). *Adolescent anger control: Cognitive behavioural techniques*. New York: Pergamon.
- Field, A. (2002). *Discovering statistics using SPSS for Windows*. London: SAGE.
- Fink, A. (2005). *Conducting literature reviews: From the Internet to paper*. London: Sage
- Galvan, J.L. (2006). *Writing literature reviews: A guide for students of the social and behavioural sciences*. Glendale, CA: Pyczak Publishing.
- Gansle, K.A. (2005). The effectiveness of school-based anger interventions and programs: A meta-analysis. *Journal of School Psychology*, 43, 321-341.
- Gardner, H. (1993). *Multiple intelligences*. New York: Basic Books.
- Goleman, D. (1996). *Emotional intelligence: Why it can matter more than IQ*. London: Bloomsbury.
- Goleman, D. (1998). *Working with emotional intelligence*. London: Bloomsbury.
- Goodman, R. (1997). The Strengths and Difficulties Questionnaire: A research note. *Journal of Child Psychology and Psychiatry*, 38, 581-586.
- Greenberg, M., Kusché, C., Cooke, E. & Quamma, J. (1995). Promoting

emotional competence in school age children: The effects of the PATHS curriculum. *Development and Psychopathology*, 7, 117-136.

Hallam, S. (2009). An evaluation of the Social and Emotional Aspects of Learning (SEAL) programme: Promoting positive behaviour, effective learning and well-being in primary school children. *Oxford Review of Education*, 35, 3, 313-330.

Hallam, S., Rhamie, J. & Shaw, J. (2006). *Evaluation of the Primary Behaviour and Attendance Pilot*. Research Brief 717. London: Department for Education and Skills.

Hallam, S., Shaw, J. & Rhamie, J. (2006). *Evaluation of the Primary Behaviour and Attendance Pilot*. Research Report 717. London: Department for Education and Skills.

Health Professions Council (HPC, 2008). *Standards of conduct, performance and ethics*. London: HPC.

Howell, D.C. (2002). *Statistical methods for psychology*. Duxbury: Thomson Learning.

Humphrey, N., Kalamouka, A., Bolton, J., Lendrum, A., Wigelsworth, M., Lennie, C, et al. (2008) *Primary Social and Emotional Aspects of Learning (SEAL): Evaluation of small group work*. Research report DCSF-RR064. London: DCSF.

Kazdin, A.E. (2003). *Research design in Clinical Psychology*. Boston, MA: Allyn & Bacon.

Kelly, B., Longbottom, J., Potts, F. & Williamson, J. (2004). Applying emotional intelligence: Exploring the promoting alternative thinking strategies curriculum. *Educational Psychology in Practice*, 20, 3, 221-240.

- Khan, K.S., Kunz, R., Kleijnen, J. & Antes, G. (2003). *Systematic reviews to support evidence based Medicine: How to review and apply findings of healthcare research*. London: Royal Society of Medicine Press.
- Kim, G., Walden, T., Harris, V., Karrass, J. & Catron, T. (2007). Positive emotion, negative emotion, and emotion control in the externalising problems of school-aged children. *Child Psychology and Human Development*, 37, 221-239.
- Kusché, C. & Greenberg, M. (1998). *PATHS: Promoting alternative thinking strategies*. South Deerfield, MA : Developmental Research Programmes Inc.
- Luthar, S.S. (2006). Resilience in development: A synthesis of research across five decades. In Cicchetti, D. & Cohen, D.J. (Eds.), *Developmental psychopathology: Risk, disorder & adaptation*, (pp. 739-795). Hoboken, N.J.: John Wiley & Sons.
- Luthar, S.S, Cicchetti, D. & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71, 3, 543-562.
- Maddern, L., Franey, J., McLaughlin, V. & Cox, S. (2004). An evaluation of an inter-agency intervention programme to promote social skills in primary school children. *Educational Psychology in Practice*, 20, 2, 135-155.
- Mascolo, M.F. & Griffin, S. (Eds.) (1998). *What develops in emotional development?* New York: Plenum Press.
- Maslow, A. (1954). *Motivation and personality*. New York: Harper Row.
- Masten, A.S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56, 3, 227-238.
- Masten, A.S. & Reed, M.J. (2002). Resilience in development. In Snyder, C.R. & Lopez, S.J. (Eds), *Handbook of Positive Psychology*, (pp.74-88). Oxford: Oxford

University Press.

Mayer, J.D. & Salovey, P. (1997). What is emotional intelligence? In Salovey, P. & Sluyter, D. (Eds.), *Emotional Development and Emotional Intelligence*, (pp. 3-31). New York: Basic Books.

Meichenbaum, D. (1979). *Cognitive-behaviour modification: An integrative approach*. New York: Plenum.

Mertens, D.M. (2010). *Research and evaluation in education and psychology*. London: SAGE.

Miller, D. & Daniel, B. (2007). Competent to cope, worthy of happiness? How the duality of self-esteem can inform a resilience-based classroom environment. *School Psychology International*, 28, 5, 605-622.

Musher-Eizenmann, D.R., Boxer, P., Danner, S., Dubow, E.F., Goldstein, S. E., & Heretick, D. M. L (2004). Social-cognitive mediators of the relation of environmental and emotion regulation factors to children's aggression. *Aggressive Behavior*, 30, 389-408.

Novaco, R.W. (1994a). Anger as a risk factor for violence among the mentally disordered. In Monahan, J. & Steadman, H. (Eds.), *Violence and mental disorder: Developments in risk assessment*, (pp.21-59). Chicago: University of Chicago Press.

Novaco, R.W. (1994b). Clinical problems of anger and its assessment and regulation through a stress coping skills approach. In O'Donohue, W. & Krasner, L. (Eds) *Handbook of psychological skills training: Clinical techniques and applications*, (pp. 320-338). Boston: Allyn & Bacon.

Novaco, R.W. (1975). *Anger Control*. Lexington, USA: D.C. Heath.

Office for Standards in Education (Ofsted, 2010). *Evaluation schedule of*

judgements for schools inspected under section five of the Education Act 2005, from September 2009. Retrieved May 17, 2010 from <http://www.ofsted.gov.uk/Ofsted-home/Forms-and-guidance/Browse-all-by/Other/General/Framework-for-the-inspection-of-maintained-schools-in-England-from-September-2009>

Pallant, J. (2007). *SPSS survival manual: A step by step guide to data analysis using SPSS for Windows*. Maidenhead: Open University Press.

Petticrew, M. & Roberts, H. (2006). *Systematic reviews in the social sciences: A practical guide*. Oxford: Blackwell.

Pianta, R.C. & Walsh, D.J (1998). Applying the concept of resilience in schools: Cautions from a developmental systems perspective. *School Psychology Review*, 27, 3, 407-417.

Prince-Embury, S. (2007). *Resiliency Scales for children and adolescents: A profile of personal strengths*. San Antonio, USA: Harcourt Assessment.

Rice, M. & Howell, C. (2006). Differences in trait anger among children with varying levels of anger expression patterns. *Journal of Child and Adolescent Psychiatric Nursing*, 19, 2, 51-61.

Robson, C. (2007). *Real world research*. Oxford: Blackwell.

Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatry*, 57, 316-331.

Saarni, C. (1999). *The development of emotional competence*. New York: Guilford.

Saarni, C. (1997). Emotional competence and self-regulation in childhood. In Salovey, P. & Sluyter, D. (Eds.), *Emotional development and emotional intelligence* (pp. 35-66). New York: Basic Books.

Saarni, C. & Harris, P.L. (Eds.) (1991). *Children's understanding of emotion*. Cambridge: Cambridge University Press.

Saarni, C., Mumme, D.L. & Campos, J.J. (1998). Emotional development: Action, communication and understanding. In Damon, W. & Eisenberg, N. (Eds.) *Handbook of child psychology (5th Ed) Volume 3: Social, emotional and personality development*, (pp. 237-311). New York: Wiley.

Salovey, P. & Mayer, J.D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*. 9, 185-211.

Seligman, M.E.P. (2002). Positive psychology, positive prevention and positive therapy. In Snyder, C.R. & Lopez, S.J. (Eds) *Handbook of Positive Psychology* (pp. 3-12). Oxford: Oxford University Press.

Sharp, P. (2001). *Nurturing emotional literacy*. London: David Fulton Publishers.

Sharp, P. & Herrick, E. (2000). Promoting emotional literacy: Anger management groups. In Barwick, N. (Ed.), *Clinical Counselling in Schools*, (pp. 124-141). London: Routledge.

Shucksmith, J., Summerbell, C., Jones, S. & Whittaker, V. (2007) *Mental wellbeing of children in primary education (targeted/ indicated activities)*. Teeside: University of Teeside

Stallard, P., Simpson, N., Anderson, S., Carter, T., Osbourn, C. & Bush, S. (2005). An evaluation of the FRIENDS programme: a cognitive behavioural therapy intervention to promote emotional resilience. *Archives of Disease in Childhood*, 90, 1016-1019.

Statistics Package for Social Sciences (SPSS, 2008). *Version 17.0*. Chicago IL: SPSS Inc.

Steiner, C. & Perry, P. (1997). *Emotional literacy: A personal programme to increase your emotional intelligence*. London: Bloomsbury.

Sukhodolsky, D.G., Kassinove, H. & Gorman, B.S. (2004). Cognitive-behavioral therapy for anger in children and adolescents: A meta-analysis. *Aggression and Violent Behavior*, 9, 247-269.

Sun, J. & Stewart, D. (2007). Development of population-based resilience measures in the primary school setting. *Health Education*, 107, 6, 575-599.

University of Nottingham (2009). *University of Nottingham code of research conduct and research ethics*. University of Nottingham: Nottingham.

Weare, K. (2004). *Developing the emotionally literate school*. London: SAGE.

Weare, K. & Gray, G. (2003). *What works in developing children's emotional and social competence and wellbeing?* Research Report 456. London: Department for Education and Skills.

Weare, K. & Michel, D. (2008). *Response to paper by Carol Craig 'The dangers of promoting a taught approach to emotional literacy (SEAL) in schools'*. Unpublished paper.

Wechsler, D. (1944). *The measurement of adult intelligence (3rd ed.)*. Baltimore: Williams & Wilkins.

Wells, J., Barlow, J. & Stewart-Brown, S. (2003). A systematic review of universal approaches to mental health promotion in schools. *Health Education*, 103, 4, 197-220.

8. Appendices

8.1: Introductory Sheets from 'Staying Calm' (Clifford & Davies, 2009)

(Reproduced with kind permission from Leicestershire County Council.)

Introduction to Group Work

The following materials aim to develop positive mental health and well-being in primary aged pupils, through short, focussed, group work sessions, which are held within school.

Why set up group work?

Children who are presenting with social and emotional difficulties may be resistant to receiving individual support from an adult. Offering group work opportunities in an enjoyable way, will enhance self-esteem and emotional resilience and provide opportunities to practise social skills in a safe setting.

The following materials aim to support children to:

- Find out more about themselves and others.
- Feel confident to contribute ideas.
- Explore issues in more depth.
- Practise social skills in a safe environment.
- Recognise that they have choices and help them to make the right ones.
- Learn to get on with other people.
- Learn to be reflective.
- Develop empathy.
- Develop coping skills (resilience).

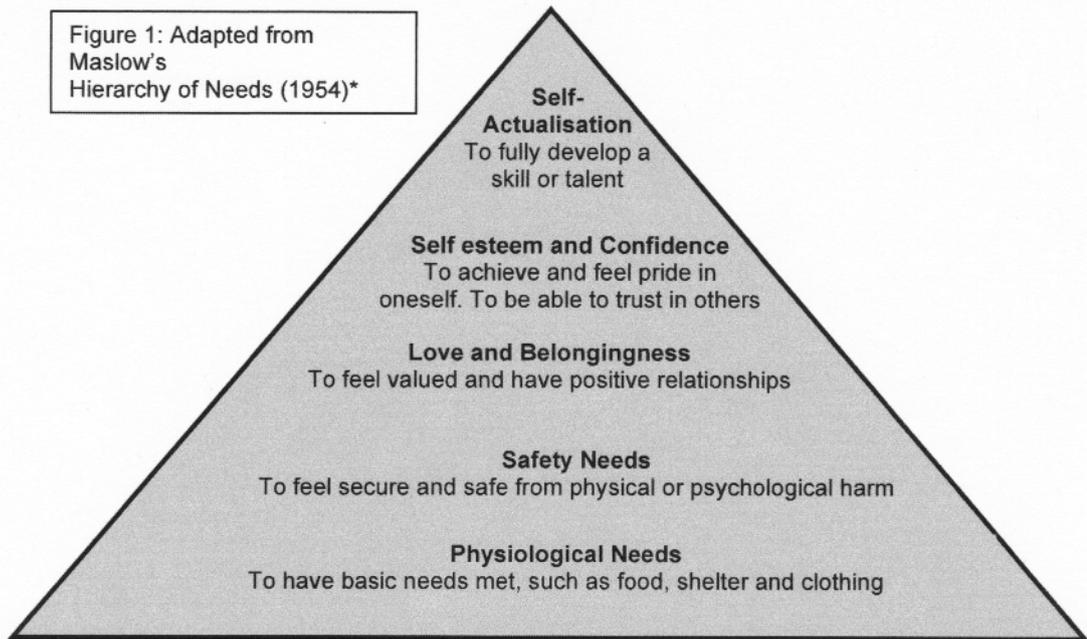
These resources compliment the Department for Children, Schools and Families (DCFS) Social and Emotional Aspects of Learning (SEAL) materials (<http://bandapilot.org.uk/primary/>). The resources contained in each group work pack are considered to be a Wave 2 Intervention (similar, to the Silver Level -SEAL materials). This means that they are designed to complement whole class work which may be undertaken in Personal, Social, Health and Citizenship Education (PSHCE) lessons, by providing additional and different support within a small group context.

Why develop positive mental health?

Maslow's hierarchy of needs (see Figure 1) establishes that before anyone can settle to the task of learning, their basic needs must be met.

By creating an environment in which children feel 'safe' to contribute and share ideas (safety needs) and in which they are able to develop a sense of group cohesion (belonging needs), opportunities are provided for them to develop their self-esteem (self-esteem and confidence needs) and move towards becoming more independent learners (self-actualisation needs).

Figure 1: Adapted from Maslow's Hierarchy of Needs (1954)*



Resilience

Resilience can be described as the ability to cope with challenges in the face of adversity. Children with positive social networks and a broad repertoire of social and emotional skills can cope well, even when things get tough. Effective early intervention is vital for children with skill deficits in these areas. Instruction, teaching, adult modelling and meaningful and fun opportunities to try new skills will promote the development of a resilient child.

Selecting children to participate in group work

Each group should consist of 6 to 8 children, and ideally, should include at least 2 'role model' children, who are not presenting with the difficulties that the group has specifically been set up to address.

A Skills Audit Questionnaire (see Appendix 3) is included, which can be used to identify children with low scores, who may benefit from working within the group. It can also be used to measure progress, by comparing scores before and after the intervention.

Who should run the group?

The group work sessions are designed to be facilitated by Learning Support Assistants (LSAs), Teaching Assistants (TAs), Special Educational Needs Co-ordinators (SENCOs) or Teachers. It is most beneficial if two adults facilitate the sessions. It is however important that the adult(s) who run the group remain with the children for all the sessions, to develop feelings of safety and security and to develop confidence.

What do the resource packs consist of?

Each resource pack consists of an Introductory Session, 6 Activity Sessions and an Evaluation Session, in which the children are encouraged to evaluate their own progress (8 sessions in total).

*Maslow. A. (1954) Motivation and Personality. New York: Harper & Row.

Each Activity Session comprises:

- Welcome, revision of group rules and follow up to the previous session's transference activity*
- A warm up activity
- An introduction activity
- Activity 1
- Activity 2
- A conclusion
- A transference activity
- A relaxation exercise

(* Transference activities are set during the session, to give children the opportunity to practise their skills in everyday situations. It is therefore vital that both parents and school staff working with the children, are aware of the session aims and can be involved in reinforcing positive behaviour.)

The resource pack sessions have been put together to be followed in sequential order, although the contents are flexible and should be adapted to the needs of the children within the group. Facilitators are encouraged to reflect on each session using the session evaluation sheet (Appendix 4). They should feel confident about adding additional activities or sessions, where progress is not being made and where an idea appears to need further development. A blank session outline is provided for this purpose (Appendix 5). A range of recommended resources containing additional activities is also provided , which may be used to plan additional or different sessions.

All resources required for the sessions are listed on the individual session sheets in the pack and they are available to print or laminate from the CD-ROM. Resources will need to be collated and prepared in advance of each session.

Skills of the group facilitator

The group needs to be facilitated by adults who are confident and creative and who can allow the children to have fun, whilst developing an environment of empathy and understanding. The group facilitators will need to listen to and praise the children and to believe in what the programme is trying to achieve.

It is important that all pupils feel that they have support from the facilitators and that a trusting relationship is developed. The facilitators should therefore make it clear from the initial session that although the discussions within the group are confidential and should not be discussed outside of the group, the facilitators may need to share very serious concerns with another adult, if they are worried about a child's safety. In the unlikely event that a disclosure is made, the child should always be informed privately that the group facilitator intends to share the information with another adult. The child should then be monitored in line with the school's Child Protection Policy.

Monitoring and evaluating

In addition to the skills audit questionnaire, this pack also contains an evaluation sheet (Appendix 4), as previously mentioned, for the group facilitator to complete after each session. This can help to plan for future sessions, both for the current group and future groups. There is also an evaluation sheet included in Session 7, for the participating pupils to complete at the end of the group work sessions, in order to review their own progress.

8.2 SDQ (Pre-test Version)

Strengths and Difficulties Questionnaire

T 4-16

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain or the item seems daft! Please give your answers on the basis of the child's behaviour over the last six months or this school year.

Child's Name (INITIALS).....

Male/Female

YEAR/AGE:.....

<u>SCHOOL:</u>	Not True	Somewhat True	Certainly True
Considerate of other people's feelings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restless, overactive, cannot stay still for long	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often complains of headaches, stomach-aches or sickness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shares readily with other children (treats, toys, pencils etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often has temper tantrums or hot tempers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rather solitary, tends to play alone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generally obedient, usually does what adults request	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many worries, often seems worried	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helpful if someone is hurt, upset or feeling ill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Constantly fidgeting or squirming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has at least one good friend	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often fights with other children or bullies them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often unhappy, down-hearted or tearful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generally liked by other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Easily distracted, concentration wanders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nervous or clingy in new situations, easily loses confidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kind to younger children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often lies or cheats	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Picked on or bullied by other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often volunteers to help others (parents, teachers, other children)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thinks things out before acting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steals from home, school or elsewhere	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gets on better with adults than with other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many fears, easily scared	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sees tasks through to the end, good attention span	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Do you have any other comments or concerns?

Please turn over - there are a few more questions on the other side

Overall, do you think that this child has difficulties in one or more of the following areas:
emotions, concentration, behaviour or being able to get on with other people?

	No	Yes- minor difficulties	Yes- definite difficulties	Yes- severe difficulties
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you have answered "Yes", please answer the following questions about these difficulties:

- How long have these difficulties been present?

	Less than a month	1-5 months	6-12 months	Over a year
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Do the difficulties upset or distress the child?

	Not at all	Only a little	Quite a lot	A great deal
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Do the difficulties interfere with the child's everyday life in the following areas?

	Not at all	Only a little	Quite a lot	A great deal
PEER RELATIONSHIPS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CLASSROOM LEARNING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Do the difficulties put a burden on you or the class as a whole?

	Not at all	Only a little	Quite a lot	A great deal
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Signature

Date

Class Teacher/Form Tutor/Head of Year/Other (please specify:)

Thank you very much for your help

© Robert Goodman, 2005

8.3: SDQ (Post-test version)

Strengths and Difficulties Questionnaire

T4-16
FOLLOW-UP

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain or the item seems daft! Please give your answers on the basis of the child's behaviour over the last month.

Child's Name :

Male/Female

School/Year:

	Not True	Somewhat True	Certainly True
Considerate of other people's feelings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restless, overactive, cannot stay still for long	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often complains of headaches, stomach-aches or sickness	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Shares readily with other children (treats, toys, pencils etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often has temper tantrums or hot tempers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rather solitary, tends to play alone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generally obedient, usually does what adults request	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many worries, often seems worried	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helpful if someone is hurt, upset or feeling ill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Constantly fidgeting or squirming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has at least one good friend	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often fights with other children or bullies them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often unhappy, down-hearted or tearful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generally liked by other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Easily distracted, concentration wanders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nervous or clingy in new situations, easily loses confidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kind to younger children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often lies or cheats	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Picked on or bullied by other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often volunteers to help others (parents, teachers, other children)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thinks things out before acting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steals from home, school or elsewhere	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gets on better with adults than with other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many fears, easily scared	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sees tasks through to the end, good attention span	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Do you have any other comments or concerns?

Please turn over - there are a few more questions on the other side

Since *October*, are the child's problems:

Much worse	A bit worse	About the same	A bit better	Much better
<input type="checkbox"/>				

Has *'staying calm'* been helpful e.g. providing information or making the problems more bearable?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not at all	Only a little	Quite a lot	A great deal
<input type="checkbox"/>						

Over the last month, has the child had difficulties in one or more of the following areas: emotions, concentration, behaviour or being able to get on with other people?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No	Yes-minor difficulties	Yes-definite difficulties	Yes-severe difficulties
<input type="checkbox"/>	<input type="checkbox"/>					

If you have answered "Yes", please answer the following questions about these difficulties:

- Do the difficulties upset or distress the child?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not at all	Only a little	Quite a lot	A great deal
<input type="checkbox"/>						

- Do the difficulties interfere with the child's everyday life in the following areas?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not at all	Only a little	Quite a lot	A great deal
PEER RELATIONSHIPS	<input type="checkbox"/>					
CLASSROOM LEARNING	<input type="checkbox"/>					

- Do the difficulties put a burden on you or the class as a whole?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not at all	Only a little	Quite a lot	A great deal
<input type="checkbox"/>						

Signature

Date

Class Teacher/Form Tutor/Head of Year/Other (please specify):

Thank you very much for your help

© Robert Goodman, 2005

8.5: Resiliency Scales: Administration Guidelines

Staying Calm Project

October 2009

Test Administration

Before you start:

Introduce yourself and ask child's name.

Discuss consent sheet and programme. Discuss the questionnaire and what it will involve (all on sheet). Get child to sign consent sheet if they agree to join in.

Fill in child's name and details on 'Inquiry' section of form.

Read explanation on form and emphasise that there are no judgements of answers- be as honest as you can but no right or wrong.

Complete practice questions.

Begin with the MAS section, then REL, then REA.

During administration:

Sit side by side so you can see to read but the child is able to have the sheet in front of them.

Read each question to the child but allow them to circle their own response or point to the response strip if they are finding this confusing. (Please record if the response strip is used).

If a child seems undecided encourage them to make a choice of the one that fits most of the time.

Clarification or explanation of items is allowed as requested by the child. Please mark with a dash on the response booklet if further explanation is given.

If a child deliberates for a long time over an item, mark this with a star for further questioning later. Do likewise for any that raise questions for you.

These items may need changes to wording:

MAS6 I am good at *sorting things out*. (*not mending things!*)

MAS7 I am good at *working things out*.

MAS9 I can *cope OK* when plans change.

MAS13 *If I can't do something first time*, I will keep on trying.

REL15 I can *count* on people to treat me fairly.

REL16 I can *count* on the people closest to me to do the right thing (e.g. family or good friends).

REL23 People know who I really am (*inside*).

REL24 People *take* me for who I really am.

REA1 *I get upset easily*.

REA3 *I get my own back* when someone upsets me.

REL9 When I get upset I *do things* without thinking.

REL11 & REL13 change several to *lots or many*.

REL18 *physically*.

At the end:

Probe any conflicting answers or any that they needed a long time to respond to/ deliberated on.

Use the 'Inquiry' section for this. Also, question the child on 'upset' responses as follows:

When you were answering the questions about getting upset (show the page), what did you think of when you were thinking about getting upset?

How do you feel when you are upset?

What might someone who is upset like that do/ how might you tell they were upset?

To conclude:

Offer the chance for the child to ask any questions they may have about the questionnaire or what will happen next.

Praise the child (try to say something specific) and thank them for their participation and hard work.

8.6: Teacher 'Staying Calm' Questionnaire

Staying Calm Questionnaire for Key Stage 2

This questionnaire is designed to be completed by a class teacher or an LSA, who works in the child's classroom on a regular basis. It is most useful if it is completed before and immediately after participation in group work. Please try to make sure that it is completed by the same adult each time.

Name of child: _____ Date completed: _____

Completed by: _____

Please circle the most appropriate response.

Skills	Never	Rarely	Sometimes	Often	Mostly
Listens to others' ideas.	1	2	3	4	5
Works independently with a partner.	1	2	3	4	5
Contributes their ideas in a small group with confidence.	1	2	3	4	5
Demonstrates appropriate social manners e.g. please, thank you.	1	2	3	4	5
Can use strategies to help them to relax.	1	2	3	4	5
Recognises how their body changes when they start to feel angry.	1	2	3	4	5
Recognises when another person is feeling angry.	1	2	3	4	5
Knows what can trigger their angry outbursts.	1	2	3	4	5
Remains calm when there is a perceived unfairness towards them.	1	2	3	4	5
Can calmly explain their feelings.	1	2	3	4	5
Uses strategies to calm down when feeling upset or angry.	1	2	3	4	5
Has strategies for solving problems that arise at playtimes.	1	2	3	4	5

Please add any additional comments on the back of the sheet.

Thank you for taking the time to complete the questionnaire.

8.7: Parent 'Staying Calm' Questionnaire (Pre-test version)

Staying Calm Questionnaire for Parents

This questionnaire is designed to be completed by parents of children who will be taking part in the 'Staying Calm' project. All information will be kept confidential.

Name of child: _____ Date of birth: _____

School: _____ Class: _____

Completed by: _____ Date completed: _____

Please circle the number that best fits your opinion of your child's skills at the moment.

Skills	Never	Rarely	Sometimes	Often	Mostly
Listens to others' ideas.	1	2	3	4	5
Completes activities with another child without adult help.	1	2	3	4	5
Puts across their ideas with confidence.	1	2	3	4	5
Demonstrates appropriate social manners e.g. please, thank you.	1	2	3	4	5
Can use strategies to help them to relax.	1	2	3	4	5
Recognises how their body changes when they start to feel angry.	1	2	3	4	5
Recognises when another person is feeling angry.	1	2	3	4	5
Knows what can trigger any of their own angry outbursts.	1	2	3	4	5
Remains calm when they feel something is unfair.	1	2	3	4	5
Can calmly explain their feelings.	1	2	3	4	5
Uses strategies to calm down when feeling upset or angry.	1	2	3	4	5
Has strategies for solving problems that arise at playtimes or with other children.	1	2	3	4	5

Thank you from taking the time to complete the questionnaire.
Please return it to the school office no later than Friday 2nd October.

8.8: Parent 'Staying Calm' Questionnaire (Post-test version)

Staying Calm Questionnaire for Parents

Thank you very much for completing the earlier 'Staying Calm' forms and questionnaires and returning them to school.

Even if your child has not yet been in a group, it is really important that you still fill this in- all the information is crucial for the project's success! All information will be kept confidential.

Name of child: _____

Date of birth: _____

School: _____

Class: _____

Completed by: _____

Date completed: _____

Please circle the number that best fits your opinion of your child's skills at the moment.

Skills	Never	Rarely	Sometimes	Often	Mostly
Listens to others' ideas.	1	2	3	4	5
Completes activities with another child without adult help.	1	2	3	4	5
Puts across their ideas with confidence.	1	2	3	4	5
Demonstrates appropriate social manners e.g. please, thank you.	1	2	3	4	5
Can use strategies to help them to relax.	1	2	3	4	5
Recognises how their body changes when they start to feel angry.	1	2	3	4	5
Recognises when another person is feeling angry.	1	2	3	4	5
Knows what can trigger any of their own angry outbursts.	1	2	3	4	5
Remains calm when they feel something is unfair.	1	2	3	4	5
Can calmly explain their feelings.	1	2	3	4	5
Uses strategies to calm down when feeling upset or angry.	1	2	3	4	5
Has strategies for solving problems that arise at playtimes or with other children.	1	2	3	4	5

Thank you from taking the time to complete the questionnaire.

Please return it to the school office no later than Monday 14th December.

8.9: Child Evaluation Sheets

**Staying Calm Group
My Views**



Name: _____

Date: _____

1. Please circle the number that shows how you would rate being a member of the Staying Calm group.

1	2	3	4	5
I really did not enjoy it.	I did not enjoy it.	It was OK.	I enjoyed it.	I enjoyed it very much.

2. Please circle the statement that you think is true. There have been changes in my behaviour.....

1	2	3	4	5
Agree a lot	Agree a little	Neither agree nor disagree	Disagree	Disagree a lot

What changes have you noticed?

3. Have you found anything useful, if so what?.....

4. Is there anything you would have changed?.....

5. Do you have any other comments?.....

Thank you for taking the time to fill in this questionnaire. Your comments and suggestions will be helpful in making the work better for other students.

8.10: Child Consent Form

Staying Calm Project

October 2009

Child Consent Form

Please read with child and discuss.

Thank you for coming to meet with me today.

Last week your parent or carer had a letter explaining about the 'Staying Calm' project that we will be doing in school. They sent us the letter back saying they would like you to join in. Your teachers have also chosen you as a good person to join in in the group.

If you agree to join in you will be asked to go to a small group with 5 other people from your year for about one hour per week. The group will join in with some fun games and activities looking at feelings and ways to help you stay calm. They will also help you think of ways to sort things out when you fall out with or get cross with your friends. Some children will be in the group this term and some will need to wait until later in the year. Your teachers will tell you when you will be able to join the group in the next week or so.

If you agree to join you will spend a short time with us today and at the end of the project answering some questions. Your parents and teachers are also answering some questions for us too.

If you do join in you will be helping us look at whether the games and activities work and whether they are good enough to run in other schools. At the end Claire will write a report about the project, but she will make sure that the information you give us is kept safe and that the people who read the report will not know who you are or which school you came from.

If you choose to sign up to the project today, you can change your mind whenever you like, just let your parents or teachers know.

NAME: _____

D.O.B: _____

SCHOOL: _____

CLASS: _____

I understand what we have talked about and agree to join in with the Staying Calm project.

SIGNATURE: _____

DATE: _____

COMPLETED WITH: _____

8.11: Parent Consent Letter

Dear Parent/ Carer,

We are able to offer your child the opportunity to take part in the 'Staying Calm' project, an 8 week programme for children aged 7-11 years.

The programme has been designed to help boost emotional literacy and social skills in a safe and fun environment. Emotional literacy helps people to understand their own and others' feelings better. We hope that all children taking part will benefit from the programme by learning ways of understanding and managing their own feelings and behaviour. The group should also help children to learn skills for dealing with everyday conflicts, for example falling out with friends, in positive ways.

At [REDACTED] Primary the 'Staying Calm' group will involve a member of school staff working with a group of 6 pupils and will run for one hour a week during school time. If you choose for your child to take part, they may be selected to take part in the group this term, beginning in the week before the half term holiday. Children who are not selected for the group this term will be offered the chance to join a 'Staying Calm' group later in the school year.

All children taking part will be visited by myself or my colleague, [REDACTED] (Trainee Educational Psychologist), to discuss what will happen in the programme and check that they are happy to join in. They will be asked to complete a questionnaire with us, which should take approximately 20 minutes. We will also meet the children again and complete a second questionnaire with them at the end of the project. We are also asking parents and teachers to complete short questionnaires at the beginning and end of the programme.

Research into 'Staying Calm' is supported by the University of Nottingham and [REDACTED] Educational Psychology Service. As part of the project we will make sure that all information gathered remains confidential. All of the information shared as part of any reports on the project will be made anonymous, so that your child and their school cannot be identified. If you change your mind after you sign the agreement to take part, you or your child will be free to withdraw from the programme at any time you wish.

To make sure that your child gets the opportunity to take part in this programme, **please complete the consent form below and return it to the school office as soon as possible (no later than Friday 2nd October)**. The first of the parents' questionnaires has been included with this letter. I would be very grateful if you could complete this and return it when you return the consent form.

I hope you feel able to support both myself and the staff and pupils of [REDACTED] Primary by allowing your child to join in with the programme. If you have any questions please feel free to ask Mrs [REDACTED] or Mrs [REDACTED], or contact me at Claire.Whyard@leics.gov.uk or on [REDACTED]

Yours Sincerely, Claire Whyard
Trainee Educational Psychologist, [REDACTED] Educational Psychology Service

'STAYING CALM' PROGRAMME- PARENT CONSENT FORM

CHILD'S NAME: _____ YEAR: _____

I have read the information in the attached letter and agree to my child taking part in the 'Staying Calm' project. I understand that I am free to withdraw my child from the programme at any time should I change my mind.

PARENT/ CARER SIGNATURE: _____ DATE: _____

PARENT NAME (please print): _____

Please return this form to the school office as soon as possible, and no later than Friday 2nd October. Thank you.

8.12: Data Form Regarding 'Prior Exposure'

Additional Information for 'Staying Calm': Other Interventions

Year 6 Pupils

Completed by:

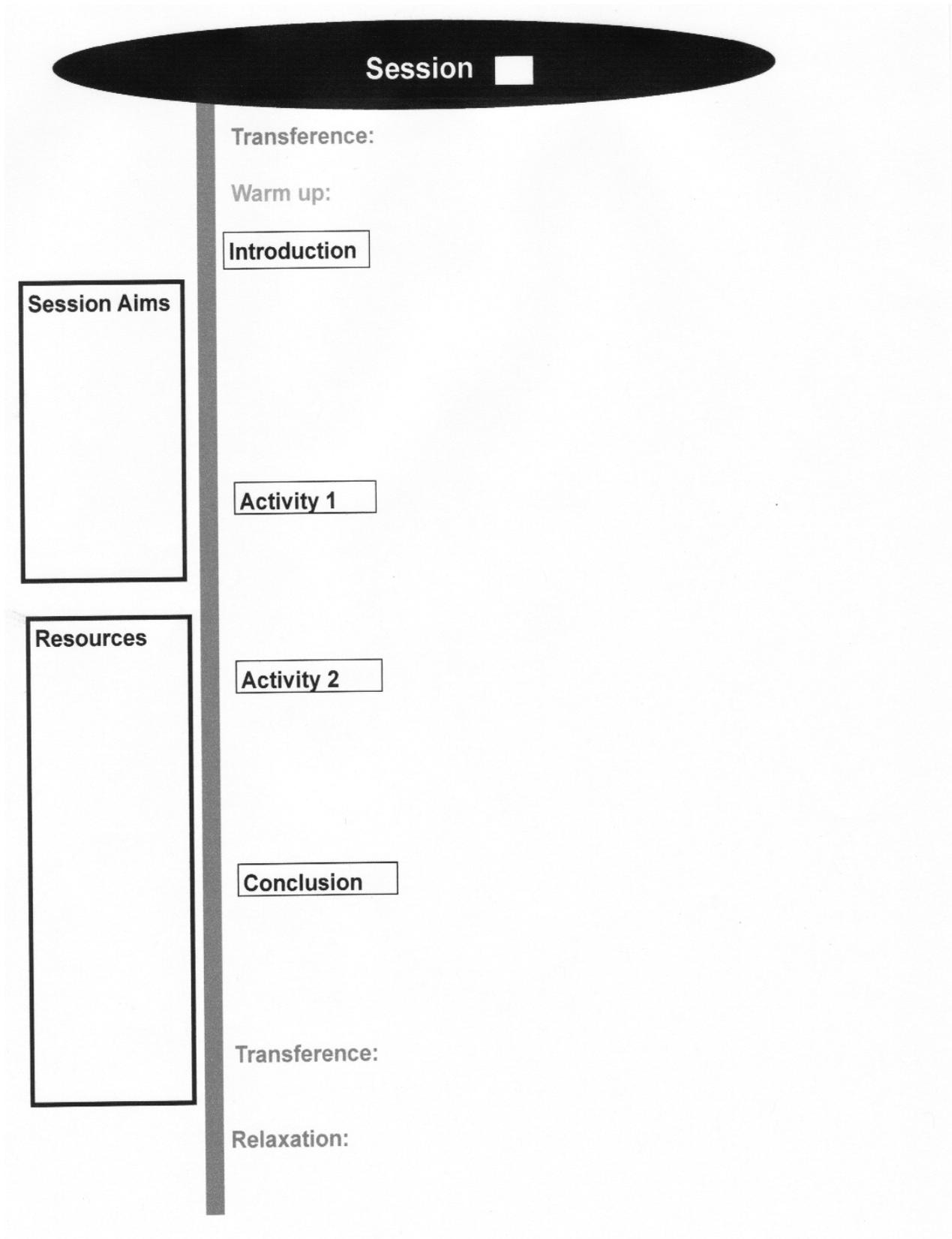
Please give details of any other SEAL/ emotional literacy/ behaviour work that children have done whilst the project has been running. Please also give details of any prior involvement of pupils in similar projects that may affect the impact of the group work (e.g. SEAL small group work last year, with approximate dates). Please return to Claire Whyard by Thursday January 14th. Thank you!

WHOLE SCHOOL:

CLASS:

SMALL GROUP/ INDIVIDUAL (please give names of pupils):

8.13: 'Staying Calm' Session Structure



8.14: 'Staying Calm' Session Contents

Session	Aims of the session
Introductory Session	I know: <ul style="list-style-type: none"> • the group rules. • the names of the other members of the group. • what the purpose of the group is.
Session 1	I can: <ul style="list-style-type: none"> • understand that anger is a feeling. • identify anger in myself and others. • recognise that people respond in different ways to events.
Session 2	I can: <ul style="list-style-type: none"> • understand what makes different people feel angry. • understand the word 'trigger' and begin to identify my own triggers.
Session 3	I can: <ul style="list-style-type: none"> • understand that the thoughts that I have about a situation can affect my feelings, behaviour and consequences.
Session 4	I can: <ul style="list-style-type: none"> • understand that sometimes things are unfair. • use strategies to deal with unfair situations.
Session 5	I can: <ul style="list-style-type: none"> • understand that I have a choice about my behaviour and that my choices can affect what will happen to me. • understand that I have control over my behaviour.
Session 6	I can: <ul style="list-style-type: none"> • use a problem solving framework to practise my skills in resolving conflict. • talk about how I found being in this group.
Session 7	Session evaluation and completion of evaluation questionnaires.

8.15: 'Staying Calm' Staff Training Materials

Getting Group Work Started

Promoting Social and Emotional Well-being

Helen Clark and Helen Clifford

Educational Psychologists



Overview of the Day

9.30am	Welcome and Introduction
9.45am	Introduction to Group Work
10.45am	Break
11.00am	Practical Session
12.15pm	Lunch
1.00pm	Practical Session, Evaluation and Conclusions
2.30pm	Training ends



Aims of the Day

- To find out about the benefits and value of group work.
- To know how to set up and facilitate group work in school.
- To understand how to evaluate the impact of group work.
- To network and share ideas about group work with other colleagues in the development group.



Introductory Activity

- 'Getting to know you' game.



Why run small group work?

For children to:

- Find out more about themselves and others.
- Feel confident to contribute ideas.
- Explore issues in more depth.
- Practise skills in a safe environment.
- Recognise that they have choices and to make the right ones.
- Learn to get on with other people.
- Learn to be reflective.
- Develop empathy.
- Develop coping skills.



Maslow's Hierarchy of Needs

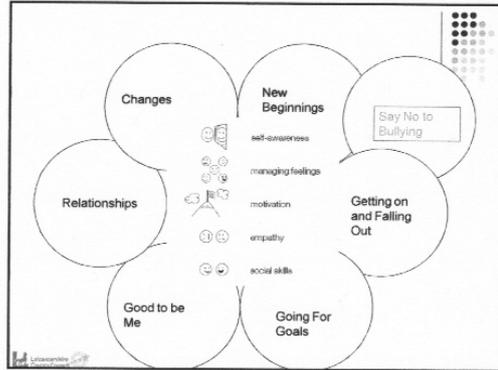
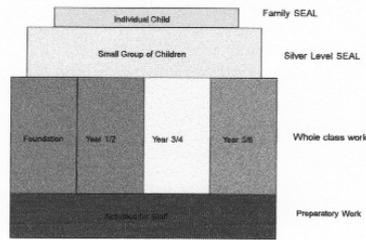


The diagram shows a pyramid with five levels of needs from top to bottom:

- Self-Actualisation Needs:** To realise one's full potential (top level)
- Self-esteem and Confidence Needs:** To achieve, gain approval and recognition from others (second level)
- Belonging and Love Needs:** To feel connected, accepted, and cared for (third level)
- Safety Needs:** To feel secure and free from physical or psychological harm (fourth level)
- Physiological Needs:** Provision of the basic needs such as food, clothing, shelter (bottom level)



SEAL is split into different levels represented by colours:



Why we adapted SEAL

We found that schools ask for small group work based on a number of commonly recurring themes:

- Managing feelings
- Promoting self-esteem
- Developing social skills

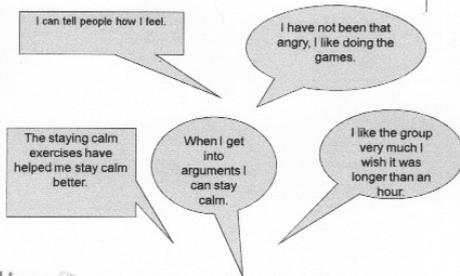
These themes are addressed within the SEAL materials but not as discrete units of work.

The silver level materials are generally given to LSA's to use but are not written in a 'pick up and use' format.

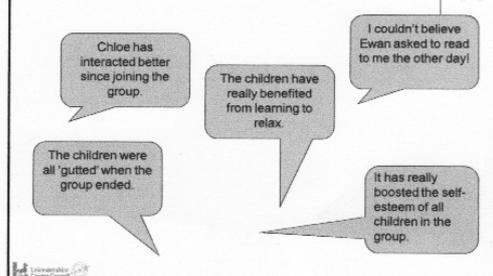
Our Project

- Developed Key stage 1 and 2 materials for small group work on the 3 themes.
- Piloted packages in a number of our schools.
- Evaluated and reviewed the materials based on staff and pupil's comments and our own observations and experiences of running sessions.
- Currently running staff training to disseminate the materials into schools.

Feedback from children attending the group:



Feedback from adults



The structure of our sessions is:-

- Transference
- Warm Up
- Introduction to the session
- Activity 1
- Activity 2
- Conclusion
- Transference
- Relaxation

The structure is very similar to that of SEAL which was developed from research as a model of good practice.



Readiness for Group Work Activity

- Sorting true or false statements with a partner from your school or with a small group.



Key Features of the Introductory Session

- Introductions and purpose of the group.
- Fun team building activity.
- Group rules- developed with the children.
- Activity to find out more about one another. For example the 'Getting to know you' game.
- Snack time.
- Activity to think about before the next session, such as thinking of a group name.
- Relaxation activity.



Each session begins with a warm up activity...

ACTIVITY:

One person in the group should read the game instructions to the group. All members of the group should play the game together.

- Group 1 Ring on a string
- Group 2 Corks
- Group 3 "Hello Harry"



There are usually 2 main activities to address the session aims

Activity 1

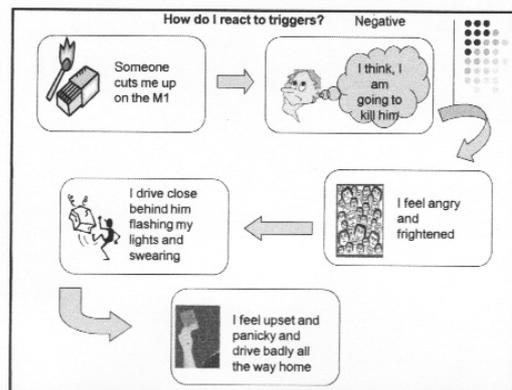
Taken from Getting Along Together Key Stage 1 - Session 1, Activity 1.

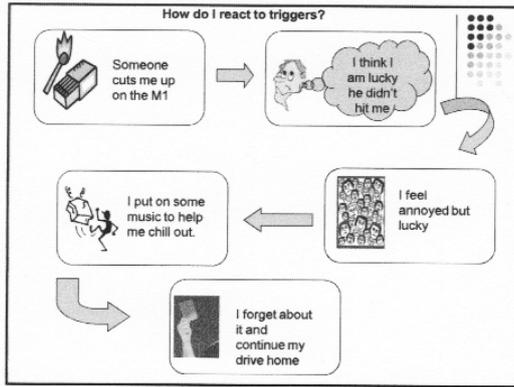
I can
Recognise my own feelings.

Activity 2

Taken from Staying Calm Key Stage 2- Session 3, Activity 2.

I can
Understand that the thoughts that I have about a situation can affect my feelings, behaviour and consequences.





Discussion Activity

Consider Activity 1, that you have just completed.

1. What could the next sessions' aim(s) be? E.g. I can
2. What activities could you plan to address the aim(s)?



Further Activities

Taken from *Getting Along Together Key Stage 1- Session 2, Activity 1.*

I can:
Understand how my behaviour affects how others are feeling

Taken from *Staying Calm Key Stage 2- Session 4, Activity 1.*

I can:
Understand that sometimes things are unfair and have strategies to deal with situations that are unfair without getting upset.

Transference Activity

A transference activity is given to the group at the conclusion of each session. The idea being that they will use the skills that they have developed in the session, in a 'real life' context before the next session.



Relaxation

Each session finishes with a relaxation activity. The aim is to help the children to feel calm and ready to return to their classroom.

It is also an opportunity to learn relaxation techniques that they can use for themselves, when they are feeling stressed or under pressure.



Relaxing like a Rag Doll





Rectangular Breathing

7
out

4
in

4
in

7
out

Draw the rectangle on a board and ask the children to close their eyes and imagine it in their head. Breathe in for a count of 4 and out for a count of 7. Repeat.



The final session....

Each group work pack contains an introductory session, 6 focussed sessions and a evaluation session.

We would encourage adults to:

1. Evaluate the sessions on a week by week basis, to inform the next session.
2. Consider any changes that could be made when running the group work, with a new group of children.



Evaluating the Impact of the Group Work

- Gathering data before and after group participation.
- Looking for individual changes and positive trends.
- Commercially produced evaluation tools.

NFER Nelson Tel: 0845 602 1937
Psychology in Education Portfolio Social Skills And Emotional Intelligence (£66.00)
Psychology in Education Portfolio Children's Self perceptions (£66.00)
Emotional literacy assessment and intervention age 7-11
Lucky Duck <http://www.luckyduck.co.uk/> or Tel: 020 7324 8500
BG Steem (£24.99)



Other Resources

Incentive Plus Tel: 01908 523411
www.incentiveplus.co.uk

Speechmark Tel: 01280 845570
www.speechmark.net

Lucky Duck Tel: 020 7324 8500
www.luckyduck.co.uk/



Evaluation of the day

We would welcome your comments to inform future training sessions.

Thank you



8.16: 'Staying Calm' Staff Guidance

The Staying Calm Project: Guidance for Staff

Thank you for deciding to take part in the Staying Calm research, which I am doing as part of my training. We are trying to evaluate how effective the programme is in boosting emotional literacy and helping children to deal with emotions and conflict in social situations. In order to do this we have selected some children in years 5 and 6 to be part of the 'intervention' group (the ones in the group this term) and some to be in the 'control' group (whose scores we are using for comparison).

There will be 12 children from each year in the study, but only 6 will have access to the group before Christmas. The other 6 will be able to do the group in the Spring or Summer terms once all of the assessments have taken place. To make sure we can check whether the group really makes a difference, it is really important that the control group are not influenced by 'Staying Calm' in any way.

As far as possible, please make sure that:

- The children in the control group do not take part in or get a chance to discuss the content of the 'Staying Calm' sessions until after Christmas.
- None of the children in the study take part in small group work targeted at emotional literacy or behaviour.
- If any similar work does take place (e.g. individual work on behaviour or whole class SEAL activities), these are recorded so that I know what each child has had access to.
- You let me know if any of the children involved have taken part in similar groups before.
- Adults who become familiar with the 'Staying Calm' approaches do not use them with children who are not in the group this term.
- You stick as closely to the activities and order of events in the manual as possible.
- You make a note of what you did in each session (ideally on the sheets provided) and complete the evaluation sheet for each session.
- The same adult runs the group each week and that it happens at a regular time, in the same place.
- If the circumstances of the groups change from week to week (e.g. a different adult runs it, it is a different time of day, in a different place or if children are absent) please record this.

I have put together a pack of 'diary' sheets for keeping a record of what is done each week. It will be really helpful if you could fill these in at the end of each session.

I hope to be able to visit and sit in on one session for each group during November, but will also be in school on different occasions to complete assessments. Just let me know if you would like a chat when I am there.

The project will run for 8 weeks:

Week beginning	Session	Other activities
Sept 28th		Training day (all)

		Collect consent letters (staff)
Oct 5th		Pupil assessments (Claire and Rebecca) Chase up consent letters (staff) Staff questionnaires (staff) Children allocated to groups (Claire)
Oct 12th	Introduction session	Complete pupil assessments (Claire)
Oct 19 th	HALF TERM	HALF TERM
Oct 26 th	Session 1	
Nov 2nd	Session 2	
Nov 9th	Session 3	Visits (Claire)
Nov 16 th	Session 4	Visits (Claire)
Nov 23rd	Session 5	
Nov 30 th	Session 6	Parent questionnaires given out (staff)
Dec 7 th	Evaluation session	Final pupil assessments (Claire and Rebecca) Staff SDQs (staff) Pupil evaluations (pupils) Staff questionnaires (staff)
Dec 14th		Final collection of responses

Please feel free to contact me with any questions or queries you have got:

Claire Whyard, Trainee EP

Office Tel: (██████████)

(I am in Mon-Thurs, they will take a message if I'm not there)

Email:

(I pick these up on work days only)

On Fridays (for urgent contact only), my mobile number is ██████████ Please leave a message and I will try to get back to you. Also, I will be out of the office all week for the week beginning Nov 30th, so please contact me on my mobile if needed. Please do not share this number with parents or other staff.

Thanks for taking the time to read this- I look forward to working with you and the children ☺.

Claire Whyard (TEP), September 2009

8.17 Adult Diary Sheets

Staying Calm Session Evaluation

Whilst piloting these materials we found it helpful to review the sessions and to consider any learning points to inform future sessions. Please attach a copy of the planning for the session.

Evaluation of Session Number: _____ Completed by: _____

Led by:

Adults present:

Children present (initials):

How well did you think this session worked overall?

Very well

Well

OK

Not very well

Very Badly

What worked well?

What didn't work well?

How did the children respond?

How could the session have been improved?

Any other comments? (continue over the page if needed)

8.18: Session Observation Checklist

Inventory of Practices for Promoting Social and Emotional Competence (Adapted from CSEFEL, 2010)

Skills	Indicators	Observed (Tick)		
		Consistently	Occasionally	Seldom
Develops meaningful relationships with children	Greets children by name			
	Communicates at eye level			
	Verbally interacts			
	Shows respect, consideration and warmth			
	Speaks calmly			
Giving directions	Gains child's attention			
	Minimises the number of directions			
	Individualises directions (if needed)			
	Gives clear directions			
	Gives positive directions			
	Gives time to respond			
	Gives children choices where appropriate			
Establishes and enforces clear rules, limits and consequences for behaviour	Follows through with positive acknowledgements of behaviour			
	Identifies appropriate rules			
	States rules positively and specifically			
	Keeps rules to a manageable number			
	Frequently reinforces positive behaviour			
Uses positive feedback and encouragement	Enforces rules and consequences consistently and fairly			
	Provides non-verbal cues			
Interacts to develop self-esteem	Models positive feedback and encouragement			
	Demonstrates active listening			
	Avoids judgemental statements			
	Responds to children's ideas			
	Recognises children's efforts			
Uses prompting and reinforcement of interactions effectively	Shows empathy and acceptance of feelings			
	Provides sincere, enthusiastic feedback to promote and maintain social interactions			
Models appropriate expressions and labelling of their own emotions and self-regulation	Models phrases children can use to initiate and maintain interactions			
	Labels positive feelings			
	Labels negative feelings paired with actions to regulate			

8.19: Parent Data Request Letter and Evaluation Sheet

Dear Parent/ Carer,

Thank you for your help and support in allowing your child to take part in the Staying Calm project. The first stage of group work is now coming to an end. I have been to visit all of the groups and have been very impressed by the hard work and dedication of the staff and pupils taking part- well done!

Thank you also to you, as parents and carers, for supporting the project through returning all of the information we have asked for so far. In order to help us complete the project it is really important that you continue to support us through completing the enclosed questionnaire and evaluation form. Even if your child has not been part of a group this term, your opinion is still really needed to help us work out if the groups have been successful.

I hope you feel able to support both myself and the staff and pupils of [REDACTED] Primary by completing the final questionnaires and **returning them to the school office no later than Monday 14th December**. If you have any questions please feel free to ask Mrs [REDACTED] or Mrs [REDACTED], or contact me at [REDACTED]

Yours Sincerely,

Claire Whyard
Trainee Educational Psychologist
[REDACTED] **Educational Psychology Service**

Staying Calm Parent Evaluation

Thank you for allowing your child to take part in the 'Staying Calm' project.

It would be really helpful if you could complete the following questions to help us understand the impact of the group.

Name of child: _____

Date of birth: _____

School: _____

Class: _____

Completed by: _____

Date completed: _____

1) Has your child brought home any activities from the group? Please give details.

2) Has your child talked about what they have done in the group? What kinds of things have they shared with you?

3) Have you noticed any change in attitude or behaviour in your child since they started the group?

4) Do you think allowing your child to be part of the group has been a positive experience?

Please add any other comments overleaf. **Please return to school by Monday 14th December.**

8.20: Parent Follow-up Letter

Dear Parent/ Carer,

Thank you for your help and support in allowing your child to take part in the Staying Calm project. The first stage of group work has now finished. I have been to visit all of the groups and have been very impressed by the hard work and dedication of the staff and pupils taking part- well done!

You may have received some questionnaires to complete at the end of last term. Unfortunately I have not yet received your response. In order to help us complete the project it is really important that you continue to support us through completing the enclosed forms. Even if your child has not been part of a group this term, your answers are still really needed to help us work out if the groups have been successful.

I hope you feel able to support myself and staff and pupils that have taken part in the project by taking a few minutes to complete the final questionnaires. Please return them to Claire Whyard in the **pre-paid envelope** provided, **no later than Friday 15th January**. If you have any questions please feel free to contact me at [REDACTED]

Thank you in anticipation for your help.

Yours Sincerely,

Claire Whyard

Trainee Educational Psychologist

[REDACTED] **Educational Psychology Service**

8.21: Raw Data

Data from Resiliency Scales

School 1			Mastery		Relatedness		Reactivity	
Year	Group		pre	post	pre	post	pre	post
5	Experimental	Target	49	50	56	63	51	53
5	Experimental	Target	54	51	76	70	23	21
5	Experimental	Target	65	62	58	56	21	36
5	Experimental	Target	42	39	48	47	24	19
5	Experimental	Role model	27	43	33	47	61	52
5	Experimental	Role model	57	61	81	86	23	14
6	Experimental	Target	56	60	80	75	40	26
6	Experimental	Target	40	46	56	72	35	34
6	Experimental	Target	67	69	79	84	31	15
6	Experimental	Target	49	53	74	72	33	28
6	Experimental	Role model	72	72	92	90	9	13
6	Experimental	Role model	63	74	83	89	26	11
5	Control	Target	57	61	70	84	23	18
5	Control	Target	54	58	66	53	31	32
5	Control	Target	49	51	63	75	9	10
5	Control	Target	50	52	67	64	48	44
5	Control	Role model	65	72	83	88	13	15
5	Control	Role model	52	45	74	68	25	22
6	Control	Target	49	37	65	59	39	31
6	Control	Target	56	60	67	71	36	34
6	Control	Target	56	62	73	77	27	23
6	Control	Target	45	52	49	65	24	12
6	Control	Role model	54	61	77	82	24	19
6	Control	Role model	52	56	73	74	26	26

Data from Resiliency Scales

School 2			Mastery		Relatedness		Reactivity	
Year	Group		pre	post	pre	post	pre	post
5	Experimental	Target	39	47	68	76	35	25
5	Experimental	Target	35	23	46	47	40	21
5	Experimental	Target	35	41	55	48	21	18
5	Experimental	Target	47	52	69	71	44	41
5	Experimental	Role						
		model	64	61	85	77	34	27
5	Experimental	Role						
		model	50	51	61	69	37	31
6	Experimental	Target	59	54	77	75	17	14
6	Experimental	Target	52	48	42	56	54	45
6	Experimental	Target	59	61	85	82	14	15
6	Experimental	Target	58	67	80	88	40	30
6	Experimental	Role						
		model	53	54	79	81	37	21
6	Experimental	Role						
		model	61	57	87	75	18	36
5	Control	Target	51	56	73	65	32	33
5	Control	Target	40	59	76	67	11	7
5	Control	Target	67	66	92	80	20	30
5	Control	Target	45	52	82	83	52	36
5	Control	Role						
		model	47	55	78	86	38	31
5	Control	Role						
		model	49	51	68	72	39	29
6	Control	Target	48	55	83	71	32	41
6	Control	Target	54	56	82	88	9	16
6	Control	Target	47	54	57	69	17	10
6	Control	Target	59	51	66	67	16	17
6	Control	Role						
		model	49	47	73	78	10	13
6	Control	Role						
		model	57	63	89	88	32	29

SDQ Teacher Responses

School 1	Year	Group	Target/ Role model	PRE-TEST						
				TOTAL	EMOTIONAL	CONDUCT	HYPERACTIVITY	PEER	PROSOCIAL	
5	5	E	T	16	4	2	6	4	7	
5	5	E	T	19	1	6	10	2	3	
5	5	E	T	16	5	3	5	3	8	
5	5	E	T	17	6	0	5	6	10	
5	5	E	R	0	0	0	0	0	10	
5	5	E	R	0	0	0	0	0	10	
6	6	E	T	14	6	0	8	0	9	
6	6	E	T	16	5	1	10	0	4	
6	6	E	T	14	0	3	10	1	3	
6	6	E	T	14	4	0	10	0	10	
6	6	E	R	2	2	0	0	0	10	
6	6	E	R	0	0	0	0	0	10	
5	5	C	T	14	5	2	6	1	7	
5	5	C	T	17	2	3	9	3	5	
5	5	C	T	16	8	1	6	1	5	
5	5	C	T	11	4	1	6	0	5	
5	5	C	R	0	0	0	0	0	10	
5	5	C	R	0	0	0	0	0	10	
6	6	C	T	14	5	0	9	0	9	
6	6	C	T	13	0	3	9	1	5	
6	6	C	T	13	5	1	5	2	5	
6	6	C	T	17	8	0	9	0	10	
6	6	C	R	2	0	0	2	0	10	
6	6	C	R	0	0	0	0	0	10	

Italicised numbers denote data that was removed from analysis.

SDQ Teacher Responses

School 1	Year	Group	Target/ Role model	POST- TEST	TOTAL	EMOTIONAL	CONDUCT	HYPERACTIVITY	PEER	PROSOCIAL
	5	E	T		9	0	3	3	3	6
	5	E	T		23	3	7	10	3	6
	5	E	T		1	0	0	1	0	5
	5	E	T		7	2	0	2	3	9
	5	E	R		10	0	2	4	4	7
	5	E	R		0	0	0	0	0	10
	6	E	T		8	1	1	6	0	9
	6	E	T		5	0	0	5	0	10
	6	E	T		0	0	0	0	0	10
	6	E	T		3	1	0	2	0	10
	6	E	R		4	4	0	0	0	10
	6	E	R		0	0	0	0	0	10
	5	C	T		12	2	0	6	4	5
	5	C	T		8	0	0	4	4	6
	5	C	T		8	3	0	4	1	5
	5	C	T		10	1	2	7	0	4
	5	C	R		5	3	0	2	0	10
	5	C	R		3	1	0	2	0	6
	6	C	T		7	1	1	5	0	9
	6	C	T		3	0	1	2	0	9
	6	C	T		3	2	0	1	0	10
	6	C	T		5	3	0	2	0	10
	6	C	R		0	0	0	0	0	10
	6	C	R		5	3	0	0	2	10

Italicised numbers denote data that was removed from analysis.

SDQ Teacher Responses

School 2	Year	Group	Target/ Role model	PRE-TEST						PROSOCIAL
				TOTAL	EMOTIONAL	CONDUCT	HYPERACTIVITY	PEER		
5	5	E	T	16	0	4	10	2	1	
5	5	E	T	23	9	1	6	7	5	
5	5	E	T	15	0	4	10	1	2	
5	5	E	T	6	0	1	5	0	7	
5	5	E	R	0	0	0	0	0	9	
5	5	E	R	0	0	0	0	0	10	
6	6	E	T	26	2	7	10	7	4	
6	6	E	T	7	1	0	2	4	5	
6	6	E	T	7	0	1	5	1	9	
6	6	E	T	22	0	8	9	5	1	
6	6	E	R	0	0	0	0	0	10	
6	6	E	R	4	1	0	0	3	10	
5	5	C	T	19	7	2	4	6	4	
5	5	C	T	8	1	0	3	4	5	
5	5	C	T	4	0	1	3	0	4	
5	5	C	T	15	0	1	9	5	5	
5	5	C	R	0	0	0	0	0	9	
5	5	C	R	0	0	0	0	0	10	
6	6	C	T	5	0	1	4	0	8	
6	6	C	T	7	1	2	3	1	9	
6	6	C	T	21	7	4	7	3	4	
6	6	C	T	8	0	3	5	0	5	
6	6	C	R	0	0	0	0	0	10	
6	6	C	R	0	0	0	0	0	10	

SDQ Teacher Responses

School 2	Year	Group	Target/ Role model	POST- TEST	TOTAL	EMOTIONAL	CONDUCT	HYPERACTIVITY	PEER	PROSOCIAL
	5	E	T		3	0	0	3	3	8
	5	E	T		14	4	2	5	3	8
	5	E	T		11	0	3	8	0	9
	5	E	T		2	0	1	1	0	8
	5	E	R		1	0	0	0	1	9
	5	E	R		0	0	0	0	0	9
	6	E	T		20	2	4	9	5	5
	6	E	T		3	0	0	1	2	5
	6	E	T		10	2	1	7	0	7
	6	E	T		24	1	7	10	6	5
	6	E	R		3	0	0	3	0	9
	6	E	R		0	0	0	0	0	10
	5	C	T		11	3	2	5	1	5
	5	C	T		9	0	2	4	3	4
	5	C	T		4	0	1	3	0	8
	5	C	T		13	1	1	10	1	6
	5	C	R		0	0	0	0	0	9
	5	C	R		0	0	0	0	0	10
	6	C	T		9	0	1	8	0	7
	6	C	T		9	0	1	6	2	9
	6	C	T		18	5	4	6	3	4
	6	C	T		10	1	4	5	0	5
	6	C	R		4	0	0	0	4	10
	6	C	R		1	0	0	0	1	9

'Staying Calm' Questionnaire: Teacher Responses

School 1				School 2					
Year	Group	Target/ Role model	PRE	POST	Year	Group	Target/ Role model	PRE	POST
5	E	T	35	39	5	E	T	30	47
5	E	T	24	30	5	E	T	27	34
5	E	T	48	52	5	E	T	23	43
5	E	T	52	45	5	E	T	34	50
5	E	R	42	41	5	E	R	51	57
5	E	R	55	54	5	E	R	50	54
6	E	T	40	42	6	E	T	34	38
6	E	T	38	50	6	E	T	55	41
6	E	T	33	52	6	E	T	38	39
6	E	T	30	55	6	E	T	30	37
6	E	R	47	52	6	E	R	57	53
6	E	R	48	51	6	E	R	60	60
5	C	T	46	39	5	C	T	25	28
5	C	T	45	44	5	C	T	27	27
5	C	T	42	47	5	C	T	36	39
5	C	T	42	40	5	C	T	28	28
5	C	R	60	58	5	C	R	54	55
5	C	R	57	47	5	C	R	52	54
6	C	T	36	34	6	C	T	42	38
6	C	T	38	58	6	C	T	49	38
6	C	T	37	41	6	C	T	35	36
6	C	T	36	48	6	C	T	43	39
6	C	R	49	59	6	C	R	55	51
6	C	R	46	53	6	C	R	54	57

Italicised numbers denote data that was removed from analysis.

'Staying Calm' Questionnaire: Parent Responses

School 1				School 2					
Year	Group	Target/ Role model	PRE	POST	Year	Group	Target/ Role model	PRE	POST
5	E	T	44	45	5	E	T	31	30
5	E	T	27	32	5	E	T	33	
5	E	T	41	48	5	E	T	31	29
5	E	T	37		5	E	T	37	
5	E	R	26	32	5	E	R	32	53
5	E	R	34	38	5	E	R	33	37
6	E	T	56	60	6	E	T	30	36
6	E	T	40	43	6	E	T	33	34
6	E	T	36	47	6	E	T	40	41
6	E	T	40	45	6	E	T	33	41
6	E	R	46	48	6	E	R	41	41
6	E	R	40	44	6	E	R	55	58
5	C	T	34	33	5	C	T	53	52
5	C	T	41	39	5	C	T	37	46
5	C	T	28		5	C	T	42	43
5	C	T	35	49	5	C	T	36	41
5	C	R	39	37	5	C	R	30	34
5	C	R	47	55	5	C	R	48	46
6	C	T	42	42	6	C	T	41	42
6	C	T	47	42	6	C	T	45	46
6	C	T	42	40	6	C	T	41	42
6	C	T	32	46	6	C	T	34	37
6	C	R	45	56	6	C	R	49	51
6	C	R	35	39	6	C	R	36	

Italicised numbers denote data that was removed from analysis.

Staff Evaluations of the 'Staying Calm' Sessions

session	Very well	well	OK	Not very well	very badly	
intro	0	3		1	0	0
1	1	1		1	1	0
2	1	2		0	1	0
3	0	2		2	0	0
4	2	2		0	0	0
5	1	3		0	0	0
6	0	3		0	1	0
Total	5	16	4	3	0	total 28
percentage of sessions	17.85714	57.14286	14.28571	10.71429	0	
1 d.p.	17.9	57.1	14.3	10.7		
	positive	75				
	negative	10.7				
	OK	14.3				

Children's Evaluations of Staying Calm: Enjoyment and Behaviour Change

Enjoyment of sessions

Response	1	2	3	4	5
School 1 Y5	0	0	0	2	4
School 1 Y6	0	0	0	0	6
School 2 Y5	0	0	0	0	6
School 2 Y6	0	0	0	2	4
total	0	0	0	4	20
%	0	0	0	16.66667	83.33333
1 d.p.	0	0	0	16.7	83.3

Change in behaviour

Response	1	2	3	4	5
School 1 Y5	0	2	2	2	0
School 1 Y6	2	3	1	0	0
School 2 Y5	0	2	2	1	1
School 2 Y6	1	3	2	0	0
	3	10	7	3	1
	12.5	41.66667	29.16667	12.5	4.166667
	12.5	41.7	29.2	12.5	4.2