THE SELF-COMPASSIONATE CHILD:
EXPLORING HOW SELF-COMPASSION AND MINDFULNESS ENHANCE CHILDREN'S RESILIENCE AND PSYCHOSOCIAL WELLBEING

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Abstract

Middle childhood is a period of development characterised by opportunity, challenge, and transition. Evidence suggests that interventions designed to build resilience may offer the key to promoting wellbeing and protecting children's mental health during this period of emerging adolescence (Watson, Rich, Sanchez, O'Brien, & Alvord, 2013). In recent years, the Positive Psychology movement has brought about a shift in the popularity of psychological interventions favoured by practitioners in both mental illness and wellness fields; along with the ever-growing interest and adaptation of mindfulness-based interventions, curiosity as to the application of self-compassion has begun to proliferate the literature. However, the encouragement of children to become more self-compassionate—that is, develop a healthy self-attitude and reduce their tendency to engage in harsh self-evaluation—has yet to receive full attention within this field of research.

To fill this gap, this thesis aimed to expand the current understanding of self-compassion by examining the relevance of this construct in children in their middle years of childhood. The key terms of this paper are defined as follows. *Mindfulness* is understood as "the state of being attentive to and aware of what is taking place in the present" (Brown & Ryan, 2003, p. 822). *Self-compassion* is most succinctly defined as "compassion turned inward" (Neff, 2016b, p. 265). *Resilience* is understood from an ecological perspective as a dynamic process of adaptation, involving interactions between a range of risk and protective factors at individual and social levels (Olssona, Bonda, Burns, Vella-Brodrickc, & Sawyer, 2003). Lastly, *psychosocial wellbeing* is also defined from an ecological orientation, encompassing social aspects as well as life satisfaction and positive and negative affect (Keyes, 2006).

This research was conducted in two main phases via a mixed-method design. Phase 1 involved the design, delivery, and evaluation of the *Peace by Piece* program, a 10-week group-therapy program designed to teach skills of mindfulness and self-compassion to children, with an accompanying parent, in a clinical setting (Study 1). Participating children's ages ranged from 7-9 years. Program evaluation was conducted both qualitatively and quantitatively. Findings provided strong support for the feasibility of this novel group-therapy intervention. Acceptability was high and attrition rates low; satisfaction surveys indicated that the program content,

duration, format and delivery were well received. Efficacy data suggested that this group intervention brought about a range of benefits for child participants. For example, thematic analysis revealed that children's wellbeing and resilience were positively influenced primarily via improvements in emotion regulation. Benefits for parent participants included an expanding capacity for emotion regulation leading to less reactive parenting and improved parent-child relationships.

Encouraging findings from Study 1 provided the platform to commence the second phase of the research, which involved quantitative data collection for Study 2. Study 2 had two main aims. The first aim was to design and pilot test two-new measures of self-compassion for preadolescents (defined in this study as children aged 9-12 years). The newly developed Self-Compassion Scale-Preadolescent (SCS-P) and the Self-Compassion Scale-Preadolescent-Parent Report (SCS-P-PR) were both were modelled from Neff's Self-Compassion Scale (SCS; 2003b). The second aim of Study 2 was to examine the relationships between self-compassion, mindfulness, and a range of psychosocial indicators of wellbeing and resilience in preadolescents. To this end, the SCS-P and SCS-P-PR, along with a battery of self-report measures designed to measure psychosocial wellbeing and resilience, were administered to 193 Year 5 and 6 students aged 9-12 years and 108 parents from five schools in the Toowoomba region of South-East Queensland.

Findings from Part A of Study 2 indicated that the SCS-P and the SCS-P-PR were both psychometrically reliable and valid measures of self-compassion for preadolescent children. However, current results did not support the use of a total score as an overall indicator of self-compassion. Such findings are in contrast to the current recommended practice when scoring and interpreting the SCS (Neff, 2003b, 2016b; Neff et al., 2019). Rather, results indicated that both measures tapped into two statistically and theoretically distinct constructs: the tendency to respond to the self with compassion (termed 'compassionate self-responding'), and the tendency to respond to the self in a negative fashion (termed 'uncompassionate self-responding').

Findings further revealed that compassionate self-responding and uncompassionate self-responding were both significant predictors of the majority of psychosocial wellbeing and resilience variables in preadolescent children. Compassionate self-responding was the strongest unique predictor for resilience and the positive indicators of psychosocial wellbeing (i.e., positive affect, satisfaction with life, and prosocial behaviour). Meanwhile, uncompassionate self-responding

was the strongest unique predictor for the negative indicators of psychosocial wellbeing (i.e., negative affect and psychosocial difficulties). It was theorised that that that the tendency to treat the self with kindness and acceptance is linked to positive interactions and feelings towards others, which can lead to a greater sense of resilience and satisfaction with life. Meanwhile, the tendency to treat the self with judgement and non-acceptance is more closely linked to a reduced sense of psychosocial wellbeing.

The finding that both the positive and negative elements of self-compassion simultaneously, yet independently, influence preadolescent resilience and psychosocial wellbeing led to a series of mediation analyses (Part B of Study 2). Results were consistent with the conceptualisation of compassionate self-responding as a protective 'buffer', that can reduce the detrimental impacts of uncompassionate self-responding on psychosocial wellbeing, and uncompassionate self-responding as a vulnerability factor, that weakens resilience and psychosocial wellbeing, even when compassionate self-responding is present. Together, findings from Study 2 suggest that it is equally important to teach preadolescent children how to reduce their propensity for harsh self-evaluation, whilst also encouraging the development of compassionate self-responding.

Findings from Study 1 and Study 2 contribute valuable new knowledge to the field of self-compassion as well as point to directions for future research. Importantly, this thesis was the first to report on a group-therapy intervention targeting self-compassion in a clinical group of children. Results suggest self-compassion is a relevant, and potentially highly efficacious, target for intervention when working with this cohort. Findings strongly support the ongoing development and evaluation of interventions designed to improve self-compassion within this cohort.

Furthermore, this thesis was the first to design and pilot-test a parent-reported measure of self-compassion, the SCS-P-PR. Significant, moderate correlations between the SCS-P-PR and SCS-P for both the positive and negative aspects of self-compassion (r =.30 and .40 respectively), suggested that self-compassionate attitudes and behaviours in children are, to some extent, visible to their parents. Validation of the SCS-P-PR—and the SCS-P self-report measure—represent unique and valuable contributions to the toolbox of assessments available for the assessment of preadolescents. Should future validation research replicate the promising

psychometric findings described herein, the SCS-P and SCS-P-PR can be adopted by researchers interested in expanding the knowledge regarding the predictors of self-compassion in preadolescent children, as well as factors that may mediate or moderate outcomes. The measures may also be used for applied purposes, such as the evaluation of group-based interventions targeting the promotion of self-compassion within this cohort.

Finally, this research adds to the growing body of literature that cautions against the common practice of viewing self-compassion as one overarching construct (as originally articulated by Neff, 2003a). Rather, the findings from this research support the contention (e.g., Brenner, Heath, Vogel, & Crede, 2017) that self-compassion is best understood as two separate—and equally important—constructs, termed by this research compassionate self-responding and uncompassionate self-responding. Thus, a comprehensive assessment of self-compassion in the preadolescent age-range entails recognising the role of these constructs in both protecting, and increasing vulnerability to, a variety of psychological outcomes. Meanwhile, the assessment of self-compassion can be further enhanced via administration of a parent-reported measure, such as the SCS-P-PR.

Future research is recommended to take a qualitative approach, in order to deepen the understanding of how compassionate and uncompassionate aspects of self-responding interact and influence mental health and wellness within young people.

Certification of Thesis

This thesis is entirely the work of Victoria Barclay-Timmis, except where otherwise acknowledged. The work is original and has not previously been submitted for any other award, except where acknowledged.

Principal Supervisor: Professor Lorelle Burton

Associate Supervisor: Associate Professor Gavin Beccaria

Student and supervisors' signatures of endorsement are held at the University.

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Table of Contents

Abstract i
Certification of Thesis v
Acknowledgements vi
List of Figures xv
List of Tables xvii
CHAPTER 1 – INTRODUCTION 1
1.1 Context and Background 1
1.2 Mental Health in Middle Childhood 1
1.3 Positive Psychology: Creating Resilience and Wellbeing in Children 2
1.4 Mindfulness 3
1.5 Self-Compassion 4
1.5.1 Self-compassion in youth. 6
1.5.2 Measurement and conceptualisation. 6
1.6 Rationale for Current Research 9
1.7 Study Design 9
1.8 Research Aims 10
1.8.1 Study 1. 10
1.8.2 Study 2. 10
1.9 Thesis Structure 11
CHAPTER 2 - LITERATURE REVIEW 13
2.1 Chapter Introduction 13
2.2 Resilience 13
2.2.1 Resilience in children. 14
2.2.2 Ecological model of resilience. 14
2.2.3 Protective resources. 15
2.2.4 Individual assets 16
2.2.4.1 Self-concept 16
2.2.4.2 Self-regulatory skills. 17
2.2.5 Measuring resilience. 17
2.2.6 Promoting resilience. 18
2.2.7 Summary and relevance to current study. 19
2.3 Wellbeing 20

2.3.1 Defining wellbeing. 20
2.3.1.1 Subjective wellbeing. 21
2.3.1.2 Psychological wellbeing. 21
2.3.1.3 Psychosocial wellbeing. 22
2.3.2 Psychosocial wellbeing in children. 22
2.3.3 Wellbeing versus mental illness. 23
2.3.4 Alternative approaches to wellbeing. 24
2.3.5 Individual qualities and wellbeing. 25
2.3.6 Summary and relevance to study. 26
2.4 Self-Compassion, Resilience and Wellbeing 27
2.4.1 Defining self-compassion. 27
2.4.2 Theoretical and philosophical perspectives. 29
2.4.2.1 Evolutionary perspective. 29
2.4.2.2 Buddhist philosophy. 31
2.5 The Science of Self-Compassion 33
2.5.1 Empirical evidence. 34
2.5.1.1 Self-compassion and wellbeing. 34
2.5.1.2 Self-compassion and resilience. 35
2.5.2 Self-compassion in adolescence. 37
2.5.2.1 Self-compassion in youth exposed to trauma. 38
2.5.2.2 Self-compassion and resilience. 39
2.5.3 Self-compassion in children under 12. 41
2.5.4 Self-compassion and gender. 43
2.5.5 Self-compassion and age. 44
2.5.6 Summary and relevance to current study. 45
2.6 Mindfulness 46
2.6.1 Conceptual considerations. 47
2.6.2 Mindfulness and wellbeing. 48
2.6.3 Mindfulness and resilience. 49
2.6.4 Mindfulness and youth. 50
2.6.5 Mindfulness and self-compassion. 51
2.7 Developmental Considerations 54
2.7.1 Lifespan perspective of mindfulness and self-compassion. 54
2.7.2 Metacognition. 55

2.8 Group Interventions for Children under 12 57
2.8.1 Mindfulness interventions. 57
2.8.2 Self-compassion interventions. 58
2.9 Measuring Self-Compassion 59
2.9.1 Measuring self-compassion in children under 12. 61
2.10 Summary and Conclusion 63
2.11 Research Questions 64
CHAPTER 3 - DEVELOPMENT OF THE *PEACE BY PIECE* GROUP THERAPY INTERVENTION 66
3.1 Chapter Introduction 66
3.2 The Mechanisms of Mindfulness and Self-Compassion 66
3.2.1 Mechanisms of change. 67
3.2.2 Self-regulation. 69
3.2.3 Self-compassion. 70
3.3 Group Mindfulness Interventions for Children under 12 71
3.4 Mindful Parenting Interventions 74
3.5 Concurrent Parent-Child Mindfulness Interventions 78
3.5.1 Qualitative research findings from clinical populations. 79
3.6 Group-Therapy Interventions Targeting Self-Compassion 81
3.3 Theoretical Considerations in the Development of the *Peace by Piece* Program 82
3.3.1 Developmental models. 83
3.4 Overview of the *Peace by Piece* Program 85
3.5 Background to Program Inception 86
3.6 Final Program Structure and Format 88
3.6.1 Themes. 90
3.6.2 Peaceful pause 90
3.6.3 What's up. 91
3.6.4 Mindful moving. 92
3.6.5 Bits about brains. 92
3.6.6 Being your own BFF. 92
3.6.7 Mini-mediators. 92
3.6.8 Journaling. 92
3.6.9 Peaceful Pause. 93

3.6.10 Time-in. 93
3.6.11 Home activities. 93
CHAPTER 4 - STUDY 1: A FEASIBILITY STUDY OF A MINDFULNESS AND SELF-COMPASSION GROUP THERAPY INTERVENTION FOR CHILDREN REFERRED FOR PSYCHOLOGICAL THERAPY 94
4.1 Aim of Study 1 94
4.1.1 Research questions. 94
4.1.2 Research design. 94
4.1.3 Participants. 97
4.1.4 Procedure and design. 97
4.1.4.1 Information session. 98
4.1.4.2 Treatment intervention overview. 98
4.1.5 Data collection overview. 98
4.1.5.1 Quantitative data. 99
4.1.5.2 Psychosocial wellbeing. 99
4.1.5.3 Resilience. 99
4.1.5.4 Anxiety. 100
4.1.5.5 Depression. 100
4.1.5.6 Mindfulness. 101
4.1.5.7 Self-Compassion. 101
4.1.5.8 Program satisfaction. 101
4.1.6 Qualitative data collection. 101
4.1.6.1 Child interviews. 102
4.1.6.2 Parent interviews. 102
4.1.6.3 Satisfaction and feedback surveys. 103
4.2 Results 103
4.2.1 Participation and attrition. 103
4.2.2 Demographics of intervention completers. 103
4.2.3 Quantitative data screening. 104
4.2.4 Quantitative data analyses. 104
4.2.5 Results obtained from satisfaction and feedback survey. 106
4.2.6 Qualitative data analyses. 107
4.2.6.1 Theme identification and assembly. 107
4.2.6.2 Satisfaction and feedback survey. 119

4.3 Discussion 120
4.3.1 RQ 1. How do children under 12 conceptualise self-compassion and mindfulness? 120
4.3.2 RQ 2. How feasible and acceptable is an intervention designed to target self-compassion with a clinical group of children under 12? 121
4.3.2.1 Participant experiences. 121
4.3.3 RQ 3. Can wellbeing and resilience be enhanced in a clinical group of children via participation in a group-therapy program targeting self-compassion and mindfulness? 123
4.3.3.1 Wellbeing and resilience. 123
4.3.3.2 Depression and anxiety symptomology. 124
4.3.3.3 Parents' self-compassion and mindfulness. 124
4.3.4 Summary and limitations. 125
CHAPTER 5 - STUDY 2, PART A: DEVELOPMENT OF TWO NEW MEASURES OF SELF-COMPASSION FOR PREADOLESCENTS AND THEIR PARENTS 128
5.1 Chapter Introduction 128
5.2 Development and Validation of the SCS 129
5.3 Theoretical and Statistical Issues in the Measurement of Self-Compassion 130
5.4 Measuring Self-Compassion in Youth 135
5.4.1 Methodological limitations of current research with children. 140
5.5 Informant-Rated Self-Compassion 141
5.5.1 Theoretical and practical considerations with parent-report measures. 142
5.6 Summary and Link to Aim of Study 2 143
5.6.1 Research questions. 144
5.7 Scale Development 145
5.7.1 Preadolescent self-report measure. 145
5.7.2 Parent-report measure. 146
5.8 Method 146
5.8.1 Research design and ethical approval. 146
5.8.2 Participants. 147
5.8.3 Measures. 148
5.8.3.1 Mindfulness. 148
5.8.3.2 Psychosocial wellbeing. 149

5.8.3.3 Resilience. 151
5.8.4 Procedure. 151
5.9 Results 152
5.9.1 Demographic information. 152
5.9.2 Factor analysis of SCS-P. 153
5.9.2.1 Assumptions and data screening. 154
5.9.2.2 Statistical power. 155
5.9.2.3 Method of factor extraction. 155
5.9.2.4 Factor retention rule. 156
5.9.2.5 Rotation method. 157
5.9.2.6 Factor analyses of subscales. 157
5.9.2.7 Reliability. 161
5.9.2.8 Concurrent validity. 162
5.9.3 Factor analysis of SCS-P-PR. 163
5.9.3.1 Statistical power. 164
5.9.3.2 Factor analyses of subscales. 168
5.9.3.3 Reliability. 168
5.9.3.4 Concurrent Validity. 169
5.9.4 Cross-informant correlations. 170
5.10 Discussion 172
5.10.1 RQ 4. Can a valid and reliable measure of self-compassion be developed for preadolescent children (i.e., aged 9-12 years)? 172
5.10.2 RQ 5. Can a valid and reliable parent-perspective measure of self-compassion be developed and utilised to improve measurement issues for this cohort? 173
5.10.3 RQ 6. What are the associations between self-compassion, mindfulness, and indicators of psychosocial wellbeing and resilience in preadolescent children aged 9-12? 175
5.10.3.1 Hypothesis 1. 175
5.10.3.2 Hypothesis 2. 176
5.10.3.3 Hypothesis 3. 177
5.10.4 Summary. 178

CHAPTER 6 - STUDY 2, PART B: EXAMINING THE RELATIONSHIPS BETWEEN SELF-COMPASSION, MINDFULNESS, WELLBEING AND RESILIENCE IN PREADOLESCENT CHILDREN 181
6.1 Chapter Introduction 181
6.2 Test Assumptions 183
6.2.1 Statistical power 183
6.3 Data Analyses 184
6.3.1 Model 1. 189
6.3.2 Model 2. 190
6.3.3 Model 3. 191
6.3.4 Model 4. 192
6.3.5 Model 5. 192
6.3.6 Model 6. 193
6.4 Discussion 194
6.4.1 RQ 7. What are the relative contributions of self-compassion and mindfulness to indicators of wellbeing and resilience in preadolescent children aged 9-12 years? 194
6.4.2 RQ 8. Is there support for the reciprocal model of self-compassion and mindfulness, similar to that proposed by Bluth and Blanton (2014)? 196
6.4.3 RQ 9. Are there significant gender and/or age differences in the levels of self-compassion and mindfulness reported in children 9-12? 197
6.4.4 RQ 10. Is the relationship between compassionate self-responding and indicators of psychosocial wellbeing and resilience mediated by uncompassionate self-responding? 198
CHAPTER 7 - GENERAL DISCUSSION AND CONCLUSION 201
7.1 Chapter Introduction 201
7.2 Key Findings from Study 1 202
7.3 Relevance of Study 2, Part A 209
7.4 Key Findings from Study 2, Part A 210
7.5 Key Findings from Study 2, Part B 213
7.6 Limitations and Recommendations for Future Research 217
7.7 Summary and Conclusion 218
REFERENCES 222
APPENDIX A - *Peace by Piece* Weekly Session Plans & Themes 254

APPENDIX B - *Peace by Piece* Weekly Journaling Activity (sample pages).....256
APPENDIX C - *Peace by Piece* - Take-Home Journal (sample pages).....259
APPENDIX D - *Peace by Piece* Flier for Parents.....269
APPENDIX E - *Peace by Piece* Flyer for Children.....270
APPENDIX F - *Peace by Piece* Information Sheet.....271
APPENDIX G - *Peace by Piece* Informed Consent and Assent Form.....274
APPENDIX H - *Peace by Piece* Feedback Forms.....276
APPENDIX I - Education Queensland Approval.....280
APPENDIX J - Catholic Diocese Approval.....282
APPENDIX K - Principal Information Sheet.....283
APPENDIX L - Participant Information Sheet.....286
APPENDIX M - Survey Instruments - Child Version.....291
APPENDIX N- Survey Instruments - Parent Version.....297
APPENDIX O - Informed Consent Form.....302

List of Figures

Figure 1. The elements of self-compassion.....4
Figure 2. An ecological model of factors affecting resiliency. 15
Figure 3. Three types of affect regulation system. 30
Figure 4. The three axioms of mindfulness; interwoven aspects of a single cyclic process and occurring simultaneously. 47
Figure 5. Proposed model of the reciprocal association between mindfulness and self-compassion.. 533
Figure 6. Hypothesised developmental trajectories of mindfulness and compassion. 555
Figure 7. Model depicting how the two facets of mindfulness—awareness and acceptance—work iteratively and interdependently to facilitate executive control and emotion regulation.. 688
Figure 8. An integrative model placing Mindfulness in a broader context……...79
Figure 9. Working model of the parallel processes and emotional co-regulation contributing to improved relationship quality in joint parent-child mindfulness training.. 811
Figure 10. Visual representation of the Peace by Piece session format. 900
Figure 11. Introduction to the Peaceful Pause, provided in Session 1. 911
Figure 12. Flow diagram outlining Study 1 procedure and data collection methods 966
Figure 13. Visual and verbal representations of self-compassion provided by children 1099
Figure 14. Visual representations of mindfulness provided by children 1111
Figure 15. Model 1. Indirect effect of compassionate self-responding on resilience through uncompassionate self-responding. 19090
Figure 16. Model 2 Indirect effect of compassionate self-responding on satisfaction with life through uncompassionate self-responding 1911
Figure 17. Model 3. Indirect effect of compassionate self-responding on positive affect through uncompassionate self-responding 19292
Figure 18. Model 4. Indirect effect of compassionate self-responding on prosocial behavior through uncompassionate self-responding 1922
Figure 19. Model 5. Indirect effect of uncompassionate self-responding on negative affect through compassionate self-responding. 1933

Figure 20. Model 6. Indirect effect of uncompassionate self-responding on psychosocial indicators of wellbeing through compassionate self-responding. 1944
Figure 21. A working model of the parallel processes contributing to improved resilience and psychosocial wellbeing when self-compassion and mindfulness training is delivered to children in a clinical setting, with an accompanying parent. 2066
Figure 22. The theoretical impact of improved self-compassion at multiple levels of the ecological model of resiliency.. 2088

List of Tables

Table 1. *Peace by Piece* Weekly Session Format…… .89

Table 2. Key Participant Demographic Information at Commencement of Program……...104

Table 3. Pre-Test to Post-Test Results from Wilcoxon Signed Rank Test…….105

Table 4. Pre-Test to Post-Test Results from Wilcoxon Signed Rank Test of Parents' Self-Compassion and Mindfulness…….……106

Table 5. Peace by Piece Intervention Satisfaction Ratings……...……...106

Table 6. Feedback and Satisfaction Survey Comments Pertaining to Program Acceptability……...120

Table 7. Demographic Information of Preadolescent Participants..……153

Table 8. SCS-P Item-factor Loadings Before and After Rotation for Exploratory Factor Analysis…….....159

Table 9. Means and Standard Deviations of Study Variables from Preadolescent Participants…….…….162

Table 10. Pearson Correlations of SCS-P Subscales with Self-Report Measures of Mindfulness, Psychosocial Wellbeing and Resilience…….…….....163

Table 11. Item-Factor Loadings Before and After Rotation for Exploratory Factor Analysis……...166

Table 12. Means, Standard Deviations and Cronbach's alphas of Study Variables, Parent-Reported Data……..169

Table 13. Correlations of SCS-P-PR Subscales with Parent-Reported Measures of Psychosocial Wellbeing and Resilience in their Children……..170

Table 14. Cross-Informant Correlations of Child and Parent-reported Measures of Self-Compassion, Psychosocial Wellbeing and Resilience……172

Table 15. Variable Means, Standard Deviations, and Standardised Coefficients from Multiple Regression Analyses – Preadolescent Data Set……...185

Table 16. Pearson Correlations Between Age and All Study Variables……..187

Table 17. Means and Standard Deviations for Compassionate Self-Responding, Uncompassionate Self-Responding and Mindfulness across Gender and Grade……..…188

CHAPTER 1
INTRODUCTION

"Self-compassion soothes the mind like a loving friend who's willing to listen to our difficulties without giving advice, until we can sort out our problems for ourselves." (Germer, 2009, p. 3)

1.1 Context and Background

The study of self-compassion has flourished in the decades following its inception into the academic literature in 2003, pioneered by researcher Dr Kristen Neff. Self-Compassion is defined most simply as "compassion turned inward" (Neff, 2016b, p. 265). Findings from multiple studies have consistently supported Neff's initial hypothesis that adults and adolescents who are able to relate to themselves with love and compassion (i.e., are more self-compassionate) tend to display greater resilience and report greater levels of subjective wellbeing (e.g., Barnard & Curry, 2011; Neff, 2009; Neff, Rude, & Kirkpatrick, 2007b; Wei, Liao, Ku, & Shaffer, 2011). As such, interventions aimed at inspiring a healthy and balanced attitude towards oneself, particularly during times of hardship, failure, or distress, are increasingly finding their way into the clinician's toolbox (Barnard & Curry; Gilbert & Procter, 2006).

However, academic interest into the existence, and/or relevance, of self-compassion to younger populations—such as those in their middle years of childhood—remains scarce. This pre-adolescent period of development offers a unique opportunity: the potential to encourage and foster positive ways of relating to oneself—with love, support and understanding, rather than blame, judgement or cruelty—during a time when the conceptual sense of self is still emerging and therefore likely most malleable (Bosacki, 2016). Clearly, further investigation on the significance of self-compassion within this younger cohort is warranted.

This chapter will introduce the reader to the main topics of interest and identify gaps in the current knowledge. It will conclude with the thesis design and research aims.

1.2 Mental Health in Middle Childhood

Middle childhood marks a time of opportunity, challenge, and transition. Often referred to as 'emerging adolescence' (Bosacki, 2016), the school years preceding teenager-hood present a golden window in which to develop academic

abilities, broaden social skills, become independent, form values, and develop a cultural identity (Feldman, 2012). Conversely, this period of development may also present many challenges, including increasing academic expectations (at school and/or at home), peer pressure, and bullying (Werner & Crick, 2004). Physical differences become more prominent, and the associated development of body-image related issues and negative self-perception may emerge (Booth-Laforce et al., 2006). Perhaps most crucially, the self-concept (one's feelings and beliefs about oneself) will shift away from the physical and active self (prevalent in early childhood), towards the psychological and social self, and will increasingly include an evaluation of ones' 'worthiness' in relation to others (Bosacki, 2016). Successful negotiation of the middle-years of childhood is therefore paramount; not only for the almost inevitable upheaval of adolescence, but in order to maximise the potential for accomplishment in adulthood (Feinstein & Bynner, 2004). As Feinstein and Bynner surmise, "middle childhood trajectories make important contributions to life-course development" (2004, p. 1330).

The pressures of middle childhood undoubtedly contribute to the pervasiveness of mental health issues within this population. The second Australian Child and Adolescent Survey of Mental Health and Wellbeing (Lawrence et al., 2016) indicated that the 12-month prevalence of mental health disorders among children aged 4-11 years was 13.6%. Disorders reported by young people surveyed included major depressive disorder (1.2%), anxiety disorders (6.9%), attention-deficit/hyperactivity disorder (8.2%) and conduct disorder (2.1%). The occurrence rate was even higher for children in regional or remote areas: 16.5% of children surveyed reported a mental health condition, compared to 12.9% in major capital cities (Lawrence et al., 2016). Unfortunately, only just over half (56%) of surveyed children with a mental health condition had accessed support via a health or school service. This report identified there was a need to address and improve mental health outcomes for Australian youth, and compelling evidence to support the need for preventative or early intervention approaches to mental health (Lawrence et al., 2016). This conclusion is echoed by prevalence research which has found that half of all lifetime mental health disorders emerge by 14 years (Kessler et al., 2005).

1.3 Positive Psychology: Creating Resilience and Wellbeing in Children

In recognition of the need for early intervention, and issues relevant to accessing help, the Australian Government piloted the program 'KidsMatter - A

Primary Schools Mental Health Initiative', with 100 primary schools between 2007-2008. An independent evaluation reported that participation in this program significantly improved children's mental health and wellbeing (Slee et al., 2009). The evaluation further identified that helping children build resilience was the key to promoting wellbeing and protecting children's mental health, as surmised on the KidsMatter website: "Helping children learn how to manage life's ups and downs and build their coping skills supports their mental health and wellbeing now and into the future" ("Resilience [section of webpage]," n.d., para. 2). The KidsMatter program now comes under Australia's National Mental Health Plan; it provides an evidence-based framework for mental health and wellbeing for primary schools and early childhood education services across all states and territories, and is backed by the Australian Psychological Society (www.KidsMatter.edu.au).

The KidsMatter focus on promotion of wellbeing and resilience as a preventative approach to mental health is in sync with the current 'positive psychology' perspective. The positive psychology movement, introduced by Martin Seligman (1999; Seligman & Csikszentmihalyi, 2000), has signalled a step away from the traditional focus on negative indicators of mental health, such as psychopathology, towards an emphasis on understanding and building "factors that allow individuals, communities, and societies to flourish" (Seligman & Csikszentmihalyi, 2014, p. 279). This shift in paradigm has allowed for a more complete picture of mental health; a focus on the promotion of wellbeing and 'wellness', rather than "disorder and damage" (Gable & Haidt, 2005, p. 104).

1.4 Mindfulness

The positive psychology perspective has also brought about a shift in the popularity of psychological interventions favoured by practitioners in both mental illness and wellness fields. For example, mindfulness, a millennia-old practice with roots in Buddhist philosophy, has become exponentially more prevalent in Western psychology over the past two decades. Mindfulness, commonly defined as "awareness that arises through paying attention, on purpose, in the present moment, non-judgementally…in the service of self-understanding and wisdom" (Kabat-Zinn, 2017, para. 2), is now a central concept of many therapeutic approaches delivered both individually, such as Acceptance and Commitment Therapy and Dialectical Behaviour Therapy, and in group formats, such as Mindfulness-Based Cognitive Therapy and Mindfulness-Based Stress Reduction.

The body of research supporting the efficacy of mindfulness-based treatment approaches for both psychiatric populations (Green & Bieling, 2012; van der Velden et al., 2015), and community cohorts interested in improving their wellbeing (e.g., Brown & Ryan, 2003) is expanding. Within youth populations, however, it has been noted that "enthusiasm for promoting such practices outweighs the current evidence supporting them" (Greenburg & Harris, 2012, p. 161). Despite this lack of robust evidence, across the world—and in particular the USA and UK—mindfulness interventions have been adopted as part of mainstream schooling, in both preventative and health promotion contexts (e.g., Mindful Schools, The Smiling Mind Education Program, Mindful Education). Published program evaluations have reported a variety of positive outcomes, such as enhanced emotional wellbeing, reduced stress, and improved resilience, concentration, classroom behaviour, and sleep (e.g., Kuyken et al., 2013; Schonert-Reichl & Lawlor, 2010; Schonert-Reichl et al., 2015; Wootten, 2017).

1.5 Self-Compassion

A focus on the concept of self-compassion has also arrived on the wave of the positive psychology movement. Similarly to mindfulness, this construct cites Eastern influences; it also conceptually 'overlaps', incorporating mindful awareness of thoughts and emotions as a core process (Neff, 2003a). According to Neff—who first operationalised and inducted the concept of self-compassion into the psychological literature—there are three key features essential to a self-compassionate state of mind: (a) adopting an attitude of self-kindness, (b) developing a sense of common humanity, and (c) maintaining mindful awareness of inner experiences (see Figure 1.). In other words, "self-compassion can be seen as a dynamic system that represents a synergistic state of interaction between the various elements of self-compassion" (Neff, Whittaker, & Karl, 2017, p. 596).

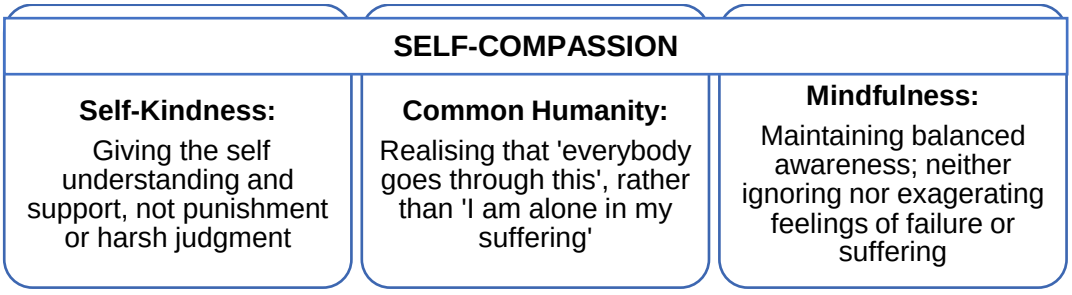


Figure 1. The elements of self-compassion. Adapted from "Self-compassion: An alternative conceptualization of a healthy attitude toward oneself", by K. D. Neff, 2003a, *Self and Identity, 2.*

Neff (2003a) described each of the three components as comprising two 'parts': the presence of the construct and the negation of its counterpart. Thus, she described self-kindness as espousing an attitude of gentle support, warmth and acceptance towards oneself when faced with personal shortcomings, failures or mistakes, whist neither ignoring nor becoming harshly self-critical, blaming or judgmental. The capacity to adopt a sense of 'common humanity' recognises that the experiences of hardship, suffering, failure, and inadequacy are all part of the human experience and therefore can be viewed as connecting humanity, rather than isolating experiences (Neff, 2003a). Finally, mindfulness refers to being aware of one's present-moment suffering, without over-identification or avoidance. In broader terms, self-compassion can be understood as the capacity to direct acceptance, kindness, and love towards the self during times of challenge and suffering, whilst negating tendencies to engage in self-depreciation and over-identification with (or avoidance of) such experiences. To enhance self-compassion, therefore, an awareness of one's emotional and cognitive responses to pain and suffering must be developed, in combination with an attitude of loving-kindness and acceptance (Neff et al., 2017).

Neff's 26-item Self-Compassion Scale (SCS; 2003b) has enabled a plethora of empirical research to be undertaken exploring the relationship of self-compassion to a broad range of psychological illness and wellness factors. Researchers using the SCS can choose to use an over-arching total self-compassion score (the most popular method), or to look individually at the six sub-scale scores: (a) self-kindness, (b) common humanity, (c) mindfulness, (d) self-judgement, (e) isolation and (f) over-identification. The first three subscales purport to measure the 'positive' aspects of fostering a self-compassionate attitude towards oneself, while the final three are designed to measure the 'negative' tendencies of self-responding.

To synthesise this expanding body of research, a meta-analytic examination of the relationship between self-compassion and positive aspects of wellbeing within adults was conducted by Zessin, Dickhauser, and Garbade (2015). The authors reported that the overall relationship between self-compassion and wellbeing was $r = .47$, and concluded that their results "clearly highlight the importance of self-compassion for individuals' wellbeing" (p. 341). Similarly, there is robust research to support a negative relationship between self-compassion and psychopathology variables, such as depression and anxiety. A comprehensive meta-analysis by

MacBeth and Gumley (2012) revealed strong, negative correlations between self-compassion and various measures of psychopathology in adults (depression symptoms: $r = -.52$; anxiety: $r = -.51$; stress: $r = -.54$).

1.5.1 Self-compassion in youth. More recently, research with adolescent samples has mirrored the findings from adult populations, revealing similarly strong associations between self-compassion and indicators of both mental health and illness (e.g., Bluth & Blanton, 2014; Bluth & Blanton, 2015; Bluth, Campo, Futch, & Gaylord, 2017; Galla, 2016). However, currently, there are only two published studies in the peer-reviewed literature which have examined self-compassion in children under 12. The first study, by Stolow, Zuroff, Young, Karlin, and Abela (2016), examined the protective effect of self-compassion against the development of depressive symptoms across three age categories. Youth from Grades 5 (9–10 years), Grade 6 (12–13 years) and Grade 11 (15–16 years) completed an adapted version of the 26-item SCS. Their findings confirmed the predicted inverse relationship between self-compassion and depressive symptoms within all three samples. Using a two time-point design (collecting data at the beginning and end of a three-month period), they further concluded that the 'positive' aspects of self-compassion, (i.e. self-kindness, common humanity, and mindfulness) may act as a protective factor that circumvents depressive symptoms developing over time (Stolow et al., 2016).

The second study to investigate self-compassion in children was presented as a validation study for an adapted version of the shortened (12-item) SCS (Sutton, Schonert-Reichl, Wu, & Lawlor, 2017). These results were also promising: the authors found evidence to suggest that self-compassion was positively correlated with multiple indicators of social and emotional wellbeing (including self-concept, optimism, prosocial goals, and satisfaction with life) in their sample of 406 children aged 8 to 12 years in Canada. The authors surmised that their results indicated that further exploration of self-compassion was warranted within this younger cohort.

1.5.2 Measurement and conceptualisation. Debate has, however, ignited in recent years as to whether Neff's (2003a; 2003b) initial conceptualisation and measurement of self-compassion requires refinement (e.g., Brenner et al., 2017). Until very recently, the only published, and validated measurement scale for self-compassion was the SCS (Neff, 2003a), along with a shortened (12-item) version of the same scale (Raes, Pommier, Neff, & Van Gucht, 2011). Muris and his

colleagues (Muris, 2015; Muris, Meesters, Pierik, & de Kock, 2016a; Muris, Otgaar, & Petrocchi, 2016b) have argued that the protective value of self-compassion has been 'inflated' in the current literature via the continued inclusion of the negative subscales of this construct (i.e., self-judgement, isolation and over-identification), on the SCS. Currently, these three subscale scores are reverse scored and added to the three positive subscale scores to create a 'total' self-compassion score when using the SCS. Muris and his associates contend that the three negative subscales included in Neff's scale are, in fact, features of psychopathology, rather than self-compassion, and thus should be excluded entirely. For example, they point out that depression is inherently characterised by self-criticism, isolation, and over-identification. These researchers posit that only the three subscales measuring the positive indicators (i.e., self-kindness, common humanity and mindful awareness) should be utilised, as these reflect the "true" protective nature of self-compassion as a psychological construct (Muris et al., 2016b).

Similarly, Brenner et al. (2017) posit that the SCS measures two theoretically distinct constructs: Self-Compassion and Self-Coldness. These researchers examined the factor structure of the SCS utilising oblique, higher-order, and bi-factor structural models with a sample of college students (N = 1,115). They surmised that their results did not provide support for the one-factor composition of self-compassion currently widely used in the field. In a bold statement, these authors called for a total re-examination of the relationships of self-compassion with psychological outcomes due to the fact that previous research has predominantly included both negative (i.e., self-coldness) and positive (i.e., self-compassion) items to measure self-compassion (Brenner et al., 2017).

These results add weight to findings from similar studies conducted by Costa, Maroco, Pinto-Gouveia, Ferreira, and Castilho (2016) and Lopez et al. (2015). These authors all examined the factor structure, construct validity, and reliability of the SCS utilising confirmatory and exploratory factor analyses in clinical and community samples. Both papers concluded that the six-factor and one-factor model proposed by Neff should be superseded by a two-factor model, which separates the negative and positive aspects of self-compassion. Meanwhile, Williams, Dalgleish, Karl, and Kuyken (2014) found no evidence to support a six-factor model of self-compassion in their confirmatory factor analyses, which used community and clinical samples in addition to a sample of individuals who regularly meditated.

Based on their findings, they boldly argued that a totally new, more robust measure of self-compassion requires development (Williams et al., 2014).

Neff, meanwhile, has continued to affirm that the construct of self-compassion encompasses both positive and negative elements which are not mutually exclusive, but rather represent six distinct components of self-compassion (Neff, 2016a, 2016b; Neff et al., 2017). Utilising Exploratory Structural Equation Modelling (ESEM) techniques, she has further argued that the continued use of an overarching total self-compassion score is warranted (Neff et al., 2019), despite the fact that this model has not found support in other recently published studies (e.g., Brenner et al., 2017). In her most recent large-scale study (N = 11,685), Neff et al. (2019) examined the factor structure of the SCS in 20 diverse samples. In each case, a "excellent fit" (p. 28) was found for a single bi-factor model (95% of item variance accounted for by a general self-compassion factor), and a six-factor correlated model. These findings were consistent with Neff at al.'s (2017) prior study of four separate populations (i.e., college undergraduates, community adults, individuals practicing Buddhist meditation, and a clinical sample of individuals with recurrent depression), whereby a six-factor correlated model demonstrated the best fit across all samples, and a general self-compassion factor accounted for at least 90% of the reliable variance in scores across samples. To surmise, Neff and colleagues' 2017 and 2019 results both suggested that it was still appropriate to interpret a total SCS score as well as all six SCS subscale scores.

Interestingly, when Williams et al. (2014) analysed the same clinical sample that was utilised in Neff at al.'s 2017 study—using traditional model-fit criteria—their findings did not support the use of a total SCS score. However, the findings from a large-scale Hungarian study by Tóth-Király, Bőthe, and Orosz (2016), which utilised ESEM to analyse the construct validity and psychometric properties of the SCS, did support Neff at al.'s (2017; 2019) arguments: Both the general self-compassion dimension and the six components were confirmed. However, these authors noted that, according to their analyses, the Mindfulness subscale of the SCS may not be fully reliable (Tóth-Király et al., 2016).

Given the clear lack of consensus amongst prominent researchers in the field, the debate as to how to administer and interpret the SCS continues. Whether to utilise a total self-compassion score, and/or all six subscale scores, or to look at separating the subscales into 'positive' and 'negative' self-compassion scores (i.e.,

utilise a one-factor, bi-factor, six-factor or two-factor model) depends on how self-compassion is conceptualised. A growing number of researchers are questioning the inclusion of any of the negative items (i.e., the items measuring self-judgement, isolation, and over-identification), as a 'true' measure of self-compassion (see Muris & Petrocchi, 2017). Meanwhile, Neff, the pioneer of research into self-compassion, defends her original conceptualisation and operationalisation of this psychological construct as containing both positive (protective) qualities in addition to the absence of the negative qualities. It is further noted that exploration of the conceptualisation and measurement of self-compassion within youth populations is lacking; the current research aimed to redress this balance.

1.6 Rationale for Current Research

The rationale for this thesis is to expand the depth of knowledge of self-compassion by examining the relevance of this construct to children under 12 years. Exploring the potential therapeutic benefit of self-compassion, in addition to mindfulness, to children in their late primary years has the potential to improve psychosocial wellbeing and resilience at a critical time in their developmental trajectory – when the impending transition to high school is looming and increasing social, personal and academic challenges are prominent (Bosacki, 2016). Indeed, it has been established that there is a compelling need for preventative and early intervention approaches to improve mental health outcomes for Australian youth (Lawrence et al., 2016).

This research will examine conceptual as well as measurement issues, in addition to exploring the potential for self-compassion to be enhanced via a group-therapy intervention. As such, it is envisaged that this research has the potential to make an important contribution within the field of child and youth mental health and wellness.

1.7 Study Design

This study is grounded from a socio-ecological perspective which acknowledges that children's wellbeing and resilience is influenced by a range of individual, familial and social variables. Social ecological models are generally recommended to guide public health practice (Golden & Earp, 2012). An evolutionary perspective provides the broad theoretical underpinning of this research. In keeping with these theoretical and philosophical perspectives, a mixed-methods design is employed, with the qualitative method taking a phenomenological

approach. The phenomenological approach is deemed appropriate due to the exploratory nature of this research and the specific aims of this thesis (Smith, 2009) .

1.8 Research Aims

The overarching aim of the thesis is to explore whether self-compassion offers a relevant, and effective therapeutic avenue for improving primary school-aged children's resilience and psychosocial wellbeing. To this end, this research is divided into two distinct studies, with separate, but linked aims.

1.8.1 Study 1. The aim of this study was to provide insight as to the potential relevance of self-compassion to a young audience, as well as provide preliminary indication of intervention acceptability. The intervention under examination was the *Peace by Piece* program, a 10-session group psychotherapy program teaching mindfulness and self-compassion skills to primary school-aged children with the aim of promoting resilience and wellbeing. The *Peace by Piece* program was co-designed, developed and facilitated by the author of this thesis and a colleague; the program will be introduced in detail in Chapter 3. Both quantitative and qualitative data analyses were conducted with pre-, post-, and follow-up data collected from group participants, which comprised six parent-child dyads referred for psychological therapy. Participating children's ages ranged from 7-9 years. Statistical analyses provided valuable information regarding program efficacy. Meanwhile, thematic analysis of qualitative data deepened the understanding of how self-compassion and mindfulness are conceptualised by primary school-aged children, as well as provided preliminary indication of how therapeutic benefit is achieved within this cohort. Finally, results were synthesised into a theoretical model of how self-compassion and mindfulness relate resilience and psychosocial wellbeing in children; this model is presented in Chapter 7.

1.8.2 Study 2. The first aim of this study was to develop and validate two measures self-compassion for preadolescent children—a self-report measure, and a parent-perspective version of the same scale. The rationale for this aim was to enable meaningful psychometric measurement of self-compassion to occur within the preadolescent age range. At the current time, only two studies have attempted to measure self-compassion in children under 12 years, using two different adaptations of Neff's (2003b) original self-report SCS; both reported preliminary support for the validity and reliability of their scales (Stolow et al., 2016; Sutton et al., 2017). However, given that there is limited empirical research on the construct of self-

compassion with populations of children, it was deemed appropriate to extend on this earlier work and validate a preadolescent self-compassion scale. To this end, data was collected from Year 5 and 6 students, and their parents, attending primary schools in the Toowoomba region. The psychometric properties of both new measures were established via exploratory factor analysis. This study is the first documented effort to examine a parent-reported measure of children's self-compassion; it is envisaged that this parental-perspective will provide valuable new insights regarding self-compassion within children.

The second aim of Study 2 was to examine the relationships between current levels of self-compassion, mindfulness, resilience and psychosocial wellbeing in preadolescent children. Data collection was conducted concurrently with the administration of the new measures of self-compassion outlined above (i.e., with Year 5 and 6 children attending primary schools in the Toowoomba region), and was obtained via a battery of self-report measures. This part of the study specifically examined the relative contributions of self-compassion and mindfulness to indicators of resilience and psychosocial wellbeing within this cohort. Mediation analyses were also conducted to further explore the relationships between the variables of interest. The findings broaden the current scientific understanding of the self-compassion construct, as well as provide an empirical research platform from which targeted psychological interventions can be developed in the future.

1.9 Thesis Structure

Following this introductory chapter, Chapter 2 presents a thorough review of the literature pertaining to the specific variables of interest, namely resilience, psychosocial wellbeing, self-compassion and mindfulness, with reference to their applicability to children in the middle years of childhood. An argument is presented that to further extend the current knowledge base, further exploration of the potential relevance of self-compassion to children, and, moreover, an examination of the relationships between self-compassion, mindfulness, wellbeing and resilience within child populations is necessary. In order to enable accurate psychometric evaluation of self-compassion, and thus facilitate further research in this field, development of a relevant, validated measure of self-compassion for this age category is also essential.

Chapter 3 provides a more focussed analysis of the literature pertaining to mindfulness and self-compassion group-therapy programs, as an introduction to the development of the *Peace by Piece* program, a group therapy program specifically

tailored to primary-aged children. Chapter 4 covers the methodology, findings and discussion of Study 1, which explores the feasibility of the pilot *Peace by Piece* program. Chapter 5 opens with a focused analysis of the literature pertaining to the methodological issues plaguing the field of self-compassion, before presenting the methodology and results from the first part of Study 2, an examination of the psychometric properties of two new measures of self-compassion preadolescent children. The results from the second part of Study 2, an **e**xamination of the relationships between current levels of self-compassion, mindfulness, resilience and psychosocial wellbeing in primary-aged children, are presented in Chapter 6. Chapter 7 presents a discussion of the integrated findings from Studies 1 and 2, and concludes the thesis, with a discussion of the strengths, limitations, implications for theory and practice of the current research.

CHAPTER 2
LITERATURE REVIEW

2.1 Chapter Introduction

This chapter provides a comprehensive review of the literature relevant to the current research aim and questions. The review commences with an examination of research pertaining to the four key psychological constructs which underpin this study; namely resilience, followed by psychosocial wellbeing, leading to a more focused review of the self-compassion and mindfulness literature. An emphasis is placed on research relating to child populations, specifically children under 12 years.

Issues pertaining to the conceptualisation and measurement of self-compassion, introduced in Chapter 1, are explored within this Chapter in greater depth. Preliminary research findings as to the efficacy of group-interventions utilising mindfulness and self-compassion are also examined. This is followed by an exploration as to the potential benefits of these approaches for children in their crucial middle-childhood years, with reference to the neurological and developmental tasks of this period.

2.2 Resilience

The construct of resilience has been the subject of psychological enquiry for decades. Determining what differentiates one person's ability to cope with life's difficulties from another person's inability to 'bounce back' from adversity has led researchers into an exploration of a multitude of associated psychological constructs within the individual, including self-esteem (e.g., Benetti & Kambouropoulos, 2006; Dumont & Provost, 1998), positive emotion (e.g., Tugade, Frederickson, & Barett, 2005), academic achievement, social competence, and conduct (Masten et al., 2004), as well as personality type, coping style, and psychiatric symptoms (Campbell-Sills, Cohan, & Stein, 2006).

Universally, it is agreed that resilience involves the capacity for positive adaptation to adversity encountered across the lifespan (Masten & Obradovic, 2006; Southwick, Bonanno, Masten, Panter-Brick, & Yehuda, 2014). However, despite an abundance of research within this area, as yet a clear consensus regarding a definition has not been met. Nevertheless, two distinct perspectives have become prevalent within the resiliency literature. Resilience is reviewed as an *outcome* of adaptation, characterised by particular patterns of functional behaviour despite risk;

or resilience is reviewed as a dynamic *process* of adaptation, involving an interaction between a variety of risk and protective factors, ranging from individual through to social (Olssona et al., 2003). A critical evaluation of the resilience literature identified a marked shift towards the latter perspective, with a focus on understanding the underlying mechanisms that lead to positive outcomes, rather than personal characteristics (Luthar, Cicchetti, & Becker, 2000). This thesis will focus on the conceptualisation of resilience as a process, rather than an outcome; not only is this consistent with the majority of current resilience research, it is in keeping with the socio-ecological perspective of this study's design.

2.2.1 Resilience in children. Research into resilience typically focusses on child and youth populations, due to its implied protective and preventative qualities. For example, resilience has been shown to mediate both the immediate impact of adversity, as well as protect against the potential long-term effects of negative events in the progression to adulthood (Campbell-Sills et al., 2006). Greenberg (2006) defined childhood resiliency as "positive or protective processes that reduce maladaptive outcomes under conditions of risk" (p. 141). Similarly, Masten and Obradovic (2006) operationalised resilience in childhood as "successful adaptation to the environment in age-salient developmental tasks" (p. 15).

Given the vastly differing 'tasks' of each developmental period (see Erikson, 1959) it is logical to assume that the skills and resources relevant and essential for resilience may also change over time, as part of a dynamic and developing process. A longitudinal study by Masten et al. (2004) confirmed that resilience in early adulthood was related to core resources which originated in childhood and were adapted in later adolescence; these resources included planfulness, future motivation, autonomy, and coping skills.

2.2.2 Ecological model of resilience. As previously mentioned, resilience has increasingly come to be recognised as a dynamic and developing process, rather than a static individual 'trait' (Olssona et al., 2003; Rutter, 1993). Researchers now acknowledge that "much of what seems to promote resilience originates outside of the individual" (Fleming & Ledogar, 2010, p. 7). There has been growing interest, therefore, as to the context within which resilience develops, and the ecological model of resilience (see Figure 2) is now the widely accepted model guiding resilience-based research.

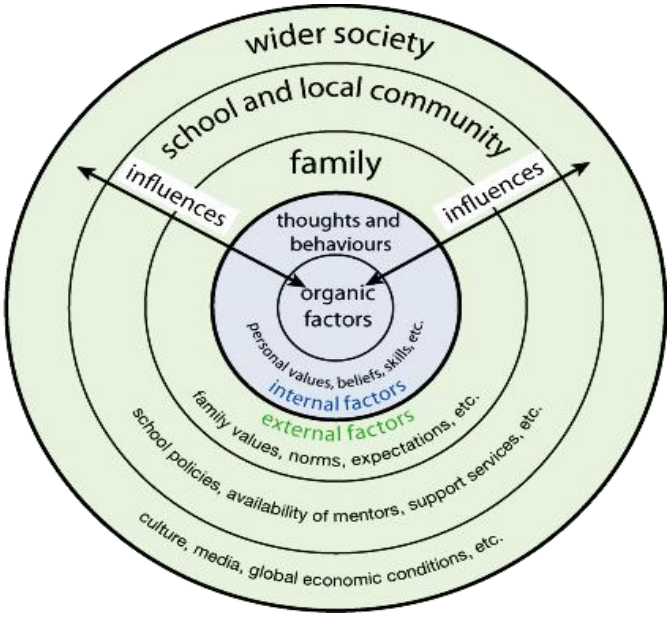


Figure 2. An ecological model of factors affecting resiliency. Source: Mental Health Foundation of Australia (http://www.mhfa.org.au/)

Based on the ecological model, researchers in the field of resilience study processes at multiple levels of analysis. For example, Olssona et al. (2003), in their review of the literature regarding adolescent resilience, identified an expanded framework of resilience to include protective processes—such as resources, competencies, talents, and skills—within the individual (individual-level factors), within the family and peer network (social-level factors), and within the whole school environment and the community (societal-level factors). Benzies and Mychasiuk (2009) concurred that resilience is optimal when protective factors are reinforced at all levels of the socio-ecological model: individual, family, and community.

2.2.3 Protective resources. Zolkoski and Bullock (2012) conducted a review of the resiliency literature dating from the 1970s, with the aim of identifying protective influences that may be nurtured to improve and support resilience in children. They included individual characteristics, family conditions, and environmental supports. The authors concluded that 'parental factors'—such as support, monitoring, and communication skills—are "crucial resources for youth" (p. 2301). The importance of close relationships was also highlighted in research by Hechtman (1991), who found that the existence of an influential person who believed in them—such as a teacher or parent—was the most significant factor in a long-term prospective follow-up of young adults diagnosed with ADHD as children.

Similarly, children with at least one warm, loving parent or caregiver (e.g., grandparent, foster parent), who also provides firm limits and boundaries, have been found to cope significantly better when confronted with difficult circumstances (Masten & Coatsworth, 1998; Werner, 1993). Social competence, i.e., the capacity to connect positively with peers, family, and prosocial adults, has also been found influential to children's adaptability to life stressors (Masten & Coatsworth, 1998).

At the wider society level, researchers have begun to examine the impact that culture may have as a resource for individual resilience, to understand the ways people draw on their respective cultural practices, beliefs, and learnings in order to tolerate and recover from challenging circumstances (Southwick et al., 2014). For example, in Australian Aboriginal communities, spirituality, traditional languages, traditional activities, and traditional healing are factors which influence resilience (Fleming & Ledogar, 2010). Meanwhile, research conducted with over 1,000 families in Afghanistan, revealed that in Afghani culture, resilience is synonymous with hope, and can provide meaning to the experience of suffering (Panter-Brick, Goodman, Tol, & Eggerman, 2011). Taking this wider, cultural and social perspective, on resilience recognises that "we need to provide people with the resources that facilitate their ability to create a better future and construct meaning in life" (Southwick et al., 2014, p. 5)

2.2.4 Individual assets. Miller (2002) found that the most discernible differences between resilient and non-resilient students was the ability to identify their own strengths, and a strong self-determination to succeed. Indeed, individual assets, such as competence, coping skills, and self-efficacy, are frequently identified as important resiliency factors (see Fergus & Zimmerman, 2005, for a review).

2.2.4.1 Self-concept. Specifically, development of a positive self-concept has been highlighted as fundamental to resilience (Alvord & Grados, 2005). In a unique, pivotal, and large-scale longitudinal study commencing in the 1950s, Emmy Werner and colleagues discovered that even infants born into extreme poverty could achieve success in adolescence and adulthood if they possessed certain qualities. These qualities were confidence in their coping abilities, having a positive outlook, choosing supportive friends, and being proactive in taking opportunities (Werner, 1993, 2001; Werner & Brendtro, 2012). It is now well-established in the literature that resilient children have a "…realistic, positive sense of self… [t]hey feel that they

can have an impact on their environment or situation, rather than just be passive observers" (Alvord & Grados, 2005, p. 239).

2.2.4.2 Self-regulatory skills. The importance of self-regulatory skills has also been emphasised in the resiliency literature. Self-regulation, defined as the ability to control one's attention, emotions, and behaviour (Masten & Coatsworth, 1998) is considered fundamental to successful adaptation and functioning across the lifespan (Alvord & Grados, 2005). Greenberg (2006) agreed that "the ability to sufficiently regulate one's emotions and arousal to initiate problem solving and gather more information" (p. 141) was crucial to resilience and argued that a child needs to develop an effective repertoire of responses to stress. Likewise, Masten and Obradovic (2006) identified that emotion regulation skills were important resiliency factors. Moreover, children with good self-regulation skills are more likely to elicit positive attention from caregivers, and later develop positive peer relationships and prosocial behaviours (Luchies, Finkel, & Fitzsimons, 2011). Thus, the development of strong self-regulatory skills has far-reaching benefits across the ecological model of resilience.

2.2.5 Measuring resilience. Internationally, the measurement of resilience has been receiving increasing interest due to its recognised potential to influence health, wellbeing, and quality of life (Windle, Bennett, & Noyes, 2011). Differing conceptualisations, definitions and operationalisations, have led to a range of scales purporting to measure resilience. Unfortunately, a comprehensive review of existing resiliency measures for youth populations revealed an absence of a conceptually and psychometrically sound instrument to evaluate resilience in children under 12 (Windle et al., 2011).

In order to address this issue, a team of investigators worked collaboratively across 11 countries to develop a "culturally and contextually relevant measure of youth resilience", which they named the Child and Youth Resilience Measure (CYRM; Ungar & Liebenberg, 2011, p. 126). Currently, the CYRM is unique in acknowledging resilience across multiple levels of the ecological model, containing items that measure resilience processes in three domains: individual (e.g., personal skills, peer support, and social skills); relational (e.g., physical and psychological caregiving); and contextual (e.g., a sense of belonging relating to spirituality, culture, and education. Studies utilising samples of children and adolescents from Canada (Daigneault, Dion, Hebert, McDuff, & Collin-Vezina, 2013; Liebenberg, Ungar, &

Van de Vijver, 2012; Munford & Sanders, 2015), the Bahamas (Jones & Lafreniere, 2014), South Africa (Theron, Liebenberg, & Malindi, 2013), New Zealand (Sanders, Munford, Thimasarn-Anwar, Liebenberg, & Ungar, 2015), Iran (Zand, Liebenberg, & Shamloo, 2016), and China (Mu & Hu, 2016) continue to support the reliability and validity of the CYRM, which has both a long (28-item) and short (12-item) version. Thus, it was the chosen measure of resilience adopted by the current study.

2.2.6 Promoting resilience. From the ecological perspective, designing appropriate interventions to promote resilience in children becomes a more complex, or at least considered, task. Interventions aimed solely at the individual level—i.e., those traditionally employed by schools and clinicians—may overlook the potential to develop important protective influences at the family, school, or wider community level.

As such, Alvord and Grados (2005) recommended that intervention strategies be designed to strengthen both personal assets and external protective factors. Following a thorough review of the literature, they presented a group program model—The Alvord–Baker social skills group model—that incorporates a range of protective factors to provide a "practical, proactive, cognitive–behavioural approach to foster resilience in children" (2005, p. 244). Their program incorporates five components: (a) interactive didactic—children are encouraged to think, offer ideas, and be proactive learners; (b) free-play—children are allowed to negotiate and interact; (c) relaxation/self-regulation—children practice strategies for stress-reduction and self-regulation; (d) generalisation—children apply group learnings to situations outside of the group; and (e) parental participation—parents are encouraged to actively participate and guide their child in skill development via homework tasks (Alvord & Grados, 2005). Alvord and Grados advocate that the Alvord–Baker social skills group model has been run successfully for 12 years with children presenting with a variety of diagnoses (e.g., mild intellectual difficulties, ADHD and anxiety disorders). Unfortunately, they have not published empirical data to support the group's efficacy.

Efficacy data does exist, however, for the Resilience Builder Program (RBP) a resilience-based cognitive behavioural therapy group (Watson et al., 2013). This 12-week program, designed to improve social, emotional, and family functioning, was run with 22 children with an anxiety disorder, aged between 7-12 years. Targeting resilience skills such as affect and behaviour regulation,

flexibility/adaptability, social problem-solving, and proactive orientation, program evaluation revealed that participation in the RBP brought about significantly decreased problem behaviour (Watson et al., 2013). It was further noted that the parents of participants reported significant decreases in depressive symptoms as well as improved family functioning. Moreover, the children themselves reported significant improvement in positive and negative affect, in addition to emotional control (Watson et al., 2013). These results support the ecological model of resilience, adding weight to the contention that "where young people are well resourced within themselves, within their family and social contexts, a capacity for constructive adaptation to adversity, that is, resilience can be enhanced" (Olssona et al., 2003, p. 6).

2.2.7 Summary and relevance to current study. Resilient children—those who possess certain individual assets and benefit from protective factors in their external environments—are more likely to achieve their full potential as adults, and less likely to become dysfunctional in terms of their capacity to support themselves and/or sustain healthy and rewarding interpersonal relationships (Campbell-Sills et al., 2006; Zolkoski & Bullock, 2012). Gaining a clearer understanding of how to effectively develop resilience during childhood, therefore, warrants continued investigation. This area of research is particularly important for populations of children who may be vulnerable to adversity, such clinical cohorts, and/or as those residing in regional areas of Australia, where the prevalence rates of mental illness are three percentage points higher than in major cities (Lawrence et al., 2016), yet access to mental health services is frequently limited. With the suicide rates in children currently being the highest in recorded history (Georgatos, 2018) the significance of this research study—which draws on clinical and community samples of children from the Darling Downs region—is further underscored.

This thesis has adopted the ecological model of resilience as an underpinning theoretical framework: Study 1 evaluates a program specifically designed for delivery to children and their parent/caregiver; it aims to not only teach individual skills (such as emotional-regulation, and positive self-concept) but also acknowledges the parent-child relationship as a potential resource for resilience building. A group format was selected to foster a sense of belonging and acceptance in the context of the wider community. In addition, research methods and quantitative measurement scales have been carefully chosen to incorporate an

understanding of resilience as a dynamic, interwoven process, rather than an outcome or static 'trait'.

Discussion will now move to an examination of wellbeing, a construct closely intertwined with resilience. As noted within an editorial commentary synthesising research regarding childhood resilience, "[a] lens on resilience shifts the focus of attention – from efforts to appraise risk or vulnerability, towards concerted efforts to enhance strength or capability" (Panter-Brick & Leckman, 2013, p. 333). Indeed, according to the definition of resilience they purport, resilience is "the process of harnessing biological, psychosocial, structural, and cultural resources to sustain wellbeing" (p. 333). Research within the field of wellbeing, and more specifically childhood psychosocial wellbeing, will now be reviewed.

2.3 Wellbeing

The notion of wellbeing has been an enduring area of interest within psychological literature (Ryff, 1989). Scientific examination of this construct commenced in the 1950s, as interest into social welfare and improvement of the human condition emerged in direct response to the psychological, social and moral atrocities of World War II (Keyes, 2006). While attention to the concept of wellbeing can be dated back to Greek philosophical times, more recently, renewed focus on wellbeing has coincided with western psychology's positive psychology movement (Joseph & Wood, 2010). This shift in paradigm, which has signalled a move towards a strengths-orientated approach, rather than a deficient-orientated model, arose from the realisation that, "the exclusive focus on pathology… results in a model of the human being lacking the positive features that make life worth living" (Seligman & Csikszentmihalyi, 2000, p. 5).

2.3.1 Defining wellbeing. A universal definition or approach to wellbeing remains elusive. One of the earliest attempts was presented by Bradburn, who defined wellbeing as "the degree to which negative affect predominates over positive" (1969, p. 9). However, most contemporary researchers now agree that wellbeing is a multi-faceted construct (Dodge, Daly, Huyton, & Sanders, 2012; Southwick et al., 2014). While a consensus regarding the conceptualisation and/or operationalisation of wellbeing has yet to appear in the literature, two very prominent and well-explored approaches to wellbeing dominate: (a) the hedonic, pleasure-focussed tradition, which highlights measures of *subjective* wellbeing, such as happiness, positive affect, low negative affect, and satisfaction with life (e.g.,

Diener, 1984; Lyubomirsky & Lepper, 1999); and (b), the eudaemonic tradition, which focuses on the examination of *psychological* wellbeing and emphasises personal fulfilment and human development (e.g., Rogers, 1961; Ryff, 1989a; 1989b; Waterman, 1993). A number of large scale studies utilising exploratory and confirmatory factor analyses have supported the contention that subjective wellbeing and psychological wellbeing are two independent but related factors (e.g., Linley, Maltby, Wood, Osborne, & Hurling, 2009).

2.3.1.1 Subjective wellbeing. The study of subjective wellbeing can be dated back to the 1960s (see Wilson, 1967). However, it was not until three decades later that a definition was formalised by Diener, Suh, Lucas, and Smith (1999). According to this definition, subjective wellbeing is comprised of two main components; (a) affect, (i.e., moods and emotions), and (b) life satisfaction, (i.e., a cognitive evaluation of how satisfied an individual is with their life). The first component, affect, is broken down into pleasant and unpleasant emotion; researchers typically measure affect via administration of a self-report instrument such as Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988). Meanwhile, the second component, life satisfaction, is most commonly assessed via the five-item Satisfaction with Life Scale (SLS; Diener, Emmons, Larsen, & Griffin, 1985). The conceptualisation of subjective wellbeing inherently recognises how crucial individuals' perceptions of their lives are, and acknowledges that wellbeing cannot accurately be predicted from sociodemographic and biological factors alone.

2.3.1.2 Psychological wellbeing. The concept of psychological wellbeing, meanwhile, provides a different basis for conceptualising this elusive construct. Champions of the eudaimonic vision, Ryff and Singer (2008) defined psychological wellbeing as comprising six core dimensions: self-acceptance, personal growth, purpose in life, positive relations, environmental mastery and autonomy. Rather than the pursuit of a subjective state of 'happiness', central to the definition of psychological wellbeing is "the idea of striving toward excellence based on one's unique potential" (Ryff & Singer, 2008, p. 14). The Ryff Scales of Psychological Wellbeing are frequently adopted to measure the construct of psychological wellbeing, and were developed following an exploration of the meaning of wellbeing to young, middle-aged, and older adults (Ryff, 1989). Thus, the scales are proposed to be reflective of adults' positive functioning. However, results from adolescent samples have revealed that Ryff's scales have questionable construct validity; thus,

calls for "more age-specific and context-appropriate items" have been made (Gao & McLellan, 2018, p. 1).

2.3.1.3 Psychosocial wellbeing. Accounts of wellbeing from both subjective and psychological perspectives tend to focus on the individual experience and neglect the social context of wellbeing (McLellan & Steward, 2014). Keyes (1998) initiated the inclusion of *social* wellbeing to the field, in recognition that this aspect was often overlooked by both the hedonic and eudaemonic approaches. Following large scale, empirical research within adult populations, Keyes (2002) operationalised a broad, socially-orientated definition of wellbeing. This conceptualisation of wellbeing encompassed an individual's perception and evaluation of their own life, in terms of their affective state and their level of psychological *and* social functioning (Keyes, 2002). This was an important step, as it moved the construct of psychosocial wellbeing beyond purely individual characteristics and into a social context (Keyes, 2006). Moving forward, this thesis adopts the term 'wellbeing' in reference to Keyes' broader definition of psychosocial wellbeing, in other words, wellbeing is conceptualised as encompassing social, as well as psychological and emotional, aspects.

To date, there is no single scale that dominates the measurement of psychosocial wellbeing. Rather, psychosocial wellbeing is typically measured via a battery of scales, encompassing the dimensions relevant to the individual study's aims and population of interest. For example, these could include measures of positive and negative affect, emotional awareness and regulation, interpersonal communication, quality of relationships, and/or and personal adaptation (Tsang, Wong, & Lo, 2012). Discussion will now turn to an examination of issues pertinent to understanding the psychosocial wellbeing of young people.

2.3.2 Psychosocial wellbeing in children. In an attempt to clarify the conceptualisation of psychosocial wellbeing in youth, Tsang et al. (2012) systemically reviewed the literature analysing 17 scales purporting to measure this construct in child and adolescent populations. Their findings revealed that psychosocial wellbeing had been operationally defined in two divergent directions: from a positive strength-based perspective, and a negative deficit-oriented approach. Tsang and colleagues (2012) identified three themes in the negative-orientated approaches to psychosocial wellbeing: (a) poor emotional awareness and expression, (b) negative affect and anxiety, and (c) poor interactions with peers and family.

Meanwhile, the strength-based instruments separated the construct of psychosocial wellbeing into two dimensions: (a) personal emotional competency (including positive affect, emotional awareness and regulation), and (b) social functioning (including interpersonal communication, family involvement, and prosocial behaviour; Tsang et al., 2012).

The authors of this literature review concluded that, "a strength-based approach is preferable to a clinically deficit-oriented model in measuring adolescents' psychosocial well-being" (Tsang et al., 2012, p. 644). This is congruent with the ethos underpinning the positive psychology movement, which argues that wellbeing is best recognised as a 'syndrome' of positive mental health symptoms, distinct from (albeit related to) indicators of mental illness (Keyes, 2002, 2005; Seligman, 2011). Indeed, a relatively new term, 'flourishing', has quickly become internationally recognised as referring to high levels of wellbeing (Hone, Jarden, Schofield, & Duncan, 2014).

Adopting a different focus to traditional studies, researchers in New South Wales conducted in-depth research with 126 children (aged 8-15 years) from both rural and urban areas in order to establish an understanding of what constitutes wellbeing from *their* perspective (Fattore, Mason, & Watson, 2009). The findings revealed that a positive sense of self, security and agency were vital to the emotional and relational wellbeing of the children they interviewed. Interestingly, youth viewed both positive and negative experiences as intrinsic to their wellbeing, and failures were identified as opportunities to develop resilience, and thus could become "wellbeing experiences" (p. 62). Overall, the findings from this study further support the contention that effective psychological interventions designed to promote wellbeing require focus not solely at the individual levelvbut acknowledge and target the social/relational layers of influence as well.

2.3.3 Wellbeing versus mental illness. The positive psychology movement essentially provoked a debate as to whether mental health (i.e., wellbeing) and mental illness (i.e., psychopathology) are two separate, correlated constructs, which exist on a dual continuum, or simply diametrically opposed on single continuum. In other words, does a lack of mental illness automatically assume mental wellness?

In a study designed to challenge "the assumption that individuals who are not ill are therefore healthy" (Keyes, 2006, p. 5), Keyes (2005) examined whether measures of positive mental health, or flourishing (i.e., wellbeing) are factorially

distinct from measures of mental illness (i.e., psychopathology). Using a large (*N* = 3,032), nationally representative sample of adults aged between 25-74 years from across the United States, Keyes' finding concurred with the hypothesis that mental health (i.e., psychological, emotional, and social wellbeing) and mental illness (i.e., major depressive episode, generalised anxiety, panic disorder, and alcohol dependence) existed as separate, correlated, unipolar dimensions. He identified 'flourishing' and 'languishing' as the two ends of the wellbeing construct. Further analysis revealed that languishing, "a state of emptiness in which individuals are devoid of emotional, psychological, and social well-being" (Keyes, 2006, p. 7), was equally as detrimental as mental illness alone, in terms activities of daily living, missed days of work, helplessness, low resilience, and intimacy. Moreover, individuals identified to have mental illness combined with languishing demonstrated more health limitations than those with mental illness alone. Intriguingly, languishing adults functioned no better, and sometimes worse than, depressed individuals (Keyes, 2005). Conversely, individuals free from mental illness *and* flourishing reported the least health limitations, fewest missed days of work, lower levels of helplessness, clearer life goals, and higher resilience and intimacy. Keyes concluded that "mental health is clearly something positive, and anything less than flourishing appears to fall short of healthy functioning in life" (2005, p. 547).

Keyes' (2005) findings were congruent with results from a comprehensive review of the literature examining psychosocial wellbeing in youth, which further surmised that "less optimal psychosocial wellbeing is as strong a predictor of adverse health outcomes as is mental illness itself" (Tsang et al., 2012, p. 644). In a synthesis of wellbeing research conducted worldwide, Keyes (2006) asserted that there was now clear evidence that health is not purely the absence of illness, and concluded that "the study of subjective well-being must take deeper institutional roots to begin to foster research and its application toward understanding how to add more health to human life expectancy" (Keyes, 2006, p. 7).

2.3.4 Alternative approaches to wellbeing. Many researchers have cautioned against viewing wellbeing as being solely strengths-based and attest that wellbeing should be defined in terms of maintaining a proper *balance* between positive and negative cognitive and affective experiences (see Jimerson, Sharkey, Nyborg, & Furlong, 2004). For example, Daleiden, Vasey, and Williams (1996)

examined the impact of the ratio of positive to negative cognitions to psychological adjustment within a sample of children aged 7 plus years. Their research concurred with findings from adult populations, revealing that there is an optimal ratio of positive to negative cognitions. When the ratio persistently falls outside of this range, mental illness is more likely: too many negative thoughts are associated with various forms of psychopathology, whereas too many positive thoughts are associated with excessive optimism and mania (Daleiden et al., 1996).

Similarly, Dodge et al. (2012) emphasised that wellbeing is a fluctuating state. They proposed a new definition, in which wellbeing is conceptualised as the balance point between an individual's resource pool (which includes physical, psychological and social resources), and current challenges. From this perspective, the stability of an individual's wellbeing 'ebbs and flows' in response to situations that arise, and the resources (real and perceived) that the individual has accessible to cope with these difficulties. Whilst this is an interesting approach—and congruent with the positive psychological framework—the application of this new, dynamic conceptualisation of wellbeing is currently limited by the lack of a psychometrically-sound means of measurement.

2.3.5 Individual qualities and wellbeing. Although it is clear that wellbeing can be influenced by a variety of environmental factors and available resources, there remains "individual differences in people's dispositional tendencies to experience chronically high or low levels of subjective wellbeing" (Wei et al., 2011, p. 192). Whilst income, age, gender, education, and race are not good predictors of subjective wellbeing (see Myers & Diener, 1995), it is noteworthy that some individuals experience high levels of subjective wellbeing despite adverse living situations. Meanwhile, others experience a low level of wellbeing despite apparent advantages, such as wealth or good health (Seligman & Csikszentmihalyi, 2000).

In their early review of the literature, Myers and Diener (1995) concluded that subjectively higher reports of wellbeing are more likely for individuals who possess some or all of the following qualities: (a) certain individual traits—self-esteem, a sense of personal control, optimism, and extraversion; (b) a supportive network of close relationships; (c) engagement in work or leisure activities congruent with personal values; and (d) are religiously active. However, the results from studies into adult wellbeing should not simply be assumed to apply to children

and young people (McLellan & Steward, 2014). Younger populations require separate examination.

To this end, in the UK, an index of children's subjective wellbeing was developed following direct consultation with young people (N > 17,000) aged 8-15 years at three time periods between 2005-2008 (Rees, Goswami, & Bradshaw, 2010). The resulting index measures wellbeing across the ten domains identified as most important by the children themselves. These are family, choice, health, time use, friends, appearance, the future, money and possessions, home, and school. Of these, family, choice and health emerged as the three most important domains, accounting for more than half of the variation in overall wellbeing. However, significant gender and age-related differences emerged in relation to which domains of life most influenced wellbeing. For example, for females the 'appearance' domain explained 30% of the variation in overall wellbeing, while for males it was only 19%. Meanwhile, for primary school children, the 'school' domain accounted for only 10% of the variance in overall wellbeing; for secondary school children, happiness at school accounted for a much higher proportion (27%). Thus, in summarising their findings, Rees et al. (2010) concluded that different meanings and structures of wellbeing must be considered for different groups of children and young people.

An even larger scale survey of children aged 11-15 years from 29 European countries revealed that very little variation in subjective wellbeing can be explained by social and economic circumstances alone (Bradshaw, Keung, Rees, & Goswami, 2011). The notable exception was the positive influence of peer-relationships on wellbeing. Similarly to the results reported by Rees et al. (2010), findings did reveal that girls tended to report lower levels of subjective wellbeing than boys, and that wellbeing declined as age increased. The same interesting trends have been echoed in emerging research examining self-compassion in adolescent and child populations (see Stolow et al., 2016), suggestive of a link between the constructs of wellbeing and self-compassion for young people. These findings will be discussed in the following section of this Chapter.

2.3.6 Summary and relevance to study. This section of the literature review has highlighted the importance of adopting a conceptualisation of wellbeing that includes both hedonic and eudaemonic aspects (i.e., a focus on feeling *and* functioning). It has also revealed the benefits of taking into consideration individual

factors as well as the social context. As such, within this thesis, care has been taken to select measures consistent with this psychosocial definition of wellbeing.

With convincing evidence to support the dual continuum model of wellbeing and mental illness as two separate, but correlated, constructs (Keyes, 2006), wellbeing can now be viewed in light of its potential to exert a protective influence against the development of mental illness (Tsang et al., 2012). Thus, similarly to resilience, interventions designed to promote and enhance wellbeing have become a focal point for health promotion and prevention interventions at local, national, and international levels. Thus, the importance of developing interventions such as the *Peace by Piece* program, piloted and evaluated in Study 1 of this thesis, is underscored.

This literature review now turns to an examination of the constructs of self-compassion and mindfulness. Interventions based on these psychological approaches continue to bourgeon in popularity in both community and clinical contexts and enjoy positive associations with both resilience and wellbeing.

2.4 Self-Compassion, Resilience and Wellbeing

When Neff (2003a) presented her initial conceptualisation and operationalisation of self-compassion into the academic literature (see Chapter 1), she predicted that it would play an important role in promoting resilience and improving wellbeing. Broad definitions of self-compassion have been presented in the introduction section of this thesis; a more detailed examination of what self-compassion is (as well as what it is not) is now presented. A discussion of the theoretical underpinnings upon which Neff made her bold predictions will then follow.

2.4.1 Defining self-compassion.

According to Neff, three distinct, interwoven qualities are required to combine in order to provide a self-compassionate state of mind:

> being kind and understanding toward oneself in instances of pain or failure rather than being harshly self-critical; perceiving one's experiences as part of the larger human experience rather than seeing them as isolating; and holding painful thoughts and feelings in mindful awareness rather than over-identifying. (Neff, 2009, p. 139)

More recent academics state that self-compassion can be understood as "both a trait and a psychological process… self-generated during times of emotional struggle" (Bluth et al., 2017, p. 841).

The literature has been clear to differentiate self-compassion from both self-pity and, more crucially, self-esteem (Neff, 2003a, 2011; Neff & Vonk, 2009). While the pursuit of self-esteem has traditionally been the focus of considerable psychological inquiry and intervention, its stability is vulnerable due to its inherent focus on self-evaluations of competence in relation to others (Crocker, Luhtanen, Cooper, & Bouvrette, 2003). In contrast, self-compassion, which involves recognition and appreciation of the commonalities of the human condition (Neff & McGehee, 2010), evokes a sense of solidarity. Empirical research has since confirmed that in comparison to self-esteem, self-compassion can indeed offer more stable feelings of self-worth (Neff & Vonk, 2009). Self-compassion is also associated with less self-evaluation, self-enhancement, and ego-defensiveness than self-esteem (Neff, 2011).

The pursuit of self-esteem has been found to lead some individuals to engage in negative behaviour (Crocker & Park, 2004), and can promote narcissism and relationship problems (Baumeister, Smart, & Boden, 1996). In contrast to the narcissistic-type qualities of self-esteem, Neff described self-compassion as a way of relating to oneself with kindness, understanding and patience during difficult times—such as when faced with adversity or one's own shortcomings—in a way similar to that of a good friend (Neff, 2003a). As such, self-compassion has been associated with prosocial, rather than antisocial, behaviour (Neff & Vonk, 2009).

Self-compassion also has the potential to be confused with self-absorption and self-pity (Jinpa, 2015; Neff, 2003a). These qualities are characterised by a narrow focus on the self and, as a consequence, oblivion to the 'bigger picture'. As such, self-absorbed individuals can become prone to exaggerating their issues, and may begin to feel overwhelmed by their problems, or that their problems are intolerable (Neff, 2003a). Meanwhile, adopting an attitude of self-compassion entails taking a broader perspective, or "a sense of proportion that helps us deal with our predicaments and suffering in more constructive ways" (Jinpa, 2015, p. 739) 2015, p. 739). Similarly, self-compassion should not to be confused with self-indulgence of self-gratification (Neff, 2003a; Jinpa, 2015). Whereas self-compassion entails treating the self with kindness, indulgence (especially over-

indulgence) is frequently the opposite. Considered and appropriate acts of self-care are, however, considered congruent with self-compassion (Jinpa, 2015).

2.4.2 Theoretical and philosophical perspectives. Self-compassion has its conceptual roots in Eastern traditions, and more specifically Buddhist philosophy (Neff, 2003a). More recently, Western psychologists and anthropologists have aimed to explore self-compassion from a scientific perspective. These perspectives are now discussed.

2.4.2.1 Evolutionary perspective. Taking an evolutionary perspective, Gilbert (2009, 2010) describes self-compassion as one element of an evolved motivational system, designed to regulate negative affect through attuning to the feelings of self and others. It is important to note that this perspective on self-compassion is not entirely congruent with Neff's (2003a) definition within the psychological literature; self-compassion is viewed solely as an adaptive and protective quality, distinct and separate from the 'negative' elements (i.e., self-judgement, isolation and over-identification) incorporated into Neff's operationalisation of the construct.

Gilbert (2009) discusses a model in which there are three major drive systems, all with different functions and associated with different emotions, desires, and motivations (see Figure 3). Firstly, the threat/self-protection system is designed to quickly detect threats and provide the body with bursts of emotions—including anger, fear, disgust and shame—to urge immediate action. Secondly, the incentive/resource-seeking system is a positive affect system linked to rewards and pleasure. The function of this system is to motivate towards evolutionary necessities such as food, sex, friendships, and shelter. When correctly balanced, it can also guide individuals towards important life goals so as to prosper. Finally, the soothing and contentment system focusses on the intention and motivation to alleviate distress in self and others. A sense of contentment or 'non-striving' is achieved when this system is in appropriate balance with the other two affect regulation systems. The soothing system encompasses such capabilities as kindness, sympathy, and empathy, and therefore is 'home' to self-compassion (Gilbert, 2009).

Figure 3. Three types of affect regulation system. Source: "Compassion focused therapy: A special section", by P. Gilbert, 2010, *International Journal of Cognitive Therapy*, *3*(2), p. 95.

According to this model, the three systems are continually interacting, ideally maintaining balance and counterbalance with one another. When the systems become unbalanced, however, significant difficulties (i.e., difficult or unhealthy emotional states) can arise. Gilbert stated that "shame-based self-criticism and self-attacking are among the most pervasive problems in Western societies" (2009, p. 309). However, by practicing self-compassion, we can effectively tame the feelings of shame being activated in the threat system, thus restoring balance and, eventually, bringing a sense of contentment, synonymous with wellbeing (Gilbert, 2009).

This theory contends that individuals all have an innate capacity for self-compassion. However, the tendency to evoke this evolutionarily advantageous self-soothing mechanism will depend, at least in part, on early experiences; for example, attachment relationships, family values, and/or exposure to trauma (Gilbert, 2009; Tanaka, Wekerle, Schmuck, Paglia-Boak, & Team, 2011). For example, a two-year longitudinal study of adolescents involved with child protection services found that childhood emotional abuse, emotional neglect, and physical abuse were negatively associated with self-compassion (Tanaka et al., 2011). In addition, individuals with low-self-compassion were more likely to report greater psychological distress, problematic alcohol use, and suicidal behaviours (Tanaka et al., 2011).

Gilbert (2009) has also pointed out that self-criticism tends to be generated by negative beliefs about what others may think or feel, and thus has at its roots a fear of jeopardising relationships. Individuals high in self-compassion, in contrast, have learnt to recognise, acknowledge and send compassion to their fears, and thus can more easily break the cycle of 'beating themselves up' (Gilbert, 2009). The empirical evidence supporting this theory is discussed following the next section.

2.4.2.2 Buddhist philosophy. The psychological construct described by the term **s**elf-compassion (Neff, 2003a) is derived from Buddhist teachings, or Dharma. These teachings espouse the importance of acknowledging the innate suffering of humanity and the amelioration of this suffering through enlightened living: "The path to true happiness is one of integrating and fully accepting all aspects of our experience" (Salzberg, 1995, p. 13). Buddhist philosophy emphasises the importance of being present to both suffering and joy, and utilises meditation practices to encourage stopping, calming and resting, as these are the prerequisites for healing of the self (Hanh, 1999).

Clear reference to the importance of adopting healthy self-attitude can be found within traditional core Buddhist teachings regarding 'The Four Immeasurables', or 'Buddhist Virtues', namely: loving kindness, compassion, joy, and equanimity (Hanh, 1999). Loving-kindness refers to "an unconditional love without desire for people or things to be a certain way; an ability to accept all parts of ourselves, others and life, including pleasurable and painful parts" (Boellinghaus, Jones, & Hutton, 2012, p. 130). Compassion involves feeling concern for the suffering and misfortunes of others (Oxford dictionary, 2019). However, according to the 14th Dalai Lama, "true compassion is not just an emotional response but a firm commitment [to alleviate a person's suffering] founded on reason…a truly compassionate attitude towards others does not change even if they behave negatively" (Gyatso, 2003, p. 274). Joy, according to Hanh (1999), is a sense that brings both peace and contentment. Joy involves hope, optimism, appreciation for the present; it is not only about ourselves, but rejoicing in the happiness and virtues of all others. Lastly, equanimity, or evenness of mind, involves adopting an attitude of regarding all beings as equals, not discriminating between ourselves and other people; equanimity requires the absence of prejudice or discrimination of any kind (Hanh, 1999).

According to Buddhist traditions, by embracing these virtues, "we learn to develop skilful mental states and let go of unskilful ones" (Salzberg, 1995, p. 3). Buddhist philosophy asserts that if we are to learn ways to practice love, compassion, joy, and equanimity "…they will grow in you every day until they embrace the whole world. You will become happier, and everyone around you will become happier, also" (Hanh, 2007, p. 1). Traditionally, practices aimed at enhancing the four virtues start through cultivation of these qualities toward the self, before extending love, compassion, joy and equanimity towards friends, strangers, 'difficult' people, and finally all beings (Hanh, 1991). Thus, according to Buddhist philosophy, having compassion for yourself is as important as having compassion for others; indeed, it has been argued that logically self-compassion comes *before* one can effectively practice directing compassion outwards (Gilbert, 2005).

In addition to the four virtues, Buddhist teachings also highlight the dangers of the opposite human qualities—hatred, cruelty, jealousy, and anxiety—as well as those qualities that may 'mimic' the true virtues, such as pity, over-identification with emotions, apathy or indifference (Kraus & Sears, 2008). It is noteworthy, therefore, that when Neff (2003b) 'introduced' self-compassion to psychological academia, she ensured that her operationalisation was congruent with its Buddhist roots, and thus emphasised not only the positive aspects, (i.e., self-kindness, common humanity and mindfulness), but also the absence of its 'enemies', i.e. self-judgement, isolation and over-identification.

More specific reference to the three core components that combine to create an attitude of self-compassion, as per Neff's (2003a) conceptualisation of the construct, can be found within the Buddha's teaching of 'The Four Noble Truths' (Hanh, 1999). For example, the first truth, the *universality of suffering*, relies on the recognition of pain, misfortune and inadequacy as experiences which join, rather than disconnect, us with the rest of humanity (i.e., the concept of 'common humanity'). The second truth, that *we are the cause of our own suffering*, necessitates that we adopt an attitude of mindful awareness towards our thoughts, feelings and actions so that we can recognise the source of our pain as arising from our own delusions and/or cravings. The third truth, that *to end suffering we must stop doing what causes suffering*, implies that once we have recognised our unhelpful habits of mind or behaviour, we realise that there is a possibility to end suffering by instead choosing a path of loving kindness. The final truth, *there is a*

noble path, involves living life according to the core Buddhist philosophies, as this is how wellbeing arises (Hanh, 1999). Millions of Buddhist followers continue to live by these teachings, in the pursuit of "inner tranquillity" (Gyatso, 2018).

2.5 The Science of Self-Compassion

The longevity and popularity of the Buddha's teachings could be considered testament alone to the advantages of cultivating a compassionate attitude towards oneself and one's own difficulties. However, in the last two decades, elements of these Eastern philosophical teachings—such as mindfulness and self-compassion—have found a home within Western psychology and, as such, their presumed benefits have come under scientific examination.

The early literature into self-compassion proposed that developing a healthy, self-compassionate attitude towards oneself would boost resilience when facing stress or hardship, due to its ability to buffer against the adverse consequences of self-judgment, isolation, and rumination (Gilbert, 2005; Neff, 2003a). In her seminal paper, Neff (2003a) hypothesised that self-compassion would be an important emotion regulation strategy, and therefore be instrumental to resilience (Alvord & Grados, 2005; Greenberg, 2006). She pointed out that the mindfulness component would, theoretically, allow an individual to hold painful or distressing feelings in awareness whilst evoking kindness, empathy, and recognition of shared humanity. Thus, rather than being flooded with negative affect, causing either an intense overreaction or emotional 'shut down', mindful awareness could allow an individual to be more objective their situation and act in ways which are ultimately more helpful (Neff, 2003a).

Similarly, Neff (2003a) also hypothesised that self-compassion would provide a protective factor against psychopathologies such as anxiety and depression and help to preserve wellbeing. She reasoned that adopting an attitude of self-compassion would ensure that the "experiences of pain and failure are not amplified and perpetuated through harsh self-condemnation…feelings of isolation … or over-identification with thoughts and emotions" (p. 235). In addition, Neff (2003b) pointed out that individuals adopting a self-compassionate attitude would be less likely to engage in behaviour that could jeopardise their wellbeing or cause their own suffering. She further noted that self-compassion would tend a person towards being proactive in regards to self-care and other behaviours that ensure wellbeing is preserved.

2.5.1 Empirical evidence. As predicted, the resilience-promoting qualities of self-compassion have found convincing empirical support over the past two decades. These were clearly summarised in a meta-analysis conducted by MacBeth and Gumley (2012), who synthesised the results from 20 samples across 14 separate studies. A large effect size ($r = -.52$) was found for the relationship between self-compassion and common psychopathology, namely depression, anxiety and stress. This led to the conclusion that self-compassion was important for "…developing wellbeing, reducing anxiety and depression, and increasing resilience to stress" (p. 550).

2.5.1.1 Self-compassion and wellbeing. In line with the positive psychology perspective, Zessin et al. (2015) turned the focus away from psychopathology and towards wellbeing. Their meta-analytical synthesis of results across 79 samples from 65 studies revealed a moderate effect size ($r = .47$) between self-compassion and indicators of various 'types' of wellbeing. They categorised wellbeing into cognitive, psychological, positive affect, negative affect, and 'other'. Interestingly, self-compassion had a stronger relationship with cognitive and psychological wellbeing than affective wellbeing. To explain this finding, the authors theorised that because a self-compassionate mindset does not entail replacing negative feelings with positive ones, but rather adopting an attitude of acceptance and integration of negative experiences, the cognitive and psychological benefits outweigh the emotional improvements in wellbeing (Zessin et al., 2015).

Based on the study's overall findings, Zessin and colleagues (2015) reasoned that "self-compassion may weaken the effects of negative experiences by cognitive-emotional reframing and influence the balance between positive and negative experiences in favour of positive situations" (p. 357). However, they also cautioned that further research concerning the mechanisms and potential causes of the differences in the relation between self-compassion and alternate forms of wellbeing was required prior to generalising their results (Zessin et al., 2015).

More recently, pioneering research with Turkish University students explored the relationship between self-compassion and the construct of 'flourishing' (Satici, Uysal, & Akin, 2013). Following the definition of flourishing presented by Diener et al. (2010)—incorporating competence, self-acceptance, meaning and relatedness, optimism, giving, and engagement—347 students, ranging in age from 18-24 years, completed the Flourishing Scale and Neff's Self Compassion Scale. Path analysis

results indicated (as predicted) that flourishing positively predicted self-kindness, common humanity, and mindfulness; it also negatively predicted self-judgement, isolation and over-identification. The results confirmed the link between self-compassion and flourishing (i.e., positive indicators of emotional, psychological, and social wellbeing; Keyes, 2002), as well as mindfulness and positive emotional reactivity (Catalino, Algoe, & Fredrickson, 2014). However, they recommended continued research with more diverse populations to test the generalisability of their findings (Satici et al., 2013).

To surmise, the findings from the studies of Zessin et al. (2015), Catalino et al. (2014), and Satici et al. (2013), all add weight to Neff's (2003a) initial predictions that self-compassion and wellbeing would have a positive association. As she commented in an editorial piece reviewing the self-compassion literature, "higher levels of self-compassion are linked to increased feelings of happiness, optimism, curiosity and connectedness" (2009, p. 212).

2.5.1.2 Self-compassion and resilience. The relationship of self-compassion to the development of a positive self-concept, recognised as crucial to resilience (Alvord & Grados, 2005), was examined in a series of five studies by Leary, Tate, Adams, Allen, and Hancock (2007). Their findings highlighted that self-compassionate people were more able to accept and be open to undesirable aspects of self. Furthermore, self-compassionate individuals tend to think in ways that are less catastrophising and less personalising (Leary et al., 2007).

In their fourth study, Leary et al. (2007) videotaped participants while performing a task that was designed to be both awkward and mildly embarrassing. Comparisons were then made between the thoughts and feelings of individuals high in self-compassion verses individuals low in self-compassion while evaluating the videotape of themselves, versus the tapes of other people preforming the same task. As predicted, low-self-compassionate participants undervalued their performances comparative to the observers (Leary et al., 2007). Meanwhile, individuals high in self-compassion made similar evaluations to the observers, suggesting that they were able to engage in more accurate, balanced self-judgements. The authors also found that self-compassion only predicted positive affect when participants watched their own videotape, not those of other participants. To surmise, the findings of this study suggest that "self-compassionate people more readily accept undesirable aspects of their character and behaviour…without obsessing about them, becoming defensive,

or feeling badly" (p. 901). This, it would appear that self-compassion may enhance resilience by not only enabling a more accurate self-evaluation, but also by mediating the psychological impact of negative events (Leary et al., 2007).

In addition to self-concept, social competence has been identified as critical to resilience (see Alvord & Grados, 2005). Recently, researchers have begun to examine the connection between self-compassion and prosocial behaviours. In a unique study, designed to explore whether self-compassion can benefit others, Neff and Pommier (2013) examined whether there was a link between self-compassion and indicators of concern for others, including forgiveness, empathetic concern, perspective taking, and altruism. They further examined the differences between three groups: young college adults, older community adults and practicing Buddhists. The general pattern of results suggested that self-compassion is positively associated with other-focused concern (Neff & Pommier, 2013), which is congruent with the traditional Buddhist assumption that self-compassion forms the basis from which compassion is learnt (Jinpa, 2015)

However, while positive associations between self-compassion and empathy, perspective-taking, altruism, and forgiveness were found among community adults and practicing Buddhists, in the college sample, self-compassion was not significantly associated with compassion, empathy or altruism (Neff & Pommier, 2013). As the mean age of the college sample was younger than the other two group, the authors theorised that "young adults in college are still forming their identities and understandings of intimate relationships, [and therefore] they are unlikely to have the same in-depth knowledge of themselves or others that comes with greater age and experience" (p. 171). They recommended that future research further examine potential age-related differences and the development of self-compassion across the lifespan (Neff & Pommier, 2013). It is envisaged that this research will make an important contribution to furthering the knowledge in this regard.

In a similar study, Welp and Brown (2013) aimed to test whether self-compassion predicts a prosocial orientation towards others. As expected, they found that adults reporting higher levels of self-compassion were more likely to report willingness to help out a stranger in a hypothetical situation (Welp & Brown, 2013). Self-compassion has also been found to positively relate to emotional connectivity, acceptance, autonomy, and supportiveness within adult romantic relationships (Neff & Beretvas, 2013). A total of 104 couples participated in this unique study, with

results revealing that those with healthier self-attitudes (i.e., high in self-compassion) displayed more positive relationship behaviour than those who lacked self-compassion (Neff & Beretvas, 2013). Furthermore, compared to self-esteem and attachment style, self-compassion was a stronger predictor of positive relationship behaviour. It was further noted by the authors that partners reported accurately in regards to each other's self-compassion levels, which suggests that it is a trait observable by others (Neff & Beretvas, 2013).

Taken together, the studies reviewed above all offer further support for the contention that interventions targeting self-compassion have the potential to enhance not only wellbeing but resilience, via influence across multiple layers of the ecological model—at least in adult populations. Focus now turns to research involving younger cohorts.

2.5.2 Self-compassion in adolescence. Neff and McGehee (2010) extended the self-compassion literature by exploring the relationships between this construct and other indicators of mental health within adolescent populations. They hypothesised that self-compassion could play an important role during this period of identity-formation. Neff & McGehee's (2010) research, conducted with 235 adolescents aged between 14-17 years, revealed that the mental health benefits of self-compassion within adolescents mirrored those of young adult populations; adolescents with greater self-compassion reported less depression (r = -.60) and anxiety (r = -.73) and greater feelings of social connectedness (r = .51). Indeed, a meta-analysis of studies examining the relationship between self-compassion and psychological distress in youth reported a large effect size (r = -0.55; Marsh, Chan & MacBeth, 2018). These authors concluded that "lack of self-compassion may play a significant role in causing and/or maintaining emotional difficulties in adolescents" (p.1011).

Neff and McGehee (2010) also explored the potential mechanisms through which self-compassion may exert positive influence in young people. They discovered that maternal support and family functioning were independent predictors of self-compassion, thus supporting the evolutionary theories of self-compassion articulated by Gilbert (2005). In terms of attachment style, secure attachment showed a positive association with self-compassion, and preoccupied and fearful attachment styles showed a negative association (Neff & McGhee, 2010). Again, this finding was congruent with the understanding of self-compassion as part of the

self-soothing, safety system closely associated with attachment and bonding (Gilbert, 2005).

Overall, the results from Neff and McGhee's (2010) research concluded that self-compassion was a strong predictor of wellbeing in adolescents; regression analyses indicated that self-compassion contributed to wellbeing even after controlling for other factors (i.e., maternal support, family functioning, attachment type, and the 'personal fable'—the belief one is special and unique). Neff and McGehee (2010) surmised that interventions targeting self-compassion in adolescents warranted exploration: Young people can be taught skills to improve self-compassion, however, other predictors of wellbeing (e.g., family functioning) are less amenable to change (Jinpa, 2015). They also theorised that self-compassion can provide an alternate model for thinking about the self that, in turn, promotes resilience (Neff & McGehee, 2010).

2.5.2.1 Self-compassion in youth exposed to trauma. In a unique longitudinal study, Zeller, Yuval, Nitzan-Assayag, and Bernstein (2015) investigated the protective properties of self-compassion with respect to resilience and recovery from traumatic stress. They utilised a convenience sample of Israeli adolescents (N = 64), aged between 15-19 years who had been exposed to a stressful, and potentially traumatic, event—the Mount Carmel Forest Fire Disaster, a week-long forest fire causing injury, death and destruction of property in December 2010 (Zeller et al., 2015). As expected, self-compassion predicted reduced levels of trauma-related psychopathology symptoms (i.e., post-traumatic stress, panic symptoms, depressive symptoms, and suicidality symptoms). Indeed, self-compassion fully mediated the effect of time for posttraumatic stress, panic symptoms and suicidality. Meanwhile, self-compassion was not found to predict wellbeing at either the 3-week, 3-month or 6-month follow-up in this sample (Zeller et al., 2015). The authors do not attempt to explain this finding; however, they do note the unique characteristics of the small convenience sample employed in this study. Consequently, it was recommended that more diverse populations of youth who have been exposed to a stressful event are sampled prior to generalising their findings. Importantly, however, the results from this novel study highlight the potential for self-compassion to "function as a malleable protective factor with respect to transdiagnostic trauma-related symptoms" (Zeller et al., 2015, p. 6).

Furthering the exploration of self-compassion in youth, Bluth and Blanton (2014) conducted research with children aged 13-18 years. Their results, as predicted, revealed significant positive associations between self-compassion and indicators of emotional wellbeing (i.e., satisfaction with life, r = .67; and positive affect, r = .26). As expected, negative associations were also found between self-compassion and measures of negative affect (r = .61) and perceived stress (r = .61). Of the six subscales of self-compassion, the component that showed the strongest associations with the dependent variables was isolation, as measured using Neff's (2003b) Self-Compassion Scale. The authors concluded that "feeling isolated and disconnected from others is related to negative mood, perceived stress, and less satisfaction with life among this group of adolescents" (p. 227).

In a similar study, Muris et al. (2016a) also found the predicted significant negative correlations between self-compassion and anxiety (r = -.26) and depression r = - .35), as well as the expected positive associations with global self-esteem (r = .44) and self-efficacy (r = .50), with a sample of adolescents aged 12-17 years. In contrast to the study by Bluth and Blanton (2014), these authors only examined the three positive indicators of self-compassion (i.e., self-kindness, common humanity, and mindfulness), and did not include their three negative counterparts. They noted that of the three indicators, mindfulness had the strongest negative association with anxiety and depression. Overall, the findings from both the Bluth & Blanton (2014) and Muris et al. (2016a) studies mirror the findings from research with adult samples; that is, they link higher levels of self-compassion to lower symptoms of psychopathology (see MacBeth & Gumley, 2012). However, further research will be required to determine which of the components of self-compassion exert the greatest influence on wellbeing and/or psychopathology.

2.5.2.2 Self-compassion and resilience. To date, it would appear that only one published study has specifically focussed on the relationship of self-compassion with resilience in youth populations. Bluth, Mullarkey and Lathren (2018), explored the associations between self-compassion, resilience, and curiosity in a large cohort (N = 1,057) of adolescents from Grade 7 to 12. As predicted, their findings confirmed that that self-compassion was positively associated with resilience as measured on the 6-item Brief Resilience Scale. Similarly, curiosity (or, openness to new experiences) was also found to be positively associated with self-compassion. The authors surmised that since self-compassion is a "modifiable trait" (p. 3042),

interventions designed to strengthen self-compassion have potential to increase both levels of resilience (i.e., the capacity to bounce back following adversity), and curiosity (i.e., the propensity towards positive risk-taking and embracing new situations), and thus can provide a valuable buffer against the development of mental health concerns common within this age range (Bluth et al., 2018).

In addition to Bluth et al.'s (2018) study that explicitly focused on resilience as a trait, there have been a number of studies to examine the relationship between self-compassion and factors that are known to be important to resilience. For example, in a longitudinal study conducted over 12 months, a sample of 2,448 Australian Grade 9 students were surveyed with the aim of understanding how self-esteem interacted with self-compassion (Marshall et al., 2015). As hypothesised, self-compassion moderated the influence of self-esteem on indictors of mental health. For those high in self-compassion, having low self-esteem did not impact greatly on mental health, suggesting self-compassion has a "potent buffering effect" (p. 116). This is consistent with earlier findings that self-compassion can moderate the impact of real, or potential, academic failure in undergraduate students (Neff, Hsieh, & Dejitterat, 2005), as well as the negative emotions evoked when unfavourably self-evaluated (Leary et al., 2007). The study by Marshall and colleagues is particularly encouraging as it suggests self-compassion among adolescents can reduce the need for self-esteem in situations that prompt self-doubt, thus avoiding the negative behaviours often associated with the pursuit of self-esteem (see Neff & Vonk, 2009).

Researchers in Turkey investigated whether self-compassion predicted sense of community (i.e., the sense of feeling connected, invested, and integral to a larger society), via a survey of 401 high school students (Akın & Akın, 2014). Results from correlational analyses indicated that self-kindness, common humanity, and mindfulness factors (i.e., the positive indicators of self-compassion) all positively related to 'sense of community'. Meanwhile, the isolation aspect of self-compassion was found to be negatively related to sense of community. Overall, self-compassion explained 17 % of the variance in sense of community (Akin & Akin, 2014). This finding is important as it suggests that self-compassion is not only associated with positive psychological outcomes for the individual, but potentially has important interpersonal implications at a societal level. The authors suggest that a possible interpretation of the positive association between self-compassion and sense of

community is due to healthier relational functioning in individuals high in self-compassion (Akin & Akin, 2014).

To surmise, in keeping with the ecological perspective of resilience, the results from the Akın and Akın (2014) and Marshall et al. (2015) studies, together with the results reported by Neff & McGehee (2010) and Zeller et al. (2015), indicate self-compassion can enhance resilience. However, more research focussing on relationships between self-compassion and resilience in young people is needed.

2.5.3 Self-compassion in children under 12. Only two studies in the published literature have specifically examined self-compassion in children under 12 years. The first of these, by Stolow et al. (2016), measured depressive symptoms, self-compassion, self-criticism, and self-esteem in a sample of children aged 9-10 years ('late childhood'). They compared these results with samples of children aged 12-13 years ('middle adolescence') and 15-16 years ('late adolescence') across a three-month period. Self-compassion was measured with an adapted version of Neff's (2003b) Self Compassion Scale (SCS), with items reworded to be more 'child-friendly'. Prior to running their analyses, the authors conducted a factor analysis and subsequently split the total self-compassion score into two distinct factors: the factor encompassing the 12 items that measured the 'positive' indicators of self-compassion (i.e., self-kindness, common humanity and mindfulness) was named SCS-POS (Cronbach's alpha = .87), and factor that encompassed the 13 items tapping into the 'negative' indicators of self-compassion (i.e., self-judgement, isolation and over-identification) was named SCS-NEG (Cronbach's alpha = .92).

Further analyses of findings from the Stolow et al. (2016) study revealed that, as predicted, the SCS-POS factor exhibited negative associations with self-criticism (r = -.11), and depressive symptoms (r = -.15), and a positive association with self-esteem (r = .23); the SCS-NEG factor displayed stronger associations in the opposite directions (self-criticism, r = .67; depressive symptoms, r = .58; self-esteem, r = -.62). The authors surmised that SCS-POS, in addition to self-esteem, provided a protective factor against the development of depressive symptoms; meanwhile, SCS-NEG, in addition to self-criticism, increased vulnerability. Interestingly, however, while children and adolescents from this study possessing higher levels of SCS-POS reported greater decreases in depressive symptoms over the three-month period (as predicted), higher levels of SCS-NEG was not found to influence levels of depressive symptoms over time. This finding was unexpected; the authors

acknowledge that as this was the first study to analyse self-compassion as two separate constructs in young people, further research is necessary prior to interpreting or generalising these findings (Stolow et al., 2016).

Significant gender and age differences were reported by Stolow et al. (2016). According to their findings, participants from older grades reported significantly higher levels of SCS-NEG, depressive symptoms and self-criticism, and lower levels of self-esteem, than their younger counterparts. A similar trend has been echoed in later research with adolescent samples (Bluth et al., 2017). Regarding gender, girls reported higher levels of SCS-NEG than boys ($p < .01$), and higher levels of self-criticism ($p < .05$). However, SCS-POS, self-esteem and depressive symptoms were not found to differ by gender (all $p > .05$). The implication of these findings is currently uncertain; these interesting, yet early discoveries, require replication in more diverse samples of young people. It is noted, however, that the gender and age patterns found by Stolow et al. (2016) are broadly similar to the trends noted in wellbeing research conducted in the UK (Rees et al., 2010) and Europe (Bradshaw et al., 2011). This suggests that that gender and age differences in self-compassion may well be meaningful, and therefore warrant further examination.

The second study to specifically examine self-compassion in children under 12 years was designed to explore the reliability and validity of a shortened 12-item SCS (Sutton et al., 2017). Items were reworded from the SCS-Short Form (Raes et al., 2011) so as to be age-appropriate. However, with no clear or rigorous method presented for how the items were rephrased to become child-friendly, it is uncertain how these researchers ensured the comprehensibility of the items on their adapted scale. Nevertheless, a sample of 406 children, aged 8-12 years, completed this scale plus self-report measures of mindfulness, self-concept, indicators of wellbeing, and psychological adjustment (i.e., positive and negative affect, satisfaction with life, optimism, depression and anxiety), empathic-related responding (empathetic responding and perspective taking), and prosocial goals. Identical to the study by Stolow et al. (2016), a two-factor structure for their scale was revealed, with the negatively-worded and positively-worded items forming two discrete subscales. Each subscale showed strong internal reliability (Cronbach's alpha = .83 and .81 respectively). Sutton et al. (2017) named the subscale representing the positively worded items 'positive self-compassion'. The subscale representing the negatively worded items was named 'negative self-compassion'.

Findings presented by Sutton et al. (2017) indicated that the positive self-compassion subscale was significantly related to all the comparison indicators, with the exception of negative affect. The positive self-compassion subscale showed the strongest associations with general self-concept (r = .50), optimism (r = .45), empathetic-related responding (r = .42), and prosocial goals (r = .60) and weaker associations with mindfulness (r = .16) in the positive direction. Meanwhile, in the negative direction, weaker associations were found with depression (r = -.22) and anxiety (r = -.13).

The negative self-compassion subscale was negatively correlated to mindfulness (r = -41), optimism (r = -.39), satisfaction with life (r = -.25), and positive affect (r = -.16) and positively correlated to negative affect (r = .46), depression (r = .43), anxiety (r = .51), and empathic concern (r = .21). There were no significant correlations between negative self-compassion and self-concept, perspective-taking, or prosocial goals (Sutton et al., 2017).

The authors of this study concluded that their findings are consistent with prior research findings examining the correlates of self-compassion in adolescents (Bluth et al., 2016) and adults (Neff 2003b; Neff et al., 2007). However, as these studies examined self-compassion as an overarching structure, rather than two separate 'positive' and 'negative' aspects, there are limitations to the similarities that can be drawn. Sutton et al. (2017) note, however, that their finding that positive self-compassion did not correlate with negative affect was unexpected; they theorise that "kind and compassionate feelings toward the self may not be associated with daily negative emotions" (p. 15) for this age group. However, given the scarcity of research in this area, further research with this cohort is "critical to understand how self-compassion develops in relation to experiences in childhood" (Sutton et al., 2017, p. 5).

2.5.4 Self-compassion and gender. The relationship between self-compassion and gender has been examined in a number of studies using adult samples; while some have found higher levels of self-compassion in males (e.g., Neff, 2003a; Neff & McGehee, 2010; Neff & Vonk, 2009), others have found no difference between men and women's self-reported levels of self-compassion (e.g., Neff et al., 2007a; Neff et al., 2007b; Neff & Pommier, 2013). A meta-analysis by Yarnell, Stafford, Neff, Reilly, Knox and Mullarkey (2015) revealed that males had slightly higher levels of self-compassion than their female counterparts. However,

the authors noted there was only a small effect size (d = .18) and warned against researchers "overemphasising gender differences" (Yarnell et al., 2015, p.499).

In terms of youth populations, a study by Bluth and Blanton (2014) reported no gender differences in self-compassion within their community sample of youth aged 13-18 years. However, while Muris et al. (2016a) initially found no evidence of a gender difference in self-compassion across their total sample of non-clinical youths aged 12-17 years, when older and younger youth were analysed as separate groups they found that older girls exhibited lower levels of self-compassion than boys. Similarly, a later investigation by Bluth et al. (2017), utilising a large sample (N = 765) of high school children aged 12-18 years, revealed that among older adolescents, females were likely to report lower levels of self-compassion than males. Meanwhile, results from a series of regression analyses revealed that self-compassion appeared to exert a protective effect on anxiety and depression for both genders and all ages. However, among older adolescents, self-compassion was revealed to wield a greater protective effect on anxiety for boys than it did for girls (Bluth et al., 2017). A year on, Bluth and Blanton (2018) found similar trends in their sample of 90 students aged 11 to 18 years: older female adolescents reported lower levels of self-compassion than either older male adolescents or early adolescents of either gender. The authors suggest that older female adolescents may be more resistant and reluctant to adopting a self-compassionate attitude, and therefore less likely to experience the benefits of this type of self-responding; they recommend future researchers examine this area to ascertain if their results can be replicated (Bluth & Blanton, 2018; Bluth et al., 2017).

Of the two studies (Stolow et al., 2016; Sutton et al., 2017) that have focussed on examining self-compassion in children under 12 years, only one reported on gender differences (Stolow et al., 2016). Therefore, further research is required to determine the existence and/or relevance of gender differences within younger cohorts of children.

2.5.5 Self-compassion and age. There is evidence to suggest that self-compassion may be positively associated with age in adults: Neff and Pommier (2013) reported that age significantly predicted self-compassion across their three adult samples (i.e., university students, older adults, and practicing Buddhists). As such, Neff and Pommier have suggested that "concern for oneself … emerges through the course of development, perhaps as a result of greater emotional maturity

and increasing understanding and recognition of the common human condition" (p. 170). Supporting this theory that self-compassion increases with age, pioneering research exploring self-compassion among older people (aged between 63-97 years) found that the mean self-compassion score was significantly higher (0.7 units) than the mean found with university-student samples reported in prior studies (Allen, Goldwasser, & Leary, 2012).

However, the opposite trend has emerged from studies with youth populations. For example, an investigation by Bluth and Blanton (2015) examined self-compassion, emotional wellbeing and perceived stress in youth aged 11-18 years via online survey. Results revealed that older female adolescents had lower self-compassion (and lower wellbeing overall) than early adolescents of either gender. Bluth and Blanton's findings also indicated that phase of adolescence, but not gender, moderated the relationship between self-compassion and the indicators of wellbeing employed by the study (i.e., life satisfaction, perceived stress, and positive and negative affect). For older adolescents, there was a stronger (inverse) relationship between self-compassion and negative affect (Bluth & Blanton, 2015). The authors suggested, based on these findings, that the impact of self-compassion, or lack of self-compassion, on negative affect increase as adolescents age (Bluth & Blanton, 2015).

More recently, findings from the large-scale study by Bluth et al. (2017) revealed that the association between self-compassion and psychopathology varied across age. For example, older adolescents that reported low and average levels of self-compassion had more depressive symptoms than those high in self-compassion (Bluth et al., 2017). This finding was broadly consistent with the results from Stolow et al.'s (2016) research, which found that children in Grade 8 and 11 (i.e., aged 13-17 years) reported more negative indicators of self-compassion compared to those in Grade 5 (i.e., aged 9-10 years). Indeed, research with youth is consistently revealing that "self-compassion may be advantageous in ameliorating the emotional challenges that adolescents face" (p. 849); however, little is yet known in regards to younger samples of children.

2.5.6 Summary and relevance to current study. At present, the literature examining the role of self-compassion in youth samples is restricted to a relatively small number of studies. Overall, the majority of findings appear to mirror those conducted with adult populations, indicating that self-compassion has a strong

association with positive indicators of wellbeing (Bluth & Blanton, 2014, 2015; Bluth et al., 2017; Neff & McGehee, 2010) and has an inverse relationship with measures of psychopathology (Bluth & Blanton, 2014, 2015; Marshall et al., 2015; Muris et al., 2016a; Neff & McGehee, 2010; Zeller et al., 2015). However, further research focussing on child populations is clearly warranted before results can be generalised to more diverse populations, particularly those under 12 years. As such, this study aims to address this research gap.

In addition, findings from large-scale studies of youth have indicated that self-compassion tends to decline from early through to later adolescence, particularly in girls (Bluth & Blanton, 2015; Bluth et al., 2017; Muris et al., 2016a). This study therefore has the potential to make an important contribution to current knowledge; (a) to clarify the comparative levels of trait self-compassion in boys and girls under 12; and (b) to assess whether interventions can be designed to improve self-compassion in the pre-adolescent years. If it can be determined that self-compassion can be 'bolstered' in pre-adolescence, then this may act as a preventative to 'losing' self-compassion throughout teenagerhood, thus improving mental health outcomes for young people.

Discussion will now turn to the independent, but related concept of mindfulness, with specific reference as to the conceptual overlap between these two psychological constructs.

2.6 Mindfulness

Western psychology's interest in mindfulness has superseded that of self-compassion by at least two decades. The most common definition appearing within the psychological literature is that of Jon Kabat-Zinn, an American professor who developed the mindfulness-based stress-reduction program (MBSR), who defines mindfulness "the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment" (2003, p. 145). Other popular definitions include Martin (1997), who defines mindfulness as "a state of psychological freedom that occurs when attention remains quiet and limber, without attachment to any particular point of view" (p. 291). Similarly, Dumas conceptualises mindfulness as a state of mind that is,

> focused on being rather than on doing, on the present and on immediate experiences as they unfold, rather than on understanding or solving problems. This attention is also nonjudgmental in that it accepts immediate

> experiences as they are. It does not evaluate these experiences, identify with them, or attempt to prolong or change them. (2005, p. 782)

2.6.1 Conceptual considerations. Conceptually defining mindfulness has been an ongoing deliberation. Shapiro, Carlson, Astin, and Freedman (2006)'s research, which explored the potential mechanisms of mindfulness, is frequently cited within more recent literature (e.g., Burke, 2009). These authors proposed a model of mindfulness comprising three fundamental, yet interwoven components: Intention, attention, and attitude (see Figure 4).

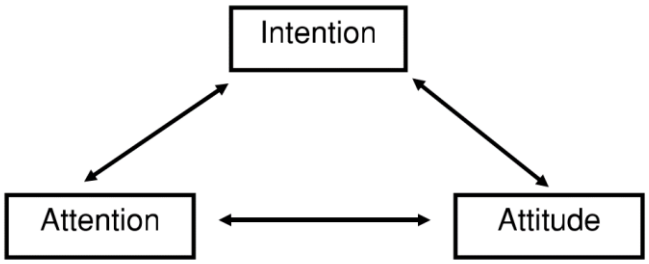


Figure 4. The three axioms of mindfulness; interwoven aspects of a single cyclic process and occurring simultaneously. Source: "Mechanisms of mindfulness", by S. L. Shapiro, L. E. Carlson, J. A. Astin, and B. Freedman, B., 2006, *Journal Clinical Psychology, 62*(3), p. 375.

Shapiro et al. (2006) suggested that engaging in the three axioms of mindfulness (intention, awareness and attitude) leads to a shift in perspective, termed 'reperceiving'. Reperceiving allows for the engagement of direct mechanisms—such as self-regulation, values clarification, and cognitive, emotional and behavioural flexibility—to pave a path towards a range of positive psychological outcomes, such as reduced stress and decreased depression and anxiety (Shapiro et al., 2006). This change in relation to one's thinking/ feeling state can also be referred to as decentering or defusing (Thompson, Arnkoff, & Glass, 2011). Various practices can be employed to scaffold the skill of mindfulness; amongst the most common are mindfulness of the breath, mindful walking, and mindful eating (Kabat-Zinn, 2003). Fundamental to all mindfulness practice is the adoption of an attitude that espouses non-judgment and acceptance, patience and non-striving, curiosity and kindliness (Bishop et al., 2004). This attitude enables the ongoing stream of internal and external stimuli to simply be observed, rather than avoided, supressed, or ruminated upon.

2.6.2 Mindfulness and wellbeing. As a practice originating from Buddhist philosophy, cultivating mindfulness is inherently recognised as important to enhanced wellbeing (Baer, 2003). While mindful awareness (i.e., paying attention to the present moment experience in a nonevaluative way) is a natural capacity, individuals differ in their propensity and discipline in adopting this state of consciousness (Brown & Ryan, 2003). Traditionally, the capacity for mindful awareness is developed and enhanced via committed, engaged practice in a variety of meditative exercises, such as mindful walking, mindful breathing, and even mindful smiling (Hanh, 1999). The purpose of cultivating mindfulness is that it allows an individual to observe, accept, and be present with potentially destructive thoughts, bodily sensations, emotions, and habitual behaviour. In other words, mindfulness "concerns the quality of consciousness itself" (Brown & Ryan, p. 823). In this way, "mindfulness is the energy that allows us to recognise our habits… and prevent [them] from dominating us" (Hanh, p. 24).

In recent years, numerous clinical psychological interventions—such as Acceptance and Commitment Therapy, Dialectical Behaviour Therapy, Mindfulness Based Stress Reduction and Mindfulness Based Cognitive Therapy—have adopted mindfulness as a core concept; consequently, a proliferation of research has been published on the topic discussing its efficacy. For example, mindfulness has been proven to be effective in improving wellbeing, cognitive functioning and distress with a range of clinical populations of adults, including those suffering chronic pain and stress-related disorders (Kabat-Zinn, Lipworth, & Burney, 1985; Teasdale et al., 2000).

While Baer noted methodological flaws in the empirical literature regarding mindfulness reviewed in 2003, evidence continues to be reported linking mindfulness to indicators of improved psychosocial wellbeing in diverse populations. Fang et al. (2010) reported enhanced psychosocial well-being among Mindfulness Based Stress Reduction participants along with corresponding changes in markers of immune activity. Meanwhile, Foureur, Besley, Burton, Yu, and Crisp (2013) found that engagement in a mindfulness-based intervention increased individual and workplace resilience in nurses and midwifes. Similarly, Smith et al. (2011) reported that mindfulness is associated with fewer post-traumatic stress symptoms, depressive symptoms, physical symptoms, and alcohol problems in firefighters. Furthermore, a study by Falkenström (2010) found that that self-reported

mindfulness was strongly related to wellbeing in their sample of 76 experienced meditators.

2.6.3 Mindfulness and resilience. Empirical research has also found mindfulness to be associated with improved resilience. For example, Keye and Pidgeon (2013) examined the role of mindfulness in predicting resilience with sample of 141 university students. Using the Connor Davidson Resilience Scale, results from regression models supported the hypothesis that mindfulness (r = .67), in addition to academic self-efficacy (r = .65), were significant predictors of resilience. Similarly, Chavers (2013) found a significant correlation between mindfulness and resilience in a sample of 208 community adults, with mindfulness being a significant predictor of resilience as reported on the Resilience Questionnaire.

A review of the literature by Thompson et al. (2011) examined the relationships between mindfulness and other acceptance-based theories of psychopathology with risk and resilience to post-traumatic stress and post-traumatic functioning. The review revealed a positive relationship between trait mindfulness and psychological adjustment following trauma exposure. The authors postulated that mindfulness improves resilience via multiple pathways, including: non-judgmental acceptance of symptoms, self-compassion, diffusion from ruminative cognitions, and increased distress tolerance (Thompson et al., 2011). This is consistent with findings from more recent research, which has supported the protective role of self-compassion in the recovery from traumatic stress (Zeller et al., 2015). Thompson et al.'s (2011) findings were also consistent with those reported in a review of the literature into the efficacy of the 'Eastern Arts' (e.g., yoga, mindfulness mediation, compassionate, tai chi) in supporting resilience among high-risk youth (Waechter & Wekerle, 2014). Thompson et al. concluded that the current empirical evidence provides sufficient basis for approaches such as mindfulness to be incorporated as interventions to promote resilience in disenfranchised youth.

The specific benefits of engaging in regular meditative practices have also been examined empirically. For example, it has been reported that practitioners of Buddhist meditation report significantly higher levels of self-compassion, compassion for humanity, empathetic concern, perspective taking, altruism, forgiveness, and less personal distress when confronting others' suffering, when compared to community adults or undergraduate college students (Neff & Pommier,

2013). These findings suggest that habitually meditating—i.e., adopting a state focused on interconnectedness and the acceptance of moment-to-moment experience (Germer, 2009)—is associated with an increased capacity for kindness and understanding towards the self and others (Neff & Pommier). Similarly, in a review examining the utility of meditation techniques to treat medical illnesses across 20 randomised controlled trials, evidence for efficacy was found for patients with mood and anxiety disorders (as well as epilepsy, symptoms of the premenstrual syndrome and menopausal symptoms, and autoimmune illness; Arias, Steinberg, Banga, & Trestman, 2006).

2.6.4 Mindfulness and youth. More recently, there has been widespread growing interest in the application of mindfulness with both in clinical and non-clinical populations of children and adolescents. While the literature base is not as extensive, and the evidence not as robust (Burke, 2009), research suggests that mindfulness is at least enjoyed and accepted by young people (Davis, 2012) and may have an efficacious impact on a range of outcomes including emotional and social wellbeing and behaviour (Burke, 2009; Greenburg & Harris, 2012; Zoogman, Goldberg, Hoyt, & Miller, 2015). Bluth, Roberson and Gaylord (2015) designed a mindfulness-based intervention for community teenagers. The results from their pilot program, conducted with 28 adolescents aged 10-18, indicated that mindfulness, self-compassion, perceived stress, and life satisfaction all improved from pre-intervention to post-intervention. Bluth et al. (2015) concluded that "mindfulness may be an effective intervention for improving indicators of emotional wellbeing among an adolescent population" (p. 292).

Indeed, mindfulness programs are becoming increasingly popular in schools across the world (e.g., Mindful Schools Program; Mindfulness in Schools Project). In fact, recent statistics suggest that almost half of school-age children in the UK engage in mindful activities (Stone, 2014). Another study, investigating the effectiveness of the Mindfulness in Schools Program, reported that British students aged 12-16 years participating in the one-term intervention experienced a reduction in stress, greater wellbeing and fewer depressive symptoms (Kuyken et al., 2013) compared to a control group.

The proliferation of mobile phone apps, such as The Smiling Mind app, Breathe Kids app, and the Headspace app, have also improved the viability, accessibility, convenience and cost-effectiveness of mindfulness programs within

youth populations. Indeed, a recent feasibility study in the USA, which examined the acceptability of a mindfulness and self-compassion program delivered via mobile phones with 20 youths over 30 days, concluded that "a mobile app may be a feasible way to disseminate a mindfulness and self-compassion-based program widely among adolescents" (Donovan et al., 2016, p. 217). However, deciphering the relative contributions of mindfulness, verses self-compassion, on mental health is an area requiring further investigation.

2.6.5 Mindfulness and self-compassion. Conceptually, it is clear that mindfulness and self-compassion are related and overlapping constructs (López, Sanderman, & Schroevers, 2016). For example, Neff's (2003a) definition of self-compassion identifies mindfulness as a key component and implies that the capacity for mindful awareness is necessary to the development of a compassionate relationship with oneself. Meanwhile, mindfulness incorporates self-acceptance; adopting a non-judgemental attitude towards one's internal and external experiences (e.g., Shapiro et al., 1996).

However, in terms of focus, the two constructs differ substantially. Mindfulness has a wider application and can be used in reference to the non-judgemental awareness of a broad range of present-moment experiences, both internal and external to the individual (Greco, Baer, & Smith, 2011a). In contrast, self-compassion refers more specifically to an awareness and the response generated towards the *self* during times of hardship or suffering, and thus incorporates active self-soothing (Baer, 2003; Boellinghaus et al., 2012; Germer, 2009; Neff & Pommier, 2013). Hence, while mindfulness involves the gentle focussing of attention to any moment with calmness and balance, self-compassion applies more specifically in moments of suffering, hardship or failure (Bluth & Blanton, 2014; Neff, 2003a). In addition, self-compassion involves recognising that pain and suffering are part of the human experience, while mindfulness solely encourages neither the avoidance nor over-identification of unpleasant emotions (Neff, 2003b).

Therefore, while there is no doubt the two constructs of mindfulness and self-compassion conceptually overlap, there are sufficient differences to warrant examination of them as independent, but related constructs (Bluth & Blanton, 2014). Indeed, these nuanced differences have led researchers to measure mindfulness and self-compassion as two distinct constructs (Kuyken et al., 2010; Robins, Keng, Ekblad, & Brantley, 2012; Van Dam, Sheppard, Forsyth, & Earleywine, 2011).

Empirically, there is scarce evidence for the separate and combined effects of mindfulness and self-compassion on indicators of mental health; available results are inconclusive due largely to methodological limitations and inconsistent use of measurement scales (López et al., 2016). To overcome these difficulties, Lopez and colleagues (2016) utilised multifaceted measures (the Five Facet Mindfulness Questionnaire and the SCS), with a large representative sample of community adults (N = 1,736) to explore the unique predictive value of both mindfulness and self-compassion on measures of affect. Findings from this study indicated that both mindfulness and self-compassion were unique contributors of affect, suggesting that both are important for an individual's wellbeing. Interestingly, while mindfulness showed greater influence on positive affect, a lack of self-compassion was the strongest predictor of negative psychological symptoms (Lopez et al., 2016).

Lopez et al.'s (2016) findings mirrored those from an earlier study of undergraduate students, where self-compassion explained more variance in depressive symptoms and negative affect than did a single-factor of mindfulness (Woodruff et al., 2013). However, in the Woodruff et al. (2013) study, self-compassion predicted greater variance in all measures of positive mental health as compared to the five-factor model of mindfulness. Similarly, Van Dam et al. (2011) also found that self-compassion was a better predictor than mindfulness across positive and negative measures, but only when single scores of both constructs were compared (rather than individual subscale scores). Further research is needed to clarify the nature of these relationships.

Research examining the influence of self-compassion versus mindfulness for adolescents was conducted by Bluth and Blanton (2014). In their exploration of pathways to adolescent emotional wellbeing, Bluth and Blanton (2014) proposed a model depicting a reciprocal association between mindfulness and self-compassion (see Figure 5). The theorised model was based on the results from a study of 67 adolescents in an urban high school administered an online survey. Their findings indicated that self-compassion mediated the relationship between mindfulness and emotional wellbeing, as hypothesised, but also that mindfulness mediated the relationship between self-compassion and emotional wellbeing. Based on these results, the authors suggested that mindfulness and self-compassion enhance emotional wellbeing in adolescents via an iterative, dynamic process: Awareness and attention (via mindfulness) leads to the recognition of thoughts or feelings that

reflect uncompassionate self-responding, leading to a desire to be more self-compassionate. This process fosters both self-acceptance and a sense of being part of a flawed, common humanity. Emotional wellbeing is enhanced as a direct result of decreased conflict with others and with oneself (Bluth & Blanton, 2014).

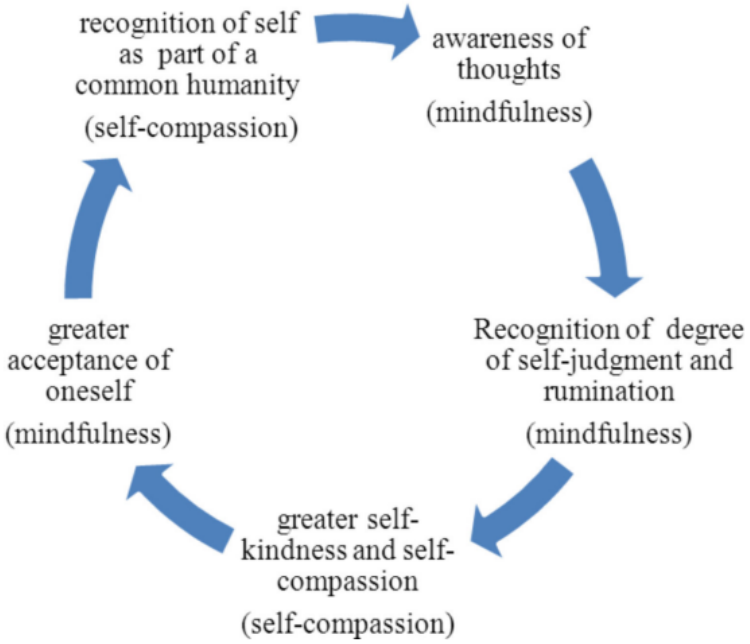


Figure 5. Proposed model of the reciprocal association between mindfulness and self-compassion. Source: "Mindfulness and self-compassion: Exploring pathways to adolescent emotional well-being", by K. Bluth and P. W. Blanton, 2014, *Journal of Child and Family Studies, 23*(7), p. 21.

The conceptualisation of a reciprocal relationship between mindfulness and self-compassion supports previous findings in the literature that have explored the practical application of mindfulness in group settings. For example, prior research has consistently shown that participation in Mindfulness Based Stress Reduction and Mindfulness Based Cognitive Therapy results in greater self-compassion (Birnie, Speca, & Carlson, 2010; Kuyken et al., 2010; Rimes & Wingrove, 2011; Robins et al., 2012; Shapiro, Brown, & Biegel, 2007), while engagement in groups focussed on self-compassion leads to improvements in mindfulness (Neff & Germer, 2013). However, given the particular dearth of research with younger cohorts of children, further research is needed to explore the precise nature of the relationship between mindfulness and self-compassion, and their unique and combined effect on positive indicators of mental health. This research would have the potential to inform future

intervention delivery. Focus will now turn to developmental issues pertaining to the relevance and delivery of such interventions to younger children.

2.7 Developmental Considerations

This section of the literature review will consider the relevance of mindfulness- and self-compassion-based interventions in reference to the developmental capabilities and trajectories of children under 12 years.

2.7.1 Lifespan perspective of mindfulness and self-compassion. In recognition of the scarcity of research taking a developmental focus in the field of contemplative science, Roeser and Eccles (2015) presented a hypothesised model of the developmental trajectories of mindfulness and compassion (see Figure 6). This model recognises compassion—which encompasses self-compassion—as an intrinsic capacity (as per evolutionary theories; see Gilbert, 2009) that can develop to a greater or lesser extent depending on the nature of experienced child rearing environments, and/or through intentional development. Similarly, according to this model, the intrinsic capacity for mindfulness can be developed or extended through socialisation and intentional practice. Sustained practice of state mindfulness (i.e., the repeated practice of being mindful), is hypothesised to result in a relatively enduring disposition called trait mindfulness. Thus, this model provides the basic framework for any mindfulness or compassion-based intervention; it suggests that while these inherent human capabilities develop naturalistically in children, they can also be fostered with appropriate training and practice. In addition, this model suggests that interventions directed towards "key socialisation agents" (p.1), such as parents and teachers, can provide indirect benefits as they support the development of mindful awareness and compassion in the children in their care.

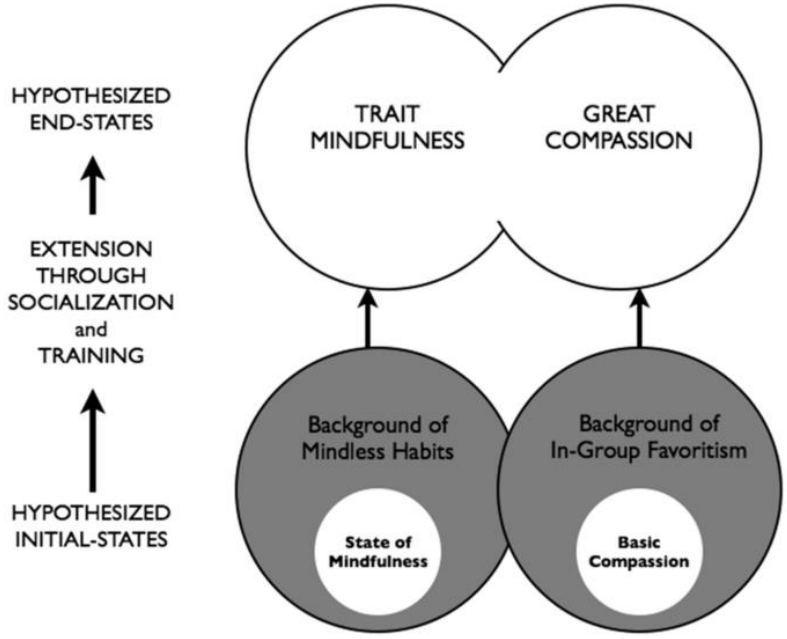


Figure 6. Hypothesised developmental trajectories of mindfulness and compassion. Source: "Mindfulness and compassion in human development: introduction to the special section", by R. W. Roeser and J. S. Eccles, 2015, *Developmental Psychology, 51*(1), p. 2.

2.7.2 Metacognition. To ensure that self-compassion and mindfulness-based interventions—those designed to develop and extend these inherent capabilities—are appropriately targeted for children, it is necessary to consider at what stage of development children will have the appropriate metacognitive awareness to engage therapeutically. Metacognition (an awareness of one's own mental functions) develops progressively throughout childhood (Kuhn, 2000). It can be presumed that in order to engage in (or fully understand) skills aimed at developing mindfulness or self-compassion, a child must have at least a "dawning awareness" of their own mental capabilities (p. 178).

Developmental psychologists have identified that middle childhood is characterised by a number of physiological and neurological changes associated with the emergence of metacognition and self-awareness. According to Piaget (1964), a child would need to have reached the formal operational period (i.e., 11 years onwards) before they can engage in meta-cognitive reasoning, as this is when abstract and hypothetical reasoning is possible (Thompson & Gauntlett-Gilbert, 2008). Indeed, research exploring age and gender differences in children's metacognitive knowledge found a significant difference between eighth graders (i.e.,

children aged 12 to 13 years) and third graders (i.e., children aged 7 to 8 years; (Schneider, 2008).

However, recent research has identified that children as young as six can accurately reflect on their own cognitions (see Schraw & Moshman, 1995, for a review). Similarly, regulation of cognition—the metacognitive activities that help control one's thinking or learning which include planning, monitoring, and evaluation—are skills known to be slowly developing during middle childhood and can be improved with training and practice (Schraw & Moshman, 1995). It is widely accepted that clinically useful work is possible for children in the 'concrete operations' stage (i.e., between 7-11 years), when using a cognitive behavioural framework (CBT). CBT is considered evidence-based best practice for treatment of depressive disorders and generalised anxiety (amongst others) in this age group, according to the Australian Psychological Society (Lovelock, Mathews, & Murphy, 2010). As teaching children mindfulness and self-compassion involves very similar skills to CBT—such as self-awareness, behavioural modification, use of metaphors to understand abstract concepts, as well as identifying and changing self-talk (Stallard, 2002)—it is reasonable to presume that meaningful work can be carried out within this age range. Indeed, control-group studies of mindfulness-based interventions have reported significant improvements in a multitude of areas—from self-regulation to peer acceptance—with groups of children as young as five (Flook, Goldberg, Pinger, & Davidson, 2015).

While no empirical research has specifically examined whether interventions focusing on self-compassion can lead to improvements in wellbeing and/or resilience among primary school-aged children, it can be reasonably anticipated that self-compassion holds relevance to this population. Firstly, the concept of increasing self-kindness can be logically linked to less self-critical and judgemental self-evaluations taking place during this period of industry and initiative (Erikson, 1959), when it is important for children to learn to accept weaknesses as well as build on strengths. Erikson posits that children in the primary age category must successfully develop the virtues of purpose and competence if they are to complete this developmental stage successfully; self-kindness may assist children in achieving this goal. Secondly, the promotion of interpersonal connectedness may reduce the likelihood of a child displaying anti-social behaviours such as bullying, which are commonplace within the primary age category, when empathy and morality remain

under development. Finally, the mindful aspect of self-compassion may help children to develop healthy and appropriate emotional-regulation skills, which then provides an integrated network of behavioural strategies the child can access to best manage their relationships, maintain their wellbeing, behave consistently with their self-image, and achieve desired goals (Thompson & Calkins, 1996).

The current research is designed to clarify the age and stage of development at which interventions targeting mindfulness and self-compassion can be successfully implemented. Focus now moves to the literature regarding intervention strategies involving young children.

2.8 Group Interventions for Children Under 12 Years

2.8.1 Mindfulness interventions. As previously discussed, despite a limited empirical research 'platform', mindfulness-based group therapy approaches are burgeoning in the youth arena (Bluth, Roberson, & Gaylord, 2015). In regards to younger cohorts of children, that is, those under 12 years, a number of mindfulness-based group-therapy approaches have been specifically adapted. For example, Saltzman and Goldin (2008) reported that their 8-week Mindfulness Based Stress Reduction intervention entitled 'Still Quiet Place'—which they conducted with a self-referred non-clinical sample of 31 children aged 9-11 years and their parents—brought about improvements in attention and emotional reactivity, in addition to some areas of meta-cognition. Saltzman and Goldin concluded that mindfulness training in a group format is feasible for children and can bring "significant improvements both in scientific terms and also in terms of meaningful outcomes in the daily lives of children, parents, and teachers" (p. 159).

More recently, encouraging results have also been reported by Flook et al. (2015), in their exploration of a mindfulness-based kindness curriculum targeting prosocial behaviour and self-regulatory skills in preschool children aged 5-6 years. Results revealed that the 68 children participating in the 12-week program (which was comprised of two 20–30 min lessons each week) showed improvements in teacher-reported social competence as well as higher grades for learning, health, and social-emotional development in comparison to a control group. In terms of cognitive flexibility and delayed gratification, small to medium effect sizes favoured the intervention group. Meanwhile, the children in the control group exhibited more selfish behaviour (Flook et al., 2015). Similarly, Schonert-Reichl et al. (2015) reported positive outcomes from a mindfulness-based school program aimed at

enhancing cognitive and social-emotional development in primary school children, aged 9-11 years. Results from the 99 children participating in the intervention revealed a myriad of benefits in comparison to a control group. These benefits included improved cognitive control and stress physiology (measured via salivary cortisol), improved empathy, perspective-taking, emotional control, self-concept, and mindfulness, and decreased symptoms of depression and peer-rated aggression. They were also rated (by peers) as more prosocial and enjoyed increased peer acceptance (Schonert-Reichl et al., 2015).

These recent studies both strongly support the contention that mindfulness-based interventions can be utilised to successfully cultivate and enhance self-regulatory skills as well as prosocial dispositions (which are necessary for compassion) in children during their early and middle childhood years. As surmised by Schonert-Reichl and Lawlor (2010), mindfulness-based intervention strategies show promise "not only to ameliorate children's problems but also to cultivate their well-being and thriving" (p. 52). These results also support the contention, articulated following a review of the literature by Greenburg and Harris (2012), that "interventions that nurture mindfulness in children… may be a feasible and effective method of building resilience in universal populations and in the treatment of disorders in clinical populations" (p. 161). However, before it can be emphatically determined that mindfulness offers a universal, proactive approach to enhance wellbeing and resilience in the face of potential challenges, and to alleviate symptoms and problem behaviour, further research using diverse samples, particularly clinical populations of children, is required (Flook et al., 2015).

2.8.2 Self-compassion interventions. To date, no group-based interventions targeting self-compassion in children under 12 have appeared in the literature. This is hardly surprising considering the scarcity of research conducted with children in general within the field of self-compassion.

In adult populations, however, promising results have been reported in a randomised controlled trial of the Mindful Self-Compassion group—an 8-week workshop designed to teach adults how to become more self-compassionate—which found that participants reported significant gains in wellbeing, maintained at the 6- and 12-month follow-ups (Germer & Neff, 2013). These positive findings were echoed in a recent meta-analysis examining the relationship between self-compassion and indicators of wellbeing in adults (Zessin et al., 2015). Findings

were synthesised across nine intervention studies which had incorporated Mindful Self-Compassion Training, Compassion Cultivation Training, or mindfulness training with an explicit focus on self-compassion. The analysis found a statistically significant Hedges' *g* of 0.36 ($Z = 5.02$, $p < .01$). Zessin et al. (2015) concluded that interventions based on "manipulation of state self-compassion and trait self-compassion cause a statistically significant increase in wellbeing" (p. 355). Whether this trend holds true for interventions targeting child populations, however, remains unexplored.

Chapter 3 of this thesis will present a more detailed examination of the literature pertaining to group therapy programs targeting children under 12 years. It is argued that the development of a new group-therapy program targeting self-compassion is necessary to fill a gap in the current repertoire of interventions available for this age range. Discussion now moves to the issue measuring self-compassion.

2.9 Measuring Self-Compassion

Further confounding the field of research into self-compassion are conceptualisation and measurement issues. As discussed in *Chapter 1***,** the vast majority of research examining self-compassion have measured the construct via Neff's 26-item Self-Compassion Scale (SCS; 2003b) or the shortened 12-item version of the same scale (SCS-SF; Raes et al., 2011). Consistent with Neff's earliest conceptualisation of self-compassion, the long- and short-form versions of the measure are comprised of both positive and negative items. The positive items assess the three protective features of self-compassion: self-kindness, common humanity and mindfulness, while the negative items tap into the three counter-qualities: self-judgement, isolation and over-identification. Both scales require participants to respond to items on a 5-point Likert-type scale, ranging from 1 (*Almost never*) to 5 (*Almost always*). According to Neff (2003b), on the long-form SCS it is possible to analyse the six-subscales separately, and to compute an overarching 'total' self-compassion score by reverse scoring the negative items and adding them to the positive scale scores. On her website (www.self-compassion.org), Neff reports that the short-form SCS has "near-perfect correlation with the long scale when examining total scores"; however, she warns researchers interested in sub-scale scores not to use the short-form, as they are less reliable.

Individuals are required to have at least a Grade 8 reading level to complete either the long or short-form SCS.

Good test-retest reliability has been found in adults, which suggests that self-compassion has trait-like stability (e.g., 3-week interval: r = .93; Neff, 2003; 5-month interval: r = .71; Raes et al., 2011).

Debate currently reigns in the literature as to how to conceptualise and measure the construct of self-compassion. While Neff continues to defend her original scale (see Chapter 1), it would appear that within the literature, there are four different perspectives emerging: (a) to continue to conceptualise and measure self-compassion as an over-riding construct, incorporating both positive and negative indicators (Neff et al., 2017); (b) to separate the scale into two factors, one measuring only the positive indicators and the other incorporating the negative indicators of self-compassion (Brenner et al., 2017; Stolow et al., 2016; Sutton et al., 2017); (c) to remove the negative indicators entirely, and only use the positive subscales, as these represent the 'true' protective nature of the construct of self-compassion (Lopez et al., 2015; Muris et al, 2015); or (d) to start afresh with a new conceptualisation and measurement tool (Williams et al., 2014).

Despite a growing number of cross-cultural validation studies indicating that both the SCS and SCS-SF are reliable instruments to assess self-compassion in both research settings and, more recently, clinical practice (e.g., Castilho, Pinto-Gouveia, & Duarte, 2015; Neff, 2016b), findings have been inconsistent as to whether a *total* self-compassion score should continue to be utilised. Leading this argument, Muris (2015) posited that "the negative items do not reflect the true protective nature of self-compassion and tend to inflate the relation with psychopathology" (p. 1461). He argues strongly against the use of a total self-compassion score, unless the negative items are first removed. Likewise, results from a study using a community sample in the Netherlands queried Neff's justification of a total self-compassion score, and recommended that a distinction be made between the constructs of self-compassion and self-criticism (Lopez et al., 2015). Brenner et al. (2017) concurred that the conceptualisation and measurement of self-compassion be distinguished from 'self-coldness'.

Other researchers have pointed out that the majority of validation studies for the SCS and the SCS-SF are limited by their over-reliance on college-based samples, which may not be representative of the population at large (e.g., Castilho et al., 2015;

Lopez et al., 2015). In response to this criticism, Neff recently conducted larger scale validation studies with more diverse populations (Neff et al., 2017). These incorporated college undergraduates (n = 222), community adults (n = 1,394), practicing Buddhist meditators (n = 215), and a clinical sample of individuals with recurrent depression (n = 390). Results supported the continued use of a total SCS score as an overall measure of self-compassion (Neff et al., 2017).

In regards to methodology, to date only one study (in English publication) has adopted exploratory structured equation modelling (ESEM) to test the validity of the SCS (Tóth-Király et al., 2016). All the remaining studies have used confirmatory factor analysis or exploratory factor analyses, which may be too restrictive for multidimensional constructs (Marsh, Liem, Martin, Morin, & Nagengast, 2011). Interestingly, results from the study utilising ESEM supported Neff's (2003b) initial bifactor model of self-compassion—i.e., the presence of a general self-compassion construct along with the six smaller individual components of self-compassion. While this study of 505 Hungarians was reported to be nationally representative (Tóth-Király et al.), further cross-cultural research is required to assess the generalisability of these findings.

2.9.1 Measuring self-compassion in children under 12 years. As introduced in Chapter 1, two studies have recently attempted to measure self-compassion in children under 12 years utilising modified versions of Neff's (2003b) SCS. Stolow et al. (2016) utilised a version of the SCS that had been re-worded by another researcher so as to be more "child-suitable" (p. 8). Their 26-item measure was completed by a sample of 193 children from New Jersey, USA, across three age groups: 5th Grade (9–10 years), 8th Grade (12–13 years) and 11th Grade (15–16 years). Results from exploratory factor analysis supported a two-factor model, with the negative and positive indicators of self-compassion forming two separate subscales, with high internal consistencies reported for both (Cronbach's alpha = .87–.92). In regards to the scale's construct validity for the youngest cohort (i.e., children aged 9-10 years), inspection of the six individual sub-scales revealed that reliabilities all exceeded .70, with the exception of the Mindfulness subscale (Cronbach's alpha = .39) and the Over-identification subscale (Cronbach's alpha = .56); therefore, the authors concluded that these subscales cannot be considered reliable. While the total number of children sampled the 5th Grade is not reported, it is assumed that approximately one third of the total 193 children fell in this age

category (i.e., 64). This is a small sample size from which to draw conclusions, and therefore caution must be exercised when interpreting these results. The authors recommend future research to explore issues of construct validity and to consider incorporating a more comprehensive measure of mindfulness when conducting research with younger participants (Stolow et al., 2016).

Meanwhile, Sutton et al. (2017) adapted the 12-item SCS-SF (Raes et al., 2011) to investigate self-compassion in a large sample of 406 children aged 8-12 years in Canada. Again, these researchers chose to reword certain items from the measure to make it more 'child-friendly'. The method they reported was simply "altering the language to be age-appropriate" (p. 6). Results from their exploratory factor analysis also indicated a two-factor structure for their reworded scale, with the negatively-worded items and positively-worded items forming two distinct subscales. Each demonstrated acceptable internal consistency (Cronbach's alpha =.81–.83). In keeping with Neff's (2017) recommendations for the short-form scale, the researchers did not analyse the six subscales separately. Sutton et al. did, however, assess the fit of a unidimensional model, where one common factor—self-compassion—was regressed onto the twelve items. This unidimensional model had poor fit; the authors surmised that the negatively and positively worded items loaded onto two separate factors, and therefore did not support the continued use of an overarching, 'total' self-compassion score, as advocated by Neff (2017) for adult populations.

It is apparent that Stolow et al. (2016) and Sutton et al. (2017) did not collaborate, and thus the re-wording of the items in their long and short-form versions of the SCS are not consistent. Of concern, neither study reported clear or robust methods for re-wording their scale items; it is uncertain how items were selected to be re-worded, and whether/how item comprehensibility was ensured prior to administration of the revised scale. Overall, it is clear that measurement issues persist in the field of self-compassion, and careful consideration of the various arguments must be heeded prior to the further development and validation of a measure of self-compassion for child samples. Given the identified limitations of the current scales, the development of an appropriate scale to measure self-compassion in children under 12 years remains a primary aim of this study. Developing a parent-report version of a self-compassion scale may be an additional viable way to improve the reliability of scale designed to measure self-compassion in this age

range. Indeed, self-compassion has been identified as a trait observable in others (Neff & Beretvas, 2013). The Positive and Negative Affect Scale for Children Parent Version (PANAS-C-PV; Ebesutani, Okamura, Higa-McMillan, & Chorpita, 2011; Ebesutani et al., 2012) and the Strengths and Difficulties Questionnaire (SDQ) Parent Version (Goodman, 1997) both use parent-report forms to enhance reliability.

This research was designed to specifically address the measurement issues of the self-compassion construct that have been identified in the literature. Issues and controversies within this field will be explored in greater detail in the introductory section of Chapter 5.

2.10 Summary and Conclusion

This literature review has highlighted the current state of the research within the field of self-compassion, and, more broadly, the literature pertaining to resilience and wellbeing in child populations. The pressures, challenges and impending transitions associated with the middle childhood years clearly point to the need for targeted interventions aimed at promoting wellness and preventing illness during this crucial, yet frequently overlooked, period of development.

Compassion-focussed approaches are becoming increasingly popular psychological interventions, widely adopted in both mental health and wellness fields (Roeser & Eccles, 2015). Congruent with the positive psychology movement, interventions based on ideas from the Eastern traditions, such as self-compassion and mindfulness, are proliferating the field due to their focus on the promotion of positive mental states. Indeed, empirical evidence supports strong associations between these constructs and a myriad of positive psychological outcomes in both adult and adolescent populations, including indicators of resilience and wellbeing (e.g., MacBeth & Gumley, 2012; Neff & McGehee, 2010).

While mindfulness has become a ‘buzzword’ in popular psychology, more recently, the related concept of self-compassion has come the forefront. Conceptually, these constructs overlap. However, there is sufficient evidence to suggest that these two areas warrant investigation as separate concepts (Bluth & Blanton, 2014). There is mounting evidence to suggest that mindfulness-based interventions can bring about improvements in multiple domains—such as self-regulation, optimism, academic performance, prosocial behaviour and social competence—for primary-aged children (e.g., Flook et al., 2015; Schonert-Reichl et al., 2015). Therefore, it is reasonable to predict that interventions targeting the

closely related construct of self-compassion may also be efficacious in improving wellbeing and resilience for this age group.

To date, only two published studies have specifically examined self-compassion in children under 12 years. The results from these early studies appear are promising. One study, by Stolow et al. (2016), found that the positive elements of self-compassion (i.e., self -kindness, common humanity and mindfulness) can act as a protective 'buffer' against the development of depressive symptoms over time. The second study, by Sutton et al. (2017), reported that the positive elements of self-compassion correlate with self-reported measures of mindfulness, self-concept, indicators of wellbeing and psychological adjustment (i.e., positive affect, satisfaction with life, optimism, depression and anxiety), empathic-related responding and prosocial goals (Sutton et al., 2017). However, further research is required to both replicate and extend on these findings.

Unfortunately, the field of self-compassion is currently plagued with concerns regarding the most appropriate conceptualisation and measurement of this construct. While Neff's 26-item SCS (2003b) and the shortened 12-item version (SCS-SF) of the same scale (Raes et al., 2011) dominate in scientific evaluations of self-compassion in adult and adolescent populations, the only two attempts to measure this construct in children have used two different measures. As such, no consistent, validated measure of self-compassion is yet available for use with children under 12 years. This research will aim to redress this issue.

In conclusion, this literature review has revealed that there is a paucity of research concerning the relative importance, stability or malleability of the construct of self-compassion within younger children. Furthermore, the feasibility of an intervention targeting the development of self-compassion—espoused as an inherent human capacity (Roeser & Eccles, 2015)—within this younger cohort of children has yet to be explored. While evidence as to the potential of mindfulness-based interventions grows, there is a noticeable lack of research conducted with clinical samples of children. Finally, measurement issues currently restrict further research in the field of self-compassion; these warrant rectification.

2.11 Research Questions

To address these gaps in knowledge and understanding, this thesis will incorporate two studies (see Chapter 1), and address the following research questions:

RQ 1. How do children under 12 years conceptualise self-compassion and mindfulness? (*Study 1*)

RQ 2. How feasible and acceptable is an intervention designed to target self-compassion with a clinical group of children under 12 years? (*Study 1*)

RQ 3. Can wellbeing and resilience be enhanced in a clinical group of children via participation in a group-therapy program targeting self-compassion and mindfulness? (*Study 1*)

RQ 4. Can a valid and reliable measure of self-compassion be developed for preadolescent children (i.e., aged 9-12 years)? What is the factor structure of this measure? (*Study 2*)

RQ 5. Can a valid and reliable parent-perspective measure of self-compassion be developed and utilised to improve measurement issues for this cohort? (*Study 2*)

RQ 6. What are the associations between self-compassion, mindfulness, and indicators of psychosocial wellbeing and resilience in preadolescent children? (*Study 2*)

RQ 7. What are the relative contributions of self-compassion and mindfulness to indicators of wellbeing and resilience in preadolescent children? (*Study 2*)

RQ 8. Is there support for the reciprocal model of self-compassion and mindfulness proposed by Bluth and Blanton (2014)? (*Study 2*)

RQ 9. Are there significant gender and/or age differences in the levels of self-compassion and mindfulness reported in preadolescent children? (*Study 2*)

The following chapter (Chapter 3) provides a more detailed scrutiny of the literature pertaining to mindfulness and self-compassion group-therapy interventions. Discussion of how these findings informed the development of the *Peace by Piece* program—a 10-session group psychotherapy intervention designed for children under 12 years—then follows. Chapter 4 then presents the methodology, results and a brief discussion of Study 1, which evaluates the pilot *Peace by Piece* program. A mixed-methods approach, incorporating both quantitative and qualitative data analyses, is employed to explore the pre-, post-, and follow-up data collected from the child and parent participants referred for clinical intervention.

CHAPTER 3
DEVELOPMENT OF THE *PEACE BY PIECE* GROUP THERAPY INTERVENTION

3.1 Chapter Introduction

As a prelude to the development of the *Peace by Piece* program, this chapter will commence with a theoretical discussion of the processes, or mechanisms, via which mindfulness may enhance skills necessary for successful negotiation of the pre-adolescent years, and how self-compassion may augment this. Following is an in-depth review of studies from recent group-therapy interventions targeted to parents and children in their primary years, which have aimed to validate mindfulness as an efficacious psychological intervention for this age-range. The reader will then be introduced to the *Peace by Piece* program—a 10-session group therapy program designed to enhance mindfulness and self-compassion for children under 12 and an accompanying parent—including a discussion of the theoretical underpinnings which informed the program's development, design and session format. The methodology and results from the feasibility study collated from data collected pre, post and 12-months following the pilot program will be presented in the following Chapter.

3.2 The Mechanisms of Mindfulness and Self-Compassion

As discussed in *Chapter 2*, interest in the Eastern practice of mindfulness has grown exponentially in recent years, with a corresponding proliferation of literature reporting on the efficacy of mindfulness-based interventions. It has been established that the cultivation of mindfulness, that is, a state of consciousness whereby experiences in the present moment are held in non-judgemental awareness (Kabat-Zinn, 1990), has an efficacious impact on wellbeing, aids in the amelioration of psychiatric symptoms, and promotes resilience to stressful life-events in a variety of adult populations (see Baer, 2003). Research on the applicability of mindfulness for children, albeit in the early stages, purports similar benefits (e.g., Harnett & Dawe, 2012; Haydicky, Wiener, & Shecter, 2017).

Formal meditation practice typically acts as a means to scaffold the state, or skill, of mindfulness whereby the ongoing stream of internal (i.e., thoughts, emotions, and body sensations) and external stimuli are observed, nonjudgmentally, as they arise and pass (Kabat-Zinn, 2003). Common formal mindfulness practices include sitting meditation, walking meditation, or mindful moving, and require

specific time to be set aside for completion (Kabat-Zinn, 1990). Meanwhile, informal mindfulness practice can occur ad hoc, simply by choosing to pay full attention to any task or routine activity, such as showering, eating, or driving. Precisely *how* such seemingly simplistic practices can have such a wide range of applications and effects remains a focus of enquiry. Research regarding the mechanisms via which mindfulness 'works' are discussed below, including a theoretical discussion as to how self-compassion may similarly have a positive impact alongside this.

3.2.1 Mechanisms of change. A number of theories have been presented in the psychological literature to explain the mechanisms via which mindfulness may achieve its benefits. An early attempt, by Bishop et al. (2004), suggested a two-component model involving attention and attitude. Their model proposed that (a) regulating attention on present-moment experiences, and (b) adopting a curious, open and accepting attitude towards to the experience, enabled more skilful responding to the mental processes that would otherwise contribute to emotional distress and/or promote maladaptive behaviours. Shapiro et al. (2006) proposed a third component to this model, intention, which they felt was also critical to the elucidation of effective mindfulness practice. Shapiro and colleagues noted that intentions (i.e., *why* one is practicing) were not static, but rather can "change and develop with deepening practice, awareness, and insight" (p. 376). To support their three-component model, these authors referenced prior research with experienced meditators, which revealed that "personal vision" (Kabat-Zinn, 1990, p. 46) correlated with outcomes—for example, individuals whose goal was to improve their ability to self-regulate attained self-regulation; those whose aim was self-exploration achieved deeper personal insight (Shapiro, 1992). Research regarding the content and/or influence of children's intentions to practice, however, are yet to appear in the literature.

Building on from this earlier work, Teper, Segal, and Inzlicht (2013) proposed a model to demonstrate more precisely how mindfulness training may increase capacity for efficacious emotion regulation, via improvements in executive control (see Figure 7). They proposed that mindfulness practice increases sensitivity and openness to somatic and affective cues within the internal and external experiential fields. According to Teper et al.'s model, this refined sensitivity ('attunement') leads to improvements in executive control—i.e. attention regulation,

cognitive flexibility, and inhibitory control (Pessoa, 2009)—which in turn enhances capacity for emotion regulation.

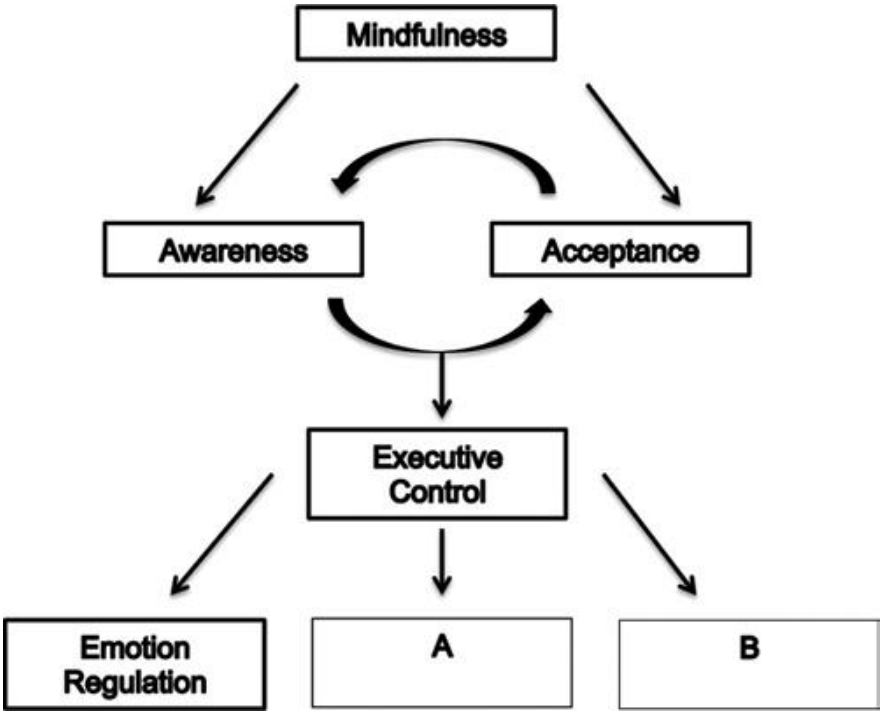


Figure 7. Model depicting how the two facets of mindfulness—awareness and acceptance—work iteratively and interdependently to facilitate executive control and emotion regulation. Boxes A and B represent other hypothetical consequences of improved executive control. Source: "How mindfulness enhances emotion regulation through improvements in executive control," by R. Teper, Z. V. Segal and M. Inzlicht, 2013, *Current Directions in Psychological Science, 20*(10), p. 452.

In contrast to this model, Holzel et al. (2011b) described a more detailed four- component process via which mindfulness meditation may provide ameliorative effects. Their model was compiled following a synthesised review of conceptual and neurological research, including results from feasibility and controlled clinical trials, qualitative studies, and neuroscientific research. They proposed that that the four components of their model work synergistically with one another and commence when a 'challenge' to the goal of maintaining a mindful state is detected by the executive attention system (*component 1*). Challenges may include distracting stimuli such as thoughts, sensations, memories, or emotions. Body awareness (*component 2*) assists in the detection of physiological states (e.g., muscle tension, increased heart-rate, abdominal distress), and is used for accurate identification of the emotional response elicited (e.g., fear or excitement). Emotion regulation processes (*component 3*) are engaged in order to respond, rather than react

emotionally, or habitually, to the experience. In this way, sustained attention (*component 1*) and body awareness (*component 2*) lead to a condition of exposure, while emotion regulation (*component 3*) facilitates response prevention and enables more skilful responding. So, according to Holzel et al. (2011b), rather than being habitually reactive or avoidant to the external and internal environment, mindfulness practice enables an individual to observe thoughts, feelings, and body sensations from the perspective that these are "just" thoughts, feelings, or body sensations, rather than a stable reflection of the self, and thus facilitates change in the final component of their theoretical model, perspective on the self (*component 4*), otherwise known as decentring (Shapiro et al., 2006). Unlike other prominent theories, these authors do not include attitude or acceptance as part of their model of mindfulness.

Ultimately, the result of the synergistic process proposed by Holzel et al. (2011b) is that an individual's capacity for self-regulation is enhanced: a choice can be made regarding the most appropriate way to act, rather than an instinctive reaction occurring in the moment; strategies can be employed (at the incipient stages) to modulate overwhelming emotions; states of wellbeing can be maintained—or returned to—with greater ease; and resilience to adverse events is thus enriched. While neither Teper et al. (2013) or Holzel et al.'s models have been specifically designed with children in mind, both emphasise the role of mindfulness in enhancing self-regulatory capacities. A deeper exploration of the particular importance of enhancing self-regulatory capacities in the pre-adolescent years now follows.

3.2.2 Self-regulation. Self-regulatory skills predict both academic performance and socio-emotional competence, and hence play a crucial role in a child's developmental trajectory (Moffitt et al., 2011). The development of skills to support self-regulation—or, the capacity to control thought, action, and emotion—can be conceptualised as an interplay of top-down (i.e., cognitive) and bottom-up (i.e., autonomic) processes (Zelazo & Lyons, 2012). Frequently termed 'executive functions', top-down processes typically include cognitive flexibility, inhibitory control, and working memory (Miyake et al., 2000). Meanwhile, bottom-up processes emerge from the autonomic system, and can include stress, arousal and motivation.

According to the 'optimal balance' model of self-regulation (Blair, 2016), a bidirectional relationship between executive functions and arousal suggests that

automatically elicited emotional reactions can either enhance or overwhelm executive functioning. By teaching children how to observe and 'sit with' difficult emotions—such as anxiety, anger, or stress—mindfulness interventions potentially facilitate self-regulation by minimising the impact of bottom-up interference whist simultaneously encouraging top-down control faculties, such as sustained attention and cognitive flexibility (Zelazo & Lyons, 2012). More specifically, by promoting nonreactivity to inner experiences (i.e., allowing thoughts and feelings to come and go) mindfulness can reduce the impact of bottom-up influences. For example, autonomic arousal, when intense, can prompt emotional reactivity, impulsivity, judgement or rumination, and thus can inhibit effective self-regulation (Wagner & Heatherton, 2016). Furthermore, as mindfulness fosters *early* attunement to such stimuli, it enables *early* engagement of regulation strategies, before the stimuli reach high intensity (Teper et al., 2013). Through teaching enhanced awareness and acceptance of emotions, mindfulness training also reduces the negative consequences associated with long-term activation of affective states, typical when rumination or avoidance strategies are employed (Williams, 2010).

In further support of self-regulatory theories of mindfulness, brain-imaging research has confirmed that significant grey-matter concentration occurs in regions that are known to be associated with learning, memory, emotional regulation, and perspective taking, after only eight weeks of mindfulness training (Holzel et al., 2011a). As the pre-frontal cortex, the area of the brain involved in the successful coordination of self-regulatory functions, is under intensive development during the childhood years (see Wagner & Heatherton, 2016), it is logical to assume that this is an ideal period to introduce activities aimed at improving self-regulatory skills, such as mindfulness. Such positive early experiences essentially serve to 'prime' the physiological response to stress, and promote adaptive and advantageous behaviours rather than reactive, impulsive responses (Blair, 2016). Focus now moves to a discussion of the mechanisms underpinning the independent—but related—construct of self-compassion.

3.2.3 Self-compassion. Theoretically, self-compassion, like mindfulness, can be understood as "a unique antecedent-focused type of regulation" (Teper et al., 2013). That is, it is one that focuses on changing a person's relationship to his or her self, rather than changing the 'true' nature, or identity, of the self. This focus on acceptance, rather than struggle or change, means that self-compassion may achieve

therapeutic benefit in a similar way to models that highlight acceptance as a key component of change brought about via mindfulness practice (e.g., Bishop et al., 2004; Shapiro et al., 2006; Teper et al., 2013). Meanwhile, within the four-component framework describing the mechanisms of mindfulness proposed by Holzel et al. (2011b), self-compassion—as defined by Neff (2003a)—appears most closely related to emotion regulation (*component 3*), as well as to the change in perspective on the self (*component 4*). Self-kindness—the generation of feelings of love and support toward oneself in instances of perceived failure or suffering—is, fundamentally, an act of emotion regulation (Holzel et al., 2011b). Furthermore, common humanity—taking the view that difficult experiences are simply one component of a larger human experience, rather than isolating experiences—implies a change in self-perspective.

Whilst theoretically logical, it is currently unknown whether the theory described above will be consistent with, or relevant to, children's understanding and conceptualisation of self-compassion. Study 1 was therefore designed to explore this gap in the knowledge via collection and analysis of qualitative data. It is envisaged that these findings will be used to inform a model that will have specific relevance to children, and thus expand the current knowledge within the field of self-compassion.

This review will now examine the theoretical and empirical literature purporting the benefits of mindfulness practice to children in their pre-adolescent years, including community and clinical populations.

3.3 Group Mindfulness Interventions for Children Under 12 Years

A recent exploratory meta-analysis of 20 mindfulness-based interventions targeting youth populations (aged from 6-18 years) commented on the consistent "superiority of mindfulness treatments over active control comparison conditions" (Zoogman et al., 2015, p. 206). The authors reported an omnibus effect size in the small to moderate range (*Beker's del* = .23, $p < .0001$). Interestingly, they noted that the effect size was significantly larger for psychological symptoms compared to other dependent variables (*del* = .37), and for clinical samples compared to non-clinical populations (*del* = .50). Zoogman et al. concluded that "mindfulness appears to be a promising intervention modality for youth" (2015, p. 206), and in particular as a means to target symptoms of psychopathology in clinical settings. A noted shortcoming of this meta-analysis, however, was exclusion criteria that eliminated interventions that included parents and children together. As such, it is

unknown how efficacious these interventions may be in comparison to interventions targeting children alone.

In conducting this meta-analysis, Zoogman et al. (2015) acknowledged that the scientific literature pertaining mindfulness and youth remains in an emergent state; indeed, this limited the power of their study to examine specific age groups (such as preadolescents, adolescents). However, as noted in *Chapter 2*, a growing number of mindfulness-based group-therapy approaches have been adapted specifically for primary-aged children, despite concerns regarding the strength of the evidence-base underpinning them (Burke, 2009; Greenburg & Harris, 2012; Harnett & Dawe, 2012). One of the earliest was a pilot study conducted with 25 non-clinical children aged between 9-12 years. Results from an open trial of a 12-week Mindfulness-Based Cognitive Therapy for Children (MBCT-C) group revealed significant improvements in psychosocial areas of functioning (Lee, Semple, Rosa, & Miller, 2008). Specifically, analyses comparing the parent reported pre- and post-intervention measures of internalising (i.e., withdrawn, anxious/depressed, and somatic complaints), and externalising (i.e., delinquent and aggressive behaviours) problems on the Child Behaviour Checklist (CBCL; Achenbach, 1991), found a small to medium effect size (d = .24 to .28*)*. However, the child-reported measures revealed no significant changes in either anxiety or depression from pre- to post-treatment. The authors purposed that as their sample of children did not report clinically elevated scores at the commencement of the trial, it was more difficult to detect changes over time, and a clinical sample may show more variability. Study 1 of this thesis will adopt a clinical sample and thus address this imbalance.

Indeed, further examination of the qualitative results from Lee et al.'s (2008) study—collected from children and their parents via six open-ended questions administered as part of a program evaluation questionnaire—suggested that the intervention was helpful to children in a range of domains. These included managing anger more effectively, coping with being teased by peers, feeling more comfortable during school activities, alleviating tension prior to exams, and general feeling of increased self-confidence. Overall, positive program evaluations from both participants (i.e., the children) and their parents supported the feasibility and acceptability of this group program, leading to the conclusion that "mindfulness interventions aimed at reducing [internalising and externalising] symptoms in children warrant further empirical investigation" (p. 25, Lee et al., 2008).

Subsequent research by Semple, Lee, Rosa, and Miller (2009) utilised a randomised control-group design and added further weight to Lee et al.'s (2008) initial pilot study. This research used similar measurement instruments and a community-based sample; findings indicated that participation in a MBCT-C group program (n = 25) resulted in significant reductions in attention problems for children aged 9-13 years, in comparison to those on a wait list. These improvements were maintained at 3-month follow-up. Anxiety symptoms and behaviour problems were also found to be reduced, but only in children who reported clinical elevations in anxiety at pre-test (Semple et al., 2009). Results from both Lee et al.'s (2008) study and Semple at al.'s (2009) research supported the contention that future research should include children who meet diagnostic criteria for clinical disorders.

Utilising a slightly younger sample, an 8-week mindfulness program entitled 'Paws b' for children aged 7–9 years was assessed via a controlled feasibility pilot study across three primary schools in the UK (Vickery & Dorjee, 2015). This program, which was delivered by school-teachers within a regular school curriculum, involved formal and informal mindfulness practices delivered over 12 half-hour lessons. The aim of the program was to promote mindful, rather than automatic, responses to the present moment experiences within the classroom, and incorporated six themes. Themes included psychoeducation regarding the brain ('Our Amazing Brain'), skills to improve emotional regulation skills ('Finding a Steady Place'), as well as introducing cognitive strategies ('The Story Telling Mind'). Home practice was encouraged via optional mindfulness tasks and take-home sheets. Self-report measures were utilised to assess emotional wellbeing at baseline, post-training and three-month follow-up. Relative to controls, at follow-up the training group (n = 33) showed a significant decrease in negative affect, with a large effect size (p = .010, d = .84). Program acceptability was also high: 76% of children reported that they liked mindfulness practices and wanting to continue these at school (Vickery & Dorjee, 2015).

This study also collected data from the parents and teachers of the participating children, at baseline and follow-up. From baseline to follow-up, significant improvements in meta-cognition were reported (as measured on the BREIF questionnaire), with a large effect size (p = .002, d = 1.08). From baseline to post-training, and baseline to follow-up, significant negative correlations were revealed between mindfulness and emotion regulation (p < .05). It was

hypothesised, therefore, that mindfulness training may have improved the meta-cognitive skills of children, which in turn enhanced self-regulation capacities and produced improvements in negative affect. In conclusion, Vickery and Dorjee (2015) surmised that the study findings provided preliminary evidence that their mindfulness-based program was feasible, acceptable to the majority of children, and may significantly decrease negative affect and improve meta-cognition to "promote resilience and protect psychological wellbeing" (p. 11).

Encouraging results have also been reported from two more school-based programs in recent years. Flook et al. (2015) explored a mindfulness-based kindness curriculum targeting prosocial behaviour and self-regulatory skills in pre-school children, while Schonert-Reichl et al. (2015) examined a mindfulness-based school program aimed at enhancing cognitive and social-emotional development in primary school children. Results from both studies supported the contention that mindfulness interventions can be utilised to successfully cultivate and enhance self-regulatory skills, as well as prosocial dispositions, in children during their early and middle childhood years.

These recent findings add support to Greenburg and Harris' (2012) large-scale analysis of research into 'contemplative practices' used with children. Their comprehensive literature review included research conducted with children in treatment settings as well as health promotion contexts, including school-based programs. They concluded that while the strength of the empirical evidence-base remained questionable, "interventions that nurture mindfulness in children and youth may be a feasible and effective method of building resilience in universal populations and in the treatment of disorders in clinical populations" (p. 161). This concurred with an earlier review by Burke (2009), who noted that while there was promising evidence to support the efficacy of mindfulness-based interventions, further research focused on clinical samples of children was required.

3.4 Mindful Parenting Interventions

In addition to interventions designed specifically for children, mindfulness interventions have also been designed specifically for parents. Mindfulness has inevitably been adopted into the parenting arena due to its associations with a variety interpersonal processes, including empathic responding and perspective-taking (Block-Lerner, Adair, Plumb, Rhatigan, & Orsillo, 2007), and closeness, relatedness, and acceptance (Carson et al., 2004). In contrast to traditional behavioural models of

parenting—typically based on the premise that human behaviour is a function of the contingencies of reinforcement and punishment—mindful parenting encourages parents to view their own and their child's behaviour nonjudgmentally, to avoid automatised ways of reacting to emotions and/or situations, and thus develop more considered, compassionate, and adaptive parenting practices (Dumas, 2005). With this aim, various models of mindful parenting have appeared in the literature. Three prominent theories are discussed below.

Firstly, Dumas (2005) presented a model of 'everyday' mindful parenting that promotes three specific strategies for parents. The first of these, facilitative listening, encourages parents to attend to their thoughts, and feelings nonjudgmentally, and adopt a more accepting, less critical, perspective on their various parenting challenges. The second strategy, distancing, helps parents psychologically distance themselves from negative emotional states that typically lead to overlearned, rigid ways of reacting to situations. Finally, motivated action plans provide a step-by-step tool for parents to anticipate and rehearse how they intend to respond to situations they find particularly challenging, and thus meet their specific parenting goals.

Secondly (and similarly), Duncan, Coatsworth, and Greenberg (2009) presented a model of mindful parenting whereby parents intentionally bring moment-to-moment awareness to their interactions with their child. They promote the importance of listening with full attention, the cultivation of emotional awareness and self-regulation, and adopting an attitude of compassion and nonjudgmental acceptance (Duncan et al., 2009).

Thirdly, Bögels, Lehtonen, and Restifo (2010) presented a more detailed model of mindful parenting, whereby six mechanisms are proposed via which mindfulness practice facilitates improvements in parenting skills, parenting satisfaction and an enhanced parent-child relationship. Firstly, the authors proposed that mindfulness practice reduces parental stress and thus reactivity. Secondly, they proposed that mindfulness reduces parental pre-occupation, leading to greater attunement, which in turn facilitates secure parent-child attachment. Thirdly, mindfulness can reduce parental impulsivity due to improvements in executive functioning. Fourthly, mindfulness practice enables the intergenerational transmission of unskilful, destructive parenting habits to be disrupted. Fifthly, mindfulness practice promotes self-compassion as well as compassion for the child,

and thus less reactivity during parenting interactions. Lastly, mindfulness practice improves marital functioning and therefore facilitates more effective co-parenting. To surmise, Bögels et al. (2010) emphasise the importance of enhancing parents' emotional and cognitive regulation in order to enable responsive and skilful parenting, rather than reactive, automatic parenting. Thus, this model is not dissimilar to the earlier models proposed by Dumas (2005) and Duncan et al. (2009).

The empirical evidence to support each of these models remains relatively scarce. Coatsworth, Duncan, Greenberg, and Nix (2010) evaluated the "added value of mindful parenting" (p. 205) via a pilot randomised trial with 65 families of children aged 10-14 years. Data was obtained via self-report measures completed by parents and children pre- and post-participation in either an existing, evidence-based parenting program, or an adapted version of the same program infused with mindfulness principles, practices and parenting activities. The mindfulness-infused program was designed to target five dimensions: (1) Listening with full attention, (2) non-judgmental acceptance of self and child, (3) emotional awareness of self and child, (4) self-regulation and low emotional reactivity, and (5) compassion for self and child. The programs were delivered to parents over seven weekly sessions, each of two hours duration to families with children transitioning from primary to high school. Multiple regression analyses of pre- and post-intervention data revealed that, as predicted, participation in the mindfulness-enhanced program improved mindful parenting and parent-child relationship qualities more effectively than participation in the original, unadapted program. Further analysis revealed that the improvements in parent-child relationship quality were mediated by increases in parental mindfulness, suggesting a co-regulation mechanism, whereby improved parental emotion regulation skills lead to improved emotion regulation skills in children who have not undergone any mindfulness-based training themselves (Coatsworth et al., 2010). These findings underscore the importance of parental involvement in mindfulness-based interventions. Thus, parental involvement was viewed as a crucial component of the *Peace by Piece* program developed for Study 1 of this thesis.

Indeed, similar findings to those of Coatsworth et al. (2010) have been echoed in more recent research examining clinical groups of children and parents. Training in mindful parenting can be logically assumed to offer particular advantages for families experiencing the additional stresses of their own and/or their

child's psychopathology symptoms. For instance, the intervention encourages parents to adopt a more accepting, compassionate and less reactive attitude to their own and their children's problems and challenges. While mindful parenting has only recently appeared as a clinical intervention, findings are promising. For example, Meppelink, de Bruin, Wanders-Mulder, Vennik, and Bögels (2016) examined the effectiveness of mindful parenting training for 70 parents of 70 children (mean age = 8.7 years) who had been referred to a clinic due to their children's psychopathology. Psychopathologies included Attention Deficient Hyperactivity Disorder, Autism Spectrum Disorder, anxiety disorders, Oppositional Defiance Disorder, adjustment disorder and parent-child interaction problems. Results obtained from parents and their children following parental-only participation in an 8-week mindful parenting training program (consisting of three-hourly sessions) indicated that the intervention, as predicted, brought about a significant decrease in both children's and parents' psychopathology, along with a significant increase in mindful parenting and mindful awareness in general. These results replicated those of Bögels, Hellemans, van Deursen, Römer, and van der Meulen (2013), who evaluated the effects of an 8-week mindful parenting training with 86 parents of children with a variety of psychiatric symptoms. They were also similar to a smaller study by Ferraioli and Harris (2012), who compared an 8-week mindful parenting training with a behavioural skills training with 15 parents of children with Autism Spectrum Disorder. Meppelink et al. (2016) concluded that their research added to the "emerging body of evidence indicating that mindful parenting training is effective for parents themselves and, indirectly, for their children suffering from psychopathology" (p. 680).

In summary, various models of mindful parenting have been proposed in the literature, with a consensus that the efficacy of mindful parenting is a product of the reciprocal relationships between parents and children (Harnett & Dawe, 2012; Hwang, Kearney, Klieve, Lang, & Roberts, 2015). While the validating empirical evidence—particularly in clinical settings—remains in its infancy, researchers in this emergent field have thus far reported positively on the benefits of parent-only training in mindfulness for both the parent and their child/ren. So far, preliminary investigations of mindful parenting (e.g., Bögels et al., 2013; Coatsworth et al., 2010; Ferraioli & Harris, 2012; Meppelink et al., 2016), support the proposed mechanism of improved parental emotion regulation as a key factor in enhancing parent-child relationship quality. Researchers have now begun to examine whether

concurrent parent-child mindfulness-based interventions can further enhance this mechanism of co-regulation, to reinforce and maintain the positive outcomes observed after parent-only training. These research findings will now be discussed.

3.5 Concurrent Parent-Child Mindfulness Interventions

One of the earliest mindfulness-based programs to involve both parent and child in the intervention was by Saltzman and Goldin (2008). They designed an 8-week Mindfulness-Based Stress Reduction (MBSR) intervention entitled 'Still Quiet Place'. Preliminary research findings were reported from the program when it was run with 31 nonclinical children aged 9-11 years and their accompanying parents. Results from a battery of self-report measures indicated that the group program brought about significant improvements in attention and emotional reactivity, along with some areas of meta-cognition, for both parent and child participants, compared to a wait-list control group (Saltzman & Goldin). A low attrition rate of 17% further supported the acceptability and feasibility of this group therapy program and the family-format delivery.

Indeed, a recent review of studies (N = 24) evaluating mindfulness-based interventions for children, adolescents, and families—in clinical and educational settings—concluded that programs that simultaneously target parents (or caregivers), in conjunction with children and/or adolescents, demonstrate most potential (Harnett & Dawe, 2012). In fact, the authors warned against "viewing mindful parenting as an independent endeavour" (p. 195). They proposed an integrative model (see Figure 8) which highlights the importance of the parents' possession of sound emotion regulatory capacities, as these directly influence the parents' capacity to (a) be emotionally available to their child, and (b) consistently implement parenting practices based on fair and reasonable values and expectations. According to this model, these parental capabilities enable an environment whereby the child can learn to self-regulate appropriately and safely.

The authors of this model suggest "a significant contribution that mindfulness can make is to provide a therapeutic approach that may directly enhance this self-regulatory capacity" (p. 206). This model further acknowledges the ecological context in which the child is embedded, and the importance of supporting parents to better manage aspects of the social ecology that are amenable to change, such as their own capacity to cope with life stressors, accessing community resources and engaging support. As such, these research findings, and the model

depicted in Figure 8, were considered key to the development of the group program intervention piloted in Study 1 of this thesis.

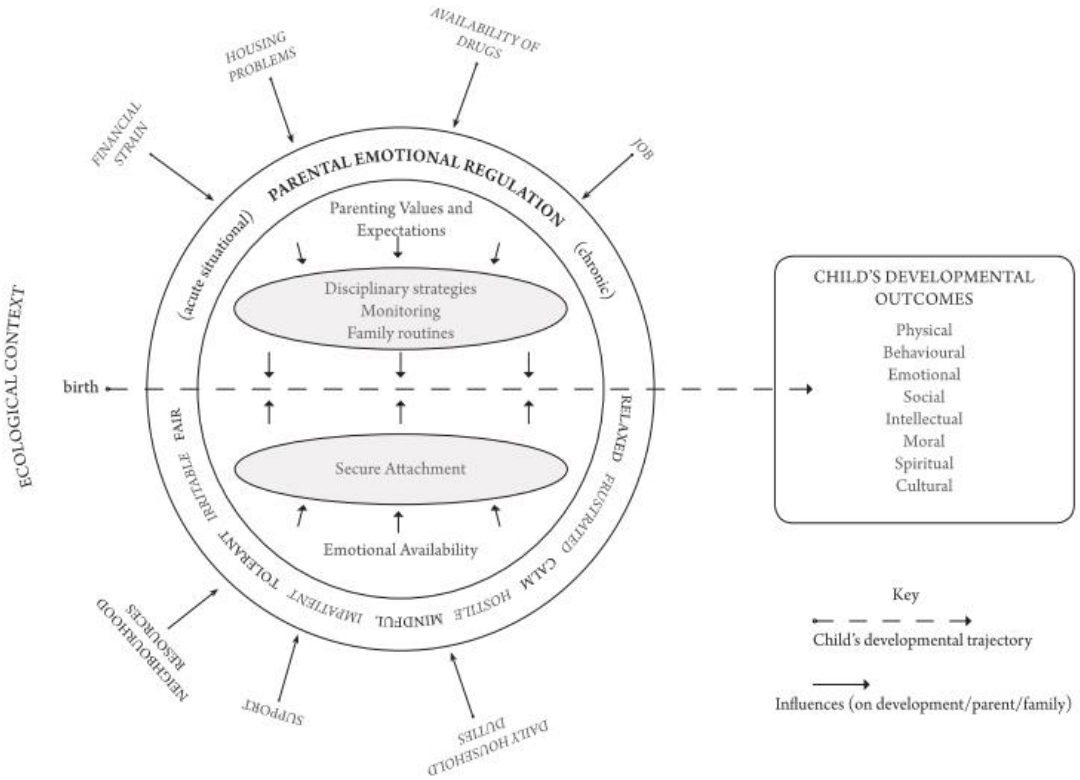


Figure 8. An integrative model placing mindfulness within a broader context. Source: "The contribution of mindfulness-based therapies for children and families and proposed conceptual integration", by P. H. Harnett, and S. Dawe, 2012, *Child and Adolescent Mental Health,* 17(4), p. 206.

3.5.1 Qualitative research findings from clinical populations. An in-depth qualitative exploration of the potential change mechanisms of mindfulness was recently conducted with five families of children aged 13-18 years with a diagnosis of Attention Deficient Hyperactivity Disorder (ADHD; Haydicky et al., 2017). This clinical sample was chosen as the clinical features of this externalising disorder meant that the children were considered 'at risk' for emotional regulation difficulties. The five children and their parent/s concurrently completed an 8-week manualised mindfulness-based intervention. This intervention had previously been investigated quantitatively, and found to bring about reductions in self-reported and parent-reported ADHD symptomology (Bögels, Hoogstad, van Dun, de Schutter, & Restifo, 2008; van der Oord, Bögels, & Peijnenburg, 2012), as well as improvements in parent functioning (Haydicky, Shecter, Wiener, & Ducharme, 2015; van der Oord et

al., 2012). The findings from this study were derived via thematic analyses of semi-structured interviews completed with adult and child participants.

Analysis of the data collected revealed support for the four-component model of mindfulness proposed by Holzel et al. (2011b), and parts of the model by Teper et al. (2013): Both child and parent participants reported greater present-focused awareness, as well as a sense of "detached self-observation" (p. 1024) following mindfulness training, consistent with decentring (Shapiro et al., 2006). This, in turn, led to enhanced self-awareness, self-monitoring and self-regulation (i.e. the regulation of attention, emotion, and behaviour). In regards to outcomes, both parent and child participants reported the greatest improvements in the domain of interpersonal relationships; more specifically, they reported increased empathy, reduced emotional reactivity, improved communication and a reduction in the intensity and duration of conflicts, consistent with the models of mindful parenting currently in the literature (e.g., Bögels et al., 2010; Coatsworth et al., 2010; Duncan et al., 2009). Specifically, responses from the youth participants indicated that they were able to view thoughts and feelings as "impermanent mental events rather than representations of self or reality" (Haydicky et al., 2017, p. 1031).

To synthesise their qualitative findings, Haydicky et al. (2017) presented a co-regulatory model (see Figure 9) to explain how the process of change in parent-child mindfulness training is further enabled via mutual reinforcement of emotional regulation skills. This "new dyadic pattern" (p. 1033) of parent-child interaction was maintained at the six-week follow-up; the authors made recommendation that future researchers determine whether this can remain stable over a longer time period. It was noted that acceptance, highlighted as a fundamental mechanism of mindfulness (e.g., Bishop et al., 2004; Shapiro et al., 2006; Teper et al., 2013) was not supported by the findings of this study. Rather, findings further solidified emotion regulation as a "critical mechanism of action" (p. 1031) in mindfulness-based interventions.

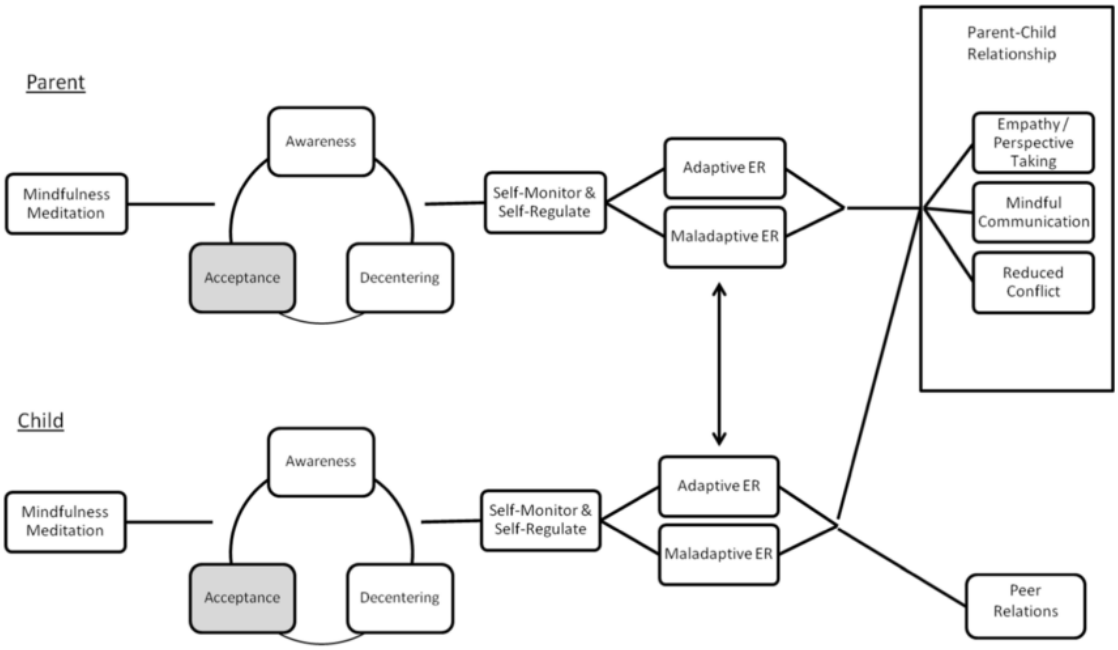


Figure 9. Working model of the parallel processes and emotional co-regulation contributing to improved relationship quality in joint parent-child mindfulness training. Shaded items denote mechanisms that were not supported by the study. Source: "Mechanisms of action in concurrent parent-child mindfulness training: A qualitative exploration". by J. Haydicky, J. Wiener, and C. Shecter, 2017, *Mindfulness*, *8*(4), p. 1031.

Interestingly, Haydicky et al. (2017) identified an additional benefit of mindfulness training—which they termed 'discovery'—whereby participants described developing an enhanced appreciation for aspects of their life they had previously overlooked. The authors commented that this process of 'discovery' may contribute to "improved quality of life and resilience" (p. 1035), and therefore recommend its future exploration as a mechanism of change elucidated via mindfulness-based interventions. This recommendation was considered during analysis of the group intervention program piloted in Study 1 of this thesis.

3.6 Group-Therapy Interventions Targeting Self-Compassion

Despite a surge of research reporting of the effectiveness of mindfulness-based group interventions for children and their parents, group interventions to specifically target self-compassion in youth populations have yet to appear in the literature. However, as discussed within Chapter 2 of this thesis, early empirical studies (Stolow et al., 2016; Sutton et al., 2017) indicate that childhood self-compassion enjoys the same positive associations with wellbeing, and negative associations with psychopathology, as adolescents and adults (e.g., Marsh et al.,

2018; Zessin et al., 2015). Therefore, it appears logical to assume that interventions designed to harness and enhance self-compassion could be efficacious for primary-aged children.

Pilot research with adults suggests that group-therapy utilising Compassionate Mind Training—which includes a range of exercises designed to develop a compassionate-self—is acceptable, feasible, and effective in reducing depression, anxiety, shame and self-criticism (Gilbert & Procter, 2006). Similarly, the Mindful Self-Compassion program has been found to be efficacious, with results from a randomised controlled trial indicating that participation in this 8-week group program enhanced self-compassion, mindfulness, and wellbeing in a community group of adults (Neff & Germer, 2013). Furthermore, treatment effects were shown to be maintained at 6-month and 12-month follow-up. Promisingly, these results are starting to be replicated in clinical samples. For example, Friis, Johnston, Cutfield, and Consedine (2016) tested the effects of the Mindfulness Self-Compassion program with a sample of 63 patients with Type I and Type II diabetes. Participation in the program increased self-compassion, as well as produced clinically significant reductions in depression and metabolic improvements, in comparison to patients in a wait-list control condition. Results such as these highlight the promise that interventions designed to enhance self-compassion have to improve, and maintain, wellbeing. To date, however, no prior research has explored the efficacy of an intervention designed to enhance self-compassion within a population of children under 12. The current research aimed to redress this imbalance.

3.3 Theoretical Considerations in the Development of the *Peace by Piece* Program

The *Peace by Piece* program was initially conceived as a group therapy program aiming to promote resilience and wellbeing in children under 12 years, adopting mindfulness and self-compassion as the mode of intervention. As discussed in *Chapter 2*, empirical evidence convincingly links the adoption of a healthy self-attitude (i.e., relating to oneself with compassion) to improved resilience and wellbeing in adults and adolescents (Neff & McGehee, 2010; e.g., Zessin et al., 2015), while emergent studies purport similar benefits for children as young as eight (Stolow et al., 2016; Sutton et al., 2017). Evolutionary theorists explain this phenomenon from the perspective that self-compassion is one component of an innate, evolutionarily-beneficial drive system that can be activated to soothe the

threat system in times of stress or hardship and thus restore 'balance' within an individual (see Gilbert, 2009). From a different perspective, self-compassion can be understood as an internal 'resource' that can buffer the negative effects of stress arising in difficult circumstances; to be self-compassionate entails adopting a more balanced, and hence more adaptive, viewpoint from which to solve problems more effectively or cope with challenges more adaptively (Neff, 2003a; Zessin et al., 2015). From either perspective, the implication is that self-compassion is an intrinsic, human capacity that is able to be harnessed, and then extended—either through socialisation or intentional practice (Roeser & Eccles, 2015).

As discussed in Chapter 2, current conceptualisations of mindfulness and self-compassion within the psychological literature overlap, which poses an inherent challenge when distinguishing their unique versus combined influence. However, empirically evidence is emerging to confirm that self-compassion and mindfulness both make unique contributions to wellbeing in adults (e.g., Lopez et al., 2016; Van Dam et al., 2011; Woodruff, 2013). This was confirmed in a recent study of adolescents exploring pathways to emotional wellbeing (Bluth & Blanton, 2014). Results from this study resulted in a reciprocal model of the association between mindfulness and self-compassion being proposed (see Chapter 2, Figure 5). This model suggested that improvements in mindfulness inherently lead to improvements in self-compassion, and vice versa. The implication of this model is that interventions designed to enhance mindfulness *and* self-compassion may benefit from their mutual reinforcement, ultimately leading to greater gains in wellbeing than interventions designed to promote either mindfulness or self-compassion alone.

3.3.1 Developmental models. However, the age at which the intrinsic capacity for self-compassion can be effectively harnessed and extended is currently unknown (see Chapter 2). Erikson's (1959) life-span developmental model can be used to formulate a logical argument as to how the core components of self-compassion—self-kindness, common humanity, and mindfulness, as defined by Neff (2003a, 2003b)—will hold relevance and benefit to children in their primary years.

Erikson (1959) outlined a theory of psychosocial development that comprises eight stages from infancy to adulthood. This theory proposes that during each of the eight stages a particular psychosocial crisis is faced whereby individual needs conflict with societal needs. According to Erikson, whether or not each crisis is successfully negotiated has implications for the development of a 'healthy'

personality and the attainment of 'basic virtues', such as hope, purpose, and competency. Meanwhile, failure to resolve a particular crisis inhibits further progression through the stages and inevitably leads to negative consequences for an individual's sense of self.

Following Erikson's theory, primary aged children must successfully develop the virtues of purpose and competence if they are to complete the two pertinent developmental stages of 'initiative verses guilt', and 'industry verses inferiority' successfully. Developing an attitude of self-kindness (the first component in Neff's model of self-compassion) may be of particular assistance to a child striving to complete these stages of development. The concept of fostering an attitude of self-kindness—while simultaneously avoiding overly critical and judgemental self-evaluations—has logical benefits for this period of industry and initiative; as it is important for children to learn to accept weaknesses as well as build on strengths to avoid being consumed by a sense of guilt and/or inferiority (Erikson, 1959). Secondly, the promotion of interpersonal connectedness, or sameness rather than difference (the second component of Neff's model of self-compassion) may increase prosocial and decrease anti-social behaviours—such as bullying—which can otherwise proliferate due to the under-developed capacity for cognitive empathy within this age range (Molnar-Szakacs, 2011). Finally, the mindful aspect of self-compassion may promote the deployment of effective emotion-regulation skills which can act as buffer against a variety of psychosocial stressors, as well as enable behaviours that are consistent with self-image (Thompson & Calkins, 1996).

Summary and Relevance to the *Peace by Piece* Program Development

Researchers interested in the applicability of mindfulness-based interventions for children have examined the various benefits of interventions targeted at parents only (e.g., Bögels et al., 2013; Coatsworth et al., 2010; Meppelink et al., 2016), children only (e.g., Flook et al., 2015; Lee et al., 2008; Semple et al., 2009; Vickery & Dorjee, 2015), as well as those designed for concurrent parent-child delivery (Haydicky et al., 2015; Haydicky et al., 2017; Salzberg, 1995). Preliminary research findings suggest that mindfulness training brings about positive changes in neurological activity, cognition, and behaviour (see Holzel et al., 2011b). However, while research to date has predominantly focused on healthy cohorts of children, meta-analytical findings have indicated that mindfulness-based interventions show most promise when they are deployed in clinical settings (Zoogman et al., 2015).

A number of models have been put forward to explain the mechanisms via which mindfulness training brings about ameliorative results, with improvements in self-regulatory capacities seemingly at their core (Holzel et al., 2011b; Teper et al., 2013). A co-regulatory model has recently been presented to explain how the process of change in concurrent parent-child mindfulness interventions is enhanced via mutual reinforcement of emotional regulation skills (Haydicky et al., 2017). An integrative model, from an ecological perspective, concurs that mindfulness-based interventions show most promise when they are delivered with children and parents concurrently; this model recognises the influence of parental emotion regulatory capacities to provide an environment whereby children can learn to self-regulate appropriately and safely (Harnett & Dawe, 2012).

It can also be theorised that self-compassion exerts benefits similarly to mindfulness, via promotion of self-acceptance, and enhanced emotional regulation (Holzel et al., 2011b). Research with adolescent populations led to a model proposing a reciprocal relationship between self-compassion and mindfulness, whereby an iterative process occurring between the two constructs promotes emotional wellbeing (Bluth & Blanton, 2014). However, while this theory is compelling, no studies to date have explored whether self-compassion can further augment the applicability and efficacy of mindfulness-based interventions in child populations.

The *Peace by Piece* program was both conceived and underpinned by the literature reviewed herein. The next section provides an overview of this program, including how its development drew from current knowledge in order to meet the identified needs of a vulnerable cohort of children.

3.4 Overview of the *Peace by Piece* Program

The *Peace by Piece* program is a highly structured 10-session group-therapy intervention. It was designed to enhance resilience and wellbeing in children under 12 years via the skills of mindfulness and self-compassion, and the involvement of an accompanying parent.

The program was designed with the ecological model in mind, emphasising the broader context of intervention delivery, and recognising members of the child's family and wider communities as important resources (Harnett & Dawe, 2012). Recent research highlighting the benefits of delivering mindfulness-based interventions concurrently with parents and children was also considered in the

group planning process and when determining delivery format (e.g., Haydicky et al., 2017). Thus, was no separation of parents and children during the intervention; they completed the program in its entirely together and received the same information and training as one another. Additional benefits of this format were two-fold; firstly, it was considered likely that the presence of the parent in the group would provide some level of comfort and familiarity for the child, who could otherwise be overwhelmed by the unfamiliar setting; secondly, it was envisaged that parental involvement would allow for the child to be better supported, reminded, and prompted to practice skills from the program with their child between sessions.

Theoretically, the justification for this type of group-therapy program was based on evolutionary theories, emphasising mindfulness and self-compassion as innate human capacities (e.g., Gilbert, 2015) that can be harnessed and enhanced through socialisation and/or formal training (Roeser & Eccles, 2015; see *Chapter 2*). The pilot program was developed for a clinical cohort of children, in keeping with the recent meta-analytical findings that mindfulness-based interventions offer most promise for youth in clinical settings (Zoogman et al., 2015).

3.5 Background to Program Inception

Khara Saunders and I first met whist studying the undergraduate psychology program at the University of Southern Queensland; we went on to complete our Honours year together, and eventually both graduated as Masters of Clinical Psychology. Our collegial relationship continued as our careers overlapped within the Child Protection field. We first began collaborating as psychologists whilst operating in our own private practices; we both continued to hold strong interest in working with vulnerable children and engaged with each other regularly with peer-supervision. The Positive Psychology movement was an influence that we both shared and drove our initial interests towards mindfulness-based practices, and, eventually compassion-based approaches. We participated in a number of professional development activities including workshops, retreats, as well as didactic which we both, separately, incorporated into our clinical work with children and adults. At a personal level, we both found that embracing the philosophies and practices of mindfulness and self-compassion an important part of our own parenting journeys, and continue to support the healthy trajectories of our own children's development.

Sadly, the capacity for self-compassion and mindfulness was often observed to be limited in the children we had worked with—both within the fields of child protection and in clinical private practice. Mindfulness-based group interventions targeting community populations of children were becoming abundant the literature; meanwhile, evidence regarding the efficacy for such programs in clinical populations of children was just emerging. Leaning on the work of Kristin Neff, attesting to the resilience promoting qualities of self-compassion, coupled with Gilbert's assertion that this is an innate human capacity, it became compelling to discover whether self-compassion, in addition to mindfulness, could be effectively targeted and enhanced to bolster resilience and improve wellbeing for vulnerable populations of children. Sourcing an existing program that incorporated both mindfulness and self-compassion for children under the age of 12 years was challenging, hence collaboration to develop the '*Peace by Piece*' program began. Our backgrounds in working with children and families gave us a keen awareness of the integral role that parents play in the heathy psychological development of their children. Our review of the literature, in addition to our participation in experiential mindfulness training, supported the potential for parental inclusion to enhance intervention efficacy, as well as reduce resistance. Thus, one of the founding concepts of the *Peace by Piece* program was the incorporation of each child's parent into every stage of the intervention.

In developing the *Peace by Piece* program, Khara and I brought together our knowledge and expertise of working in-depth with highly vulnerable families and children, delivering individual therapy and group-based mindfulness interventions in clinical and community settings, and our desire to be creative and innovative. As discussed, the motivation for development of this group program grew from an initial desire to apply mindfulness and self-compassion strategies to children who were either experiencing, or at risk of developing, mental health issues.

The specific activities comprising the 10-session intervention are detailed in a forthcoming section. Brainstorming of initial ideas came following detailed examination of the peer-reviewed published literature, a variety of treatment manuals, books, attendance at professional development workshops and lectures, as well as personal experiences. An initial outline of the program structure and sessions segments was prepared, and subsequently presented to a panel of experts. These experts included practicing clinical psychologists, psychologists with a specific

interest in child psychology, practitioners of mindfulness and self-compassion, and current researchers in the field. The panel provided feedback that assisted in the final structure of the program as well as the activities incorporated into each segment of the weekly sessions.

3.6 Final Program Structure and Format

The *Peace by Piece* program followed the same basic format and sequence of activities each week. Table 1 outlines a breakdown of the sequence of activities adopted for each session. A large, coloured, visual representation of this session format was displayed and explained to all participants during the first session. This was kept visible for all subsequent sessions for participants to refer back to (see Figure 10).

Table 1

Peace by Piece Weekly Session Format

Approx. Time	Session Segment	Outline of Activities
5 mins	Welcome with Peaceful Pause	• Warm welcome to participants • Group engage in a Peaceful Pause (brief meditation on the breath, checking-in)
10 mins	What's Up	• Brief recap of previous week • Opportunity for group participants to share any relevant experiences or insights • Theme for the week introduced • Hands-on group activity relevant to the theme e.g. mind-garden jar, 'weather' report
5 mins	Mindful Moving	• Mindful movement activity e.g. Hoberman sphere breathing, alien walking, basic yoga poses, mirror movement
10 mins	Bits about Brains	• Psychoeducation regarding the basic structure and function of the brain e.g. cool brain facts, fight or flight response, introduction to PFC, Amygdala and Hippocampus • Group questions and discussion encouraged
5 mins	Brain Break	
10 mins	Mini Mediators	• Quiet inner awareness activity • e.g. body scan, mindful breathing, mindful eating, rock the boat belly breathing
10 mins	Being your Own BFF	• Self-compassion activity e.g. how to give yourself a hug, kind self-talk, how we are all connected (finger-print tree), noticing helpful and unhelpful thoughts, self-care
5 mins	Journaling	• Free time for child to complete journal activities linked to week's theme. Colouring, writing. • Parents encouraged to engage with child
5 mins	Close with Peaceful Pause	• Peaceful Pause, emphasising loving kindness and gratitude. Children encouraged to guide the Peaceful Pause as they become familiar with it • Home activities suggested in take-home journal, reinforcing and extending the session activities
10 mins	Time-In	• Free, unstructured time where parents are encouraged to read, connect, talk, share with their child before they leave.

Figure 10. Visual representation of the Peace by Piece session format.

3.6.1 Themes. Each week was themed in an effort to increase interest and enhance learning for the young participant pool. Props were used to decorate the room, and the children were encouraged to guess the theme prior to its reveal by the facilitators. Examples of themes were Nature, Space, Superheros, and The Body. A full list of the themes for each of the 10 sessions can be found in Appendix A.

3.6.2 Peaceful pause. A core practice of this group intervention was the Peaceful Pause, and each session started and finished with this activity. Peaceful Pause is a brief meditation whereby participants are invited to sit quietly, in a circle on the floor, and guided by the facilitator to pause, breathe, and 'check-in' with their inner and outer worlds, ("*take a moment to notice what is going on inside of you….and outside...*"). A visual cue was used to reinforce the concept of the Peaceful Pause: a hand in the 'peace sign' was modelled by the facilitators, and a 3D statue of a hand in the peace sign was also placed in the middle of the circle. As the weeks progressed, the duration of the Peaceful Pause was slowly extended as the participants' capacity to sit in mindful meditation improved. This core-concept was repeatedly woven into any areas of the program, and was also encouraged to be used at home. An introduction to the Peaceful pause, as delivered by the facilitators, is provided in Figure 11.

Introduction to the Peaceful Pause (Week 1)

This week's theme is all about Peace, Breathing, and our Hands. Today we will be showing you something we like to call a "Peaceful Pause", and we will be practicing it every week in the group. It can also be used outside of the group at home, school and other places.

So, let's put our pointer and middle fingers up in the air, palms facing out – does anyone know what this symbol means? It's known as the 'peace sign'. Have you seen or heard of the peace sign before? This hand sign is actually recognised all around the world to mean peace!

Now, when we make this sign our two fingers also look like a "pause" symbol - like the II pause button on your remote control. What happens when you press the pause button? Things become still and quiet for a few moments… so we use our peace sign fingers to remind us to Pause and be Still!

And when we pause "peacefully", we first remember to pause and be still, and then to breathe (which we will be learning more about how to do) ... we pause and breathe. We simply focus on breathing in, and out, and in, and out. And we continue to focus on our breathing for as long as we need to. So, we pause, and be still, and we breathe.

Over the next few weeks we will be learning more about what we can do with the Peaceful Pause - like once we have remembered to pause and breathe, we can take a look at what is happening inside of us (like our thoughts and our feelings and our body sensations) as well as what is happening outside of us (like in our environment or with other people). So, we will learn how to Pause, Breathe, and Notice what is going on inside and outside of us. We do this in a peaceful way, a calm way, a friendly and kind way. We will learn more about why this helps us later… for now let's practice!

Before we start, there is an important thing to remember... and that is that there is no right or wrong way to do this..... so, try not to get caught up in worried thoughts or feelings about not doing it right.... just give it a go. It's as simple as it sounds, and that means that however you are doing it, you are doing it right. And I will guide you through it to start with. Ok let's go....

Everybody get in a comfortable position, wherever you are, and using your hands make our Peaceful Pause sign, and as you do so remember to Pause, and be Still..... you can close your eyes if you want to (I'll keep mine open so you are safe to do so). And now we will focus on our breath.... just breathe normally… and just notice how you are breathing. Notice everything about your breath… how your breath starts by going in your nostrils or mouth and then notice as it comes out of your body through your nostrils or mouth. And if your mind has wandered off, thinking about something else maybe, that's ok ... did you know that's normal and what minds do!! Whenever you notice it has wandered off, just gently bring your focus back to your breathing... breathing in and breathing out. When we breathe in we breathe in peace and calm. Breathe out. And then breathe in peace and calm, letting the feeling of peacefulness go all through our bodies. Can you feel your breath in other parts of your body, like in your belly maybe? Feel your belly breathing in and out. Up and down. Well done everyone. Now when you are ready we can relax our hands, open our eyes if they were shut. And bring your peacefulness and calmness back to join the group.

Well done everyone! How was that for you? It's ok if you found it hard. This gets easier and easier with practice. Our minds wander all over the place. And the more we practice the easier it gets to calm our minds and our bodies.

Figure 11. Introduction to the Peaceful Pause, provided in Session 1.

3.6.3 What's up. Immediately after the Peaceful Pause, a hands-on activity in line with the week's theme was used to open each session, and encourage engagement. For example, in week two, the theme of 'nature' was reinforced via each child constructing a 'mind-garden', using a mason jar, different types of soil, coloured rocks, and a succulent cutting. The analogy of tending to your mind like a garden was utilised to introduce the concepts of self-kindness and self-care.

3.6.4 Mindful moving. The third section of each session was dedicated to Mindful Moving. Different physical activities were chosen to link the week's theme with specific body movements, with the aim of enhancing mind-body awareness. Examples activities included mindfully walking like an alien ("*imagine you have never waked on Earth before*"), and mirror moving (whereby the child and parent take turns to 'lead' the other person's movements so they appear in unison).

3.6.5 Bits about brains. The aim of the third section was to deliver psychoeducation to participants in regards to the different parts and functions of their brain (in child-friendly language). For example, the amygdala was explained as the brain's guard dog, who can occasionally get "off the chain", causing over-the-top reactions. Meanwhile, the prefrontal cortex was introduced as the PFC, who likes to be in control, and helps to make good decisions. This segment of the intervention enabled the creation of a shared language for children and their parents to learn about and understand how their brain works.

3.6.6 Being your own BFF. Following a five-minute Brain Break, the group was reconvened for the section entitled Being your own BFF (BFF colloquially stands for 'best friend forever'), a child-friendly phrase chosen to introduce the concept of self-compassion. This section was weighted more heavily (in duration and content) and often incorporated a number of activities designed to highlight, enhance and reinforce self-kindness, common humanity, and mindfulness during challenging times (as described by Neff, 2003a). For example, a finger-print tree was created in collaboration with all the other group participants to emphasise how we are all connected (i.e., part of a common humanity). Another exercise, emphasising self-kindness, explored experientially the benefits of giving yourself a hug when you are going through a difficult time. To teach and demonstrate mindfulness of emotions, various exercises were designed to improve participants' mind-body awareness, such as how to take an internal 'weather report'.

3.6.7 Mini-mediators. The seventh section of the session was dedicated to mindfulness meditation. Exercises included the body scan, loving-kindness meditation, the self-compassion break, and guided imagery exercises. Over the weeks, children and parents were invited to explore different postures for meditation (e.g., seated, standing, lying down).

3.6.8 Journaling. Immediately after meditation a small booklet of printed activities was distributed to each child. The simple activities reinforced and

extended the session's theme. Children were encouraged to complete theses journaling activities with their parent. This was a relaxed, unstructured time whereby participants could move around the room, talk amongst themselves, draw and colour-in (for an example booklet, see Appendix B).

3.6.9 Peaceful Pause. To finish each session, the group was brought back together to do a final Peaceful Pause, with the use of a bell or other auditory stimulus to signal the beginning and end of this short meditation. Children were encouraged to take turns each week to be the person to strike the bell, and/or guide this closing meditation.

3.6.10 Time-in. Families were invited to stay to have some unstructured time-in with their child. Facilitators brought a variety of books and colouring activities to encourage positive, relaxed parent-child interactions. This time was optional and participation rates varied from week to week.

3.6.11 Home activities. Take-home journals, reinforcing the week's theme and learnings, were provided to each child, containing optional readings and activities to further encourage core-skill practice and development (for an example journal, see Appendix C). Hand-out information was also provided to parents in keeping with each week's topic and included content such as excepts from journal articles and book chapters, as well as suggestions for further reading and individual exercises.

The following Chapter details the methodology, results and discussion of the quantitative and qualitative findings emerging from the pilot Peace by Peace program.

CHAPTER 4

STUDY 1: A FEASIBILITY STUDY OF A MINDFULNESS AND SELF-COMPASSION GROUP THERAPY INTERVENTION FOR CHILDREN REFERRED FOR PSYCHOLOGICAL THERAPY

4.1 Aim of Study 1

The broad aim of the present study was to address the question of whether self-compassion, in addition to mindfulness, can be targeted successfully via a group therapy approach, to improve resilience and psychosocial wellbeing for primary-aged children in a clinical setting. The present study aimed to extend the existing body of knowledge via exploration of the feasibility (including acceptability and efficacy) of the *Peace by Piece* group therapy intervention, a program specifically designed to promote self-compassion and mindfulness skills in primary-aged children. A major question influencing this study was that of ascertaining the personal experience of participants completing the *Peace by Piece* program. Given that this was a novel intervention under investigation of feasibility, it was considered crucial that participants' personal experiences were represented.

4.1.1 Research questions. Study 1 aimed to address the first three Research Questions posed at the commencement of this thesis:

RQ 1. How do children under 12 years conceptualise self-compassion and mindfulness?

RQ 2. How feasible and acceptable is an intervention designed to target self-compassion with a clinical group of children under 12 years?

RQ 3. Can wellbeing and resilience be enhanced in a clinical group of children via participation in a group-therapy program targeting self-compassion and mindfulness?

In keeping with the exploratory nature of this research, and due to the scarcity of prior research in this area research questions were posed in leu of specific hypotheses.

4.1.2 Research design. To address these exploratory research questions, a mixed-methods design was adopted, employing a combination of quantitative and qualitative approaches (see flow chart, Figure 12). Utilising the strengths of both qualitative and quantitative research, mixed method designs are preferable when deeper insights and an expanded understanding of research problems is required (Creswell, 2009). A concurrent embedded strategy was employed. This strategy

was deemed appropriate as it enabled the quantitative data to address questions relating to the intervention outcomes, while the qualitative data allowed for a deeper exploration of the individuals' experiences during and following the intervention (Creswell, 2009). Thus, data sets were merged for an integrative analysis. This also enabled triangulation of qualitative and quantitative data sets to occur, thus improving reliability and validity.

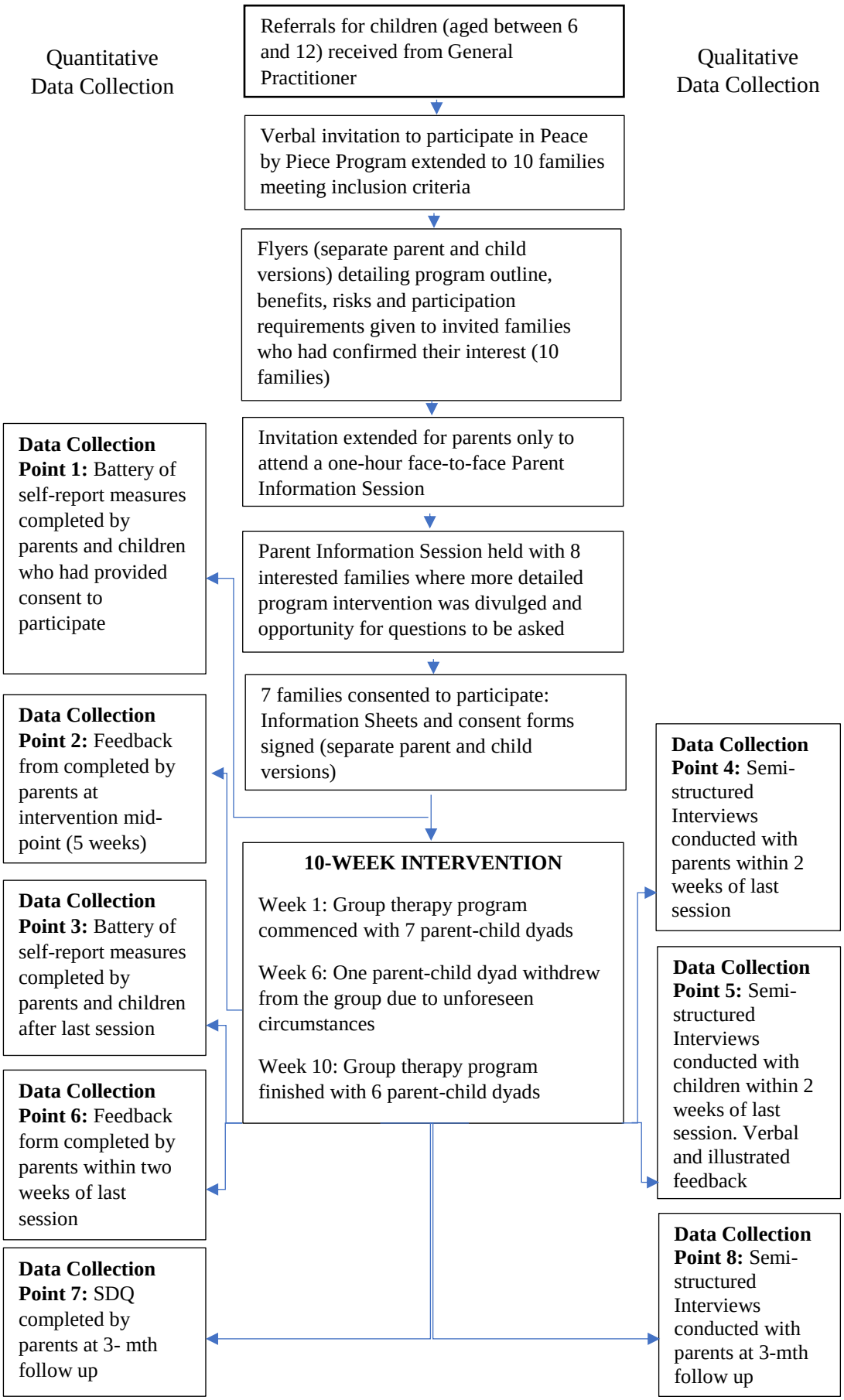


Figure 12. Flow diagram outlining Study 1 procedure and data collection methods

4.1.3 Participants. This uncontrolled pilot study recruited participants via convenience sampling methods. Child participants for the *Peace by Piece* program had been previously referred to a private clinic for clinical psychological therapy by their General Practitioner (GP). Inclusion criteria for selection for invitation to the program were: (1) the child was aged 6-11 years old; (2) the child was experiencing, or at risk of experiencing, a mood or anxiety disorder, as determined initially via referral information provided by the child's GP, and a structured diagnostic interview confirming the presence of clinically significant symptoms; and (3) the child was residing at home with at least one parent who would be available to attend the program with the child. The only exclusion criteria were that the child had no history of highly aggressive behaviour, as this could jeopardise group cohesion and participant safety. Based on these criteria, a verbal invitation to participate in the *Peace by Piece* program was extended to 10 families. These families were supplied with flyers detailing the program outline, proposed benefits and risks, and participation requirements. Separate child and parent versions of the flyer were supplied (see Appendix D and E).

Once each family had confirmed their initial interest in the program, the children's referring GPs were contacted via letter to ascertain their agreement that the referred child and family would be suitable for inclusion in the pilot group therapy program. All children were provided the option of commencing individual psychotherapy sessions (as per their initial referral) following their participation in the program. GPs were also supplied with a flyer detailing the program outline, proposed benefits and risks, and participation requirements, and invited to contact the facilitating psychologists if further information was required. Of the 10 families invited, 8 chose to attend a 1-hour Parent Information Session to learn more about the program. Of these, seven families agreed to participate in the group therapy program. One parent-child dyad withdrew after week six due to unforeseen changes in their circumstances. Therefore 6 parent-child dyads completed the 10-week program in its entirety.

4.1.4 Procedure and design. The study was granted approval by the Human Ethics Committee of the University of Southern Queensland, approval number H16REA008.

4.1.4.1 Information session. The Parent Information Session was held two-weeks prior to the group's proposed start date and was attended by nine parents from eight families. This session was facilitated by both authors of the *Peace by Piece* program. The core concepts of the program—mindfulness, self-compassion, resilience and wellbeing—were discussed in detail, in addition to the literature and research findings underpinning the program's design and predicted benefits of participation. Ample question and answer-time was provided at the end of the session, including a discussion as to the times, days and dates that the group should be run. Parents were informed that the *Peace by Piece* was a pilot program and therefore no data existed as to the programs' efficacy. Parents were notified that all data collected (from themselves and their child) would be deidentified prior to its analyses and eventual incorporation into a PhD research project, following appropriate ethical guidelines for collection, storage and (eventual) destruction. To this end, a comprehensive Information Sheet was provided to the parents, along with a condensed, child-friendly version to take home to their child (see Appendix F). Consent forms for parents and assent forms for children were also provided for perusal, to be returned prior to the group's start date (see Appendix G). Parents were advised of their right to withdraw their participation at any time.

4.1.4.2 Treatment intervention overview. Each one-and-a-half-hour therapy session was held at a private psychology clinic on a Sunday afternoon from 2.00pm to 3.30pm. This time slot was selected as preferable by the majority of participating families as it did not clash with school, after-school activities or weekend sport. Each session was delivered and facilitated by the two authors of the program. The facilitators both engaged in weekly clinical supervision to discuss and reflect on the group process and individual participant progress.

4.1.5 Data collection overview. Data collection methods and collection time-points are outlined in Figure 12. The week prior to the first session of the group program commencing, parent and child participants were administered a battery of self-report measures (specific measures described below). On completion of the 10 sessions, child and parent participants were each re-administered the battery of self-report measures to facilitate pre and post-test analyses. Feedback forms were also completed by each parent, mid-way thorough the intervention (week 5) and following the last session (week 10). Qualitative data was collected from

each parent and child individually, via 30-minute semi-structured interviews conducted by the principal author. These interviews took place within two weeks of the last group therapy session. Finally, follow-up data was collected 12-months after program completion from each of the parents via semi-structured interview.

4.1.5.1 Quantitative data. A battery of self-report measures was utilised to obtain pre- and post-intervention data regarding the variables of interest, in order to address the research questions pertaining to intervention efficacy and program acceptability. When selecting appropriate measures, preference was given to concise, freely available instruments with published reliability and validity data relevant to the age-range of this sample.

4.1.5.2 Psychosocial wellbeing. The Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) was developed to measure both psychosocial problems and strengths in children aged 3–16 years via a multi-informant approach. Separate scales allow for informants (i.e., parents and/or teachers) to report on the difficulties and strengths of children aged between 3-16 years old, whereas youths aged 11–16 are able to self-report their difficulties and strengths. The measure consists of 25 items, formulated as statements. Example items include "*other people my age generally like me*" and "*I am often accused of lying and cheating*". Answers are elicited on the basis of how true the statement has been over the last six-months, on a three-point Likert scale (*not true, somewhat true, certainly true*). The psychometric properties of the SDQ for primary-aged children have been well established (see Stone, Otten, Engels, Vermlust, & Jansens, 2010 for a review). The SDQ was also one of the only measures to receive four 'A' ratings in a recent review of the validity and reliability of child and adolescent measures of psychosocial wellbeing (Tsang et al., 2012).

4.1.5.3 Resilience. The 12-item Child and Youth Resilience Measure (CYRM-12; Liebenberg, Ungar, & LeBlanc, 2013) was developed as a shortened version of the 28-item CYRM and designed to measure overall resilience, as well as three subcategories found to influence resilience processes: traits of the individual, relationships with caregivers, and contextual factors facilitating a sense of belonging. Thus, it is a measure consistent with the ecological model of resilience adopted by this study. The measure has two versions, one for young children (aged 5-9), and another for youth (aged 10-23). A separate scale is completed by someone who

knows the child/youth well, such as a parent or teacher ('Person Most Knowledgeable'). The self-report scale consists of 12 items phrased as statements. Example items include "*I have people I look up to*" and "*my friends stand by me during difficult times*". Answers are provided on either a three or five-point Likert scale, depending on the researcher's preference, with scores provided based on how well individuals believe each statement describes them (*not at all, a little, somewhat, quite a bit, a lot*). The CYRM has been found to be a reliable and valid self-report instrument with adequate psychometric properties (Liebenberg et al., 2012). Developers of the 12-item version of this scale reported Cronbach's alpha was satisfactory (.840).

4.1.5.4 Anxiety. The State Trait Anxiety Inventory for Children (STAIC; Spielberger, 1973) was initially developed to assist in the assessment of anxiety in primary-aged children. It consists of two distinct inventories: The State-Anxiety scale measures present-state and situation-linked anxiety, while the Trait-Anxiety scale detects temporally stable anxiety across situations. For the purposes of this research, only the Trait-Anxiety scale was utilised as this scale can detect individual differences in anxiety proneness, as well as measure the effectiveness of a clinical treatment procedure (Spielberger, 1973), consistent with the aims of the study. The Trait-Anxiety scale is comprised of 20 questions measuring the chronic symptom of anxiety. Example questions include "*I worry about making mistakes*" and "*my heart beats fast*". All items are answered on a three-point Likert scale, with individuals indicating how true the statement is for them (*hardly-ever, or sometimes, or often true*). While the STAIC was first developed in the 1970s, a recent review of traditional and more modern measures of childhood anxiety found that the STAIC demonstrated good internal consistency (Cronbach's alpha = 0.91) and performed well on tests of convergent and discriminant validity (Muris, Merckelbach, Ollendick, King, & Bogie, 2002).

4.1.5.5 Depression. The CES-DC is a 20-item instrument designed to measure the frequency of self-reported depressive symptoms in children and adolescents between 6-17 years (Weissman et al., 1980). The items consist of short, simple statements regarding the emotional, cognitive and behaviour-related components of depression, such as "*I felt down and unhappy*" and "*It was hard to get started doing things*". All items are evaluated on a four-point Likert scale in

relation to how frequently they have been experienced during the last week (*not at all, a little, some, a lot*). Test-retest reliability, internal consistency, and concurrent validity of the CES-DC have been reported as adequate (Faulstich, Carey, Ruggiero, Enyart, & Gresham, 1986). More recently, the CES-DC was found to have good factorial validity and stability across age groups, making it an acceptable self-report measure for screening purposes (Barkmann, Erhart, Schulte-Markwort, & Group, 2008).

4.1.5.6 Mindfulness. No validated measure of mindfulness currently exists for children under 10 years, and therefore qualitative data was relied upon. Parental levels of mindfulness were measured via the Mindful Attention Awareness Scale (MASS), 15-item scale which has demonstrated strong psychometric properties: Cronbach's alpha levels range .80 to .90, with high test-retest reliability, discriminant and convergent validity reported in a variety of adult populations (Brown & Ryan, 2003; Carlson & Brown, 2005).

4.1.5.7 Self-Compassion. No adequately validated measure of self-compassion currently exists for children under 10 years, and therefore qualitative data was relied upon. Parental levels of self-compassion were measured via the Self-Compassion Scale, Short Form (SCS-SF; Raes et al., 2011). This 12-item scale has demonstrated good validity and reliability in non-clinical samples; the SCS-SF correlates very strongly with the 26-item SCS when examining total scores (Raes et al., 2011).

4.1.5.8 Program satisfaction. In addition to the standardised self-report measures, supplemental quantitative information was obtained from the parent participants via feedback forms completed mid-way and at the end of the intervention (see Appendix H). Questions were designed to gauge satisfaction with the intervention's content, duration, format and delivery.

4.1.6 Qualitative data collection. The exploratory nature of this study necessitated qualitative data collection. This enabled access to the richer, deeper information that was required to fully assess the feasibility of this novel intervention. Qualitative data sets were triangulated with quantitative data analyses in order to address some of the more specific research questions.

To this end, semi-structured interviews were conducted individually with participants (child and parent) within two weeks of the last-session of the group-

therapy intervention. An additional follow-up interview was conducted with each of the parents 12-months post-intervention completion. All interviews were audio recorded with permission and transcribed at a later date to facilitate analyses. In keeping with the phenomenological approach adopted by this research, the interviews were comprised of a number of open-ended questions, without a precise order so as to facilitate the gathering of free-flowing information and the exploration of emergent themes and ideas. When designing the semi-structured interview questions, the broad aim of the empirical phenomenological model was adopted:

> The aim is to determine what an experience means for the persons who have had the experience and are able to provide a comprehensive description of it. From the individual descriptions general or universal meanings are derived, in other words the essences or structures of the experience. (Moustakas, 1994, p. 12)

4.1.6.1 Child interviews. Interviews with each of the participating children were held individually at the same location as the group therapy program. Interviews were conducted by one of the psychologists who had facilitated the program, to foster warmth and familiarity so as to put the children at ease. At the commencement of their interview, each child was guided through a Peaceful Pause (i.e., brief mindfulness meditation), to encourage focus and as a means of introducing a discussion of the group program. Children were provided with pens and paper so that they could also provide illustrated responses to the questions posed, if desired. Example questions were: *"What comes to mind when I say mindfulness? (Can you draw me a picture of that?)"; "What comes to mind when I say being your own BFF? (Can you draw me a picture of that?)"; "What has changed since you finished the group? What has stayed the same?"*. Interview duration ranged from 15-25 minutes per child.

4.1.6.2 Parent interviews. Similarly, semi-structured parent interviews were conducted individually and facilitated by one of the facilitating psychologists. Questions were directed to elicit information about their own, as well as their child's, experiences of the intervention. Example questions included: *"What parts of the group did you find most beneficial?"; "What parts do you see being most beneficial to your child?"; "What has changed since you and your child finished the group? What has stayed the same?"; "How confident do you feel in regards to*

understanding the core concepts of the intervention?"; "What ideas, skills or practices (if any) have you used outside of the group?" Interview duration ranged from 20- 35 minutes per parent.

4.1.6.3 Satisfaction and feedback surveys. Supplemental qualitative information was also obtained from the parent participants via open-ended questions posed on the feedback forms completed mid-way and at the end of the intervention (see Appendix H).

4.2 Results

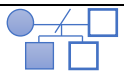
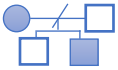
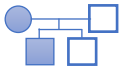
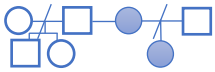
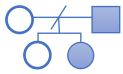
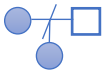
4.2.1 Participation and attrition. Of the 10 families invited to participate in the group-therapy program, 8 chose to attend the Parent Information session, and 7 went on to sign informed consent and commence the group therapy intervention. At week six, one child and her mother had to leave the program due to unforeseen changes in their personal circumstances. Therefore, in total, 6 child-parent dyads completed the 10-week pilot *Peace by Piece* group-therapy intervention. This represented an attrition rate of 14%.

4.2.2 Demographics of intervention completers. Three of the children who completed the program were girls, and three were boys. Ages of the children ranged from 7 to 9 years (mean age 7.9). All children attended a State Primary school in the Toowoomba region. None of the child participants had received mindfulness or self-compassion therapy or training prior to commencing the group program. In terms of family composition, two children were from single parent families, and four were from two-parent families (see Table 2). All children and parents identified as Caucasian-Australian; one parent-child dyad also identified as being of Aboriginal decent.

Of the six accompanying parents/caregivers, all were biological parents; one was a father and five were mothers. All parents had graduated at least high school, and two had tertiary qualifications. Two of the parents had received prior education and brief training in mindfulness; one in the context of occupational professional development, the other as part of individual psychotherapy. Key demographic information regarding the participants is provided in Table 2.

Table 2

Key Participant Demographic Information at Commencement of Program

Dyad	Participant Names[#]		Child Age	Referring Issue	CES-DS Score*	STAIC T Anxiety**	Family Composition
	Child	Parent					
1	Clive	Veronica	9	Depressed mood	15	55	
2	Ricky	Victoria	7	Anxiety	50	70	
3	Breanna	David	9	Anxiety	20	63	
4	Christopher	Kristy	8	Anxiety	19	66	
5	Annie	Karen	7	Depressed mood, anxiety	29	58	
6	Eleanor	Dylan	8	Depressed mood, anxiety	28	51	
7	*Charlie-Rose*	*Charlotte*	*7*	Depressed mood, anxiety	*32*	*70*	

Note. [#]Participant names are pseudonyms. Shaded boxes in Family Composition indicate the child and parent who attended the program. Italicised family did not complete entire program. *Centre for Epidemiologic Studies Depression Scale for Children. Scores >14 indicate clinically significant depressive symptoms ** State-Trait Anxiety Inventory for Children -Trait Anxiety Scale. Scores > 60 indicate clinically significant anxiety symptoms

4.2.3 Quantitative data screening. All quantitative data analyses obtained via the battery of self-report measures completed by child and parent participants were conducted utilising SPSS v.25 software. As skewness and kurtosis values for the majority of variables exceeded the recommended +/-2 cut-off points (George & Mallery, 2010), a non-parametric test was selected to analyse the data collected from self-report measures pre- and post-completion of the *Peace by Piece* program, and at 12-month follow-up.

4.2.4 Quantitative data analyses. The Wilcoxon signed-rank test revealed that from pre-test to post test, there was a significant improvement across all psychosocial wellbeing indicators, as measured utilising the SDQ (parent report), $p < .05$, which was maintained at 12-month follow-up. In relation to resilience, there

was no significant difference found between pre- and post-test on the child self-report. However, there was a significant improvement from pre-test to post-test on the parent-reported measure of child's resilience. There was also a significant reduction in children's self-reported symptoms of anxiety and depression between pre- and post-test.

Table 3 summarises the results with *p* values and effect sizes (*r*). Large effect sizes were found. Strength of effect size (*r*) was determined using Cohen's (1988) thresholds of small (*r* = .10), medium (*r* = .30), large (*r* = .50), and very large (*r* = .70). Results from Wilcoxen signed-rank tests revealed that from pre-test to post test, there was a significant improvement in parents' self-reported indicators of mindfulness. Meanwhile, there was no significant improvement in parents' self-reported indicators of self-compassion. Table 4 summarises the results with *p* values and effect sizes (*r*).

Table 3

Pre-Test to Post-Test Results from Wilcoxon Signed Rank Test

Measure	Pre-test – Post-test	Sig. (1-tail; *p)*	Effect Size (*r*)	Pre-test – Follow up	Sig. (1-tail; *p*)	Effect Size (*r*)
SDQ parent report						
Total	2.21	.01*	0.64	2.20	.01*	0.64
Emotional	2.03	.02*	0.59	2.06	.02*	0.60
Conduct	1.84	.03*	0.53	2.03	.02*	0.59
Hyperactivity	2.23	.01*	0.64	2.23	.01*	0.64
Peer Problems	2.03	.04*	0.58	2.21	.01*	0.64
Pro-Social	1.84	.03*	0.53	1.83	.03*	0.53
Externalising	2.21	.01*	0.64	2.22	.01*	0.64
Internalising	2.20	.01*	0.64	2.21	.01*	0.64
Impact	2.00	.02*	0.58	2.21	.01*	0.64
CYRM						
Child report	0.96	.17	0.28	-	-	-
CYRM						
Parent report	2.03	.02*	0.59	-	-	-
STAIC – Trait	2.00	.02*	0.58	-	-	-
CES–DC	2.02	.02*	0.58	-	-	-

Note. SDQ = Strengths and Difficulties Questionnaire. CYRM = Child and Youth Resilience Measure. STAIC = State-Trait Anxiety Inventory for Children – Trait Anxiety Scale. CES-DC = Centre for Epidemiological Studies Depression Scale for Children. *Correlation is significant, $p < .05$, one-tailed.

Table 4

Pre-Test to Post-Test Results from Wilcoxon Signed Rank Test of Parents' Self-Compassion and Mindfulness

Measure	Pre-test – Post-test	Significance (1-tail; *p)*	Effect Size (*r*)
Self-Compassion Scale, Short Form	2.21	.12	NA
Mindful Attention Awareness Scale	2.03	.03*	0.90

* Correlation is significant, $p < .05$, one-tailed

4.2.5 Results obtained from satisfaction and feedback survey. In order to analyse the quantitative data collected via the satisfaction and feedback surveys, the percentage of participants agreeing or strongly agreeing with each statement were collated. Results are shown in Table 5.

Table 5

Peace by Piece Intervention Satisfaction Ratings

Question	% Agree or Strongly Agree
I am satisfied with the program overall	100%
As a parent, I have understood the information presented in the group	100%
My child enjoyed coming to the group	80%
My child participated well in the group	80%
My child understood the information presented in the group	100%
I felt supported and encouraged to implement the program learnings	100%
I feel confident to implement the learnings from the program	100%
The facilitators communicated well and were engaging	100%
I would recommend the *Peace by Piece* program to others	100%
The group was beneficial to myself and my child	100%
I have seen progress in my child since finishing the group	80%
I have seen progress in myself since finishing the group	100%
My child used the home journals and found them useful and fun	100%
The overall format of group worked well	100%
The use of themes and linked activities/resources was helpful	100%
Parent information evening was beneficial	100%
Length/duration of sessions was appropriate for the age group	80%
Location of the group was satisfactory	100%

4.2.6 Qualitative data analyses. Semi-structured interviews completed with the children and parents were transcribed prior to a thematic analysis being conducted with the aid of QRS International's NVivo 12 qualitative data analysis software. Themes were identified following the procedure outlined by Braun and Clarke (2006) for conducting thematic analyses. Firstly, familiarity with the data was achieved via careful reading, and re-reading, of verbatim transcripts of all interviews. This facilitated the generation of initial codes and potential themes, which were then modified and collapsed as review and re-reviews of the data were conducted. Data coded according to potential themes was reviewed in order to identify salient meaning (i.e. words, phrases or sentences that conveyed a singular concept), and then checked for congruence. An inductive approach was used to identify emergent patterns within the data. Themes were re-reviewed, prior to final definition and naming. To reduce bias and enhance reliability, themes were reviewed by experts in mindfulness and self-compassion to ensure congruency with current theory and research. On completion of the thematic analysis, results were considered in light of the literature previously reviewed and checked for consistency and discrepancy with existing theory.107

4.2.6.1 Theme identification and assembly. Thematic analysis of full transcripts of all child and parent interviews and feedback forms, led to the identification of nine unique themes. For the purposes of this study, to be considered for inclusion as a theme, topics had to have convergence from at least two of the children and/or two of the parents (i.e., 40%), and hold relevance to the research questions. The following themes were identified; (1) self-compassion as self-kindness; (2) mindfulness as calmness; (3) improved emotional regulation; (4) improved self-compassion; (5) improved sense of wellbeing; (6) improved resilience; (7) improved parent-child relationship; (8) improved ability to cope with the challenges of parenting; and (9) barriers to implementing change. These are now discussed in detail; selected quotations have been included that convey the essence of each theme.

(1) *Self-compassion as self-kindness.* Analysis of the responses provided by children during interview revealed that most conceptualised self-compassion as treating themselves with love and kindness; Breanna described self-compassion as simply "giving kindness to yourself". A range of alternative ideas were identified;

Clive associated self-compassion with making good choices about his health and lifestyle, *"being healthy; sleep; eat healthy stuff and that",* as well prioritising self-care, *"looking after yourself".* Meanwhile Annie identified that self-compassion could include providing herself with physical comfort when distressed: "*giving myself a hug, cuddling myself*". Annie provided an eloquent description of her other thoughts on self-compassion, including when it could come in useful:

> *You talk to yourself and you say nice words to yourself. You say nice words to your heart…and you also say nice words to your brain…when you're feeling sad and when you're feeling cranky*

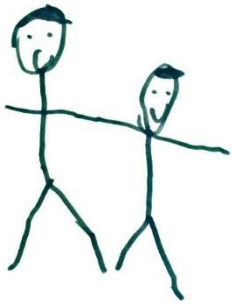
The children also provided visual representations of what came to mind when they thought about self-compassion and what it meant to them. These are presented in Figure 13.

"*I give my brain and my body nice words*" – Annie

"*Giving yourself a hug*" – Eleanor

"Knowing what you are good at… like I'm good at sharing" – Breanna

"*Being nice … like to a friend"* – Ricky



"treating your friends kindly" – Christopher

"*Staying healthy… like me playing rugby"* – Clive

Figure 13. Visual and verbal representations of self-compassion provided by children

(2) *Mindfulness as peace and calmness.* Analyses of responses provided during interview revealed that children conceptualised mindfulness in a range of ways. Mostly, children saw mindfulness as associated with peacefulness, and calm; for example, Clive described mindfulness as "*something you do with your mind…to*

be calm". Christopher associated mindfulness with the peaceful pause. Meanwhile, for Eleanor, thinking about mindfulness elicited the insight that thoughts and feelings are impermanent "*[Feelings], well they're like visitors".* Breanna recalled how "*Eating mindfully… makes you enjoy it more",* while Ricky associated mindfulness with "*Feeling happy…being mindful [is] when you're outside when you're playing".* Eleanor articulated her understanding of mindfulness in more detail*:*

> *When you meditate it's kind of like you've got a little bottle here with water and little sparkles in it. All the sparkles are like our thoughts, and when you're really angry they're buzzing around and that's sort of what we're like, but when they calm down they sort of sink to the bottom and that's when we're calm.*

Visual representations of mindfulness provided by the children during interview are displayed in Figure 14.

"*Eating strawberries mindfully makes them taste better*" – Breanna

"*Mindfulness… helps you love more*" – Annie

"being outside [helps you be mindful]" – Ricky

"*Mindfulness… makes you strong"* – Ricky

"[mindfulness is] doing a peaceful pause" – Christopher

"*[mindfulness] helps you calm your angry thoughts"* – Eleanor

Figure 14. Visual representations of mindfulness provided by children

(3) *Improved emotional regulation.* A particularly prevalent theme emerging from analysis of the parent interview data was improvements in the child's capacity

to regulate their emotions, usually evidenced by a reduction in the intensity and frequency of emotional outbursts. For example, Clive's mother reported that her son *"doesn't get to such an emotional state, like he might still be upset or a bit angry, but there's no tears or, whereas in the past, you know he probably would cry more…he's just not as emotional or reacting quite as severe yeah, to the extremes".* Annie's mother commented, "*she's not as emotional…like before you just had to look at her the wrong way and she'd have a mini breakdown. So, she's not like that as much anymore. She still has that occasionally, but we all do… she's a lot more balanced I think now*. Annie's mother also noted that her daughter had been less emotionally labile, *"she's not so agitated all the time, she's not so – what's the best way to put it, bitchy. I think is the best way to put it. She just seems a lot calmer within herself".* Similarly, Eleanor's father noted that his daughter had "*learnt to settle [herself] down".* Christopher's mother noted a similar improvement in the reactivity of her son *"I think when we first started [the program] there was like a whole lot of outbursts and "I hate you" and all those sorts of things, where we don't really experience that at all".*

In regards to the specific strategies or tools that enabled these improvements in emotion-regulation, most parents concurred that the Peaceful Pause was useful. Annie's mother commented "*if we can get her before she gets to that point [of extreme emotion] the peaceful pause helpful…. I found it useful to calm her when she gets in one of those moods; which I'm happy to say they're getting less and less thank goodness".* Breanna's father also indicated that he used similar strategies to assist his daughter to regulate her emotions: "*I do some breathing with her when she gets to the point where she can't breathe just to try to get her to breathe, so I've found that helps and of course the peaceful pause as well".* Eleanor's father noted that he had been encouraging his daughter to "*just take that breather, to not be thinking about things and worry, I notice her anxiety has decreased somewhat…. She's gained more confidence".* Ricky's mother agreed that the Peaceful Pause was useful: "*Oh the peaceful pause is [most beneficial], just like of a night, you know getting to sleep, just to loosen up*". Similarly, Clive's mother noted that the Peaceful Pause provided a convenient shared language or verbal prompt for her son: "*If he gets angry or just all over the shop, like I'll just say you know "Peaceful pause" and stop and breathe… it helps definitely*". She also noted using the techniques in a

reflective way: "*You know if one son might react to something, I'll say "did you think before you spoke then or did you take a breath before you reacted?", like you know".*

Reports from the12-month follow-up interviews suggested that the improvements in emotional regulation had been maintained; "*Annie does a lot better when things don't go her way… she doesn't get as upset as quickly as she used to, or as much".* Meanwhile, Clive's mother commented that her son "*is not as emotional or sensitive… grown in confidence".* Ricky's mother stated that "*he doesn't react as much as he used to, he is mindful of other people and what they might have going on".* Furthermore, she had noticed that her son "*has learnt how to calm down, relax*". Breanna's father noted that his daughter is *"more understanding of feelings…can discuss how she is feeling*". Meanwhile, Annie's mother noted that she "*calms down a lot easier… she used to get so worked up that she couldn't breathe… she doesn't do that anymore*".

The interviews conducted at 12-month follow-up also revealed that core concepts from the group intervention were still being utilised as a means of promoting more effective emotion-regulation. Annie's mother commented that Annie "*uses the Peaceful Pause whenever she is upset".* Meanwhile, Clive's mother informed that her son *"uses breathing strategies… positive self-talk, relaxation at night-time*". Ricky's mother similarly noted that her son "*uses the guided meditations at night-time*", while Christopher's mother stated that Christopher "*has a meditation on every night before bed. We say what we are grateful for at dinner each night*". Annie's mother also reported that meditation was used frequently: "*Annie uses guided meditation apps on my phone*". Eleanor's father reported that he and his daughter enjoyed a particular ritual together that incorporated a mindfulness activity: "*Eleanor enjoys 'have a cup of tea time', as part of our everyday routine, a quiet time where we sit together and enjoy the taste and aroma of the tea*".

(4) *Improved self-compassion***.** One of the most noteworthy findings emerging from the qualitative data was that the children participating in the group had (according to their parents' reports) become observably more self-compassionate. Eleanor's father noted that his daughter found the concept of being her own best friend particularly useful and it sparked further discussions at home: "*We had more in-depth conversations … especially about being her own BFF. She*

liked that idea, she ran with it. She's more self-caring these days". Eleanor's father went on to say that Eleanor "*definitely learned to be more of her own BFF… she took that concept to heart… I notice a lot of change, some positive changes in her behaviour towards herself and others…. she's not going to be a doormat, she's not as prepared to be a doormat. She's making, she's making friends with people who don't step all over her and have some respect for her, rather than kids who are dominating. So that's one really positive thing I think I've seen come out of it*". Similarly, Annie's mother noted an improvement in her daughter's attitude towards herself: "*She's just being a lot nicer to herself".*

During 12-month follow-up interview, Annie's mother noted that her daughter "*is pretty good with self-compassion… she is not too hard on herself anymore".* Meanwhile, Eleanor's father provided a more detailed summary of his observations of his daughter: *"Eleanor has become more self-nurturing, become more mature, more understanding of herself; doesn't call herself dumb anymore, realising that she is only human and can have another go if she doesn't get it right first time. Doesn't beat herself up so much if she does something wrong or makes mistake – be it with homework or building lego*". Meanwhile, Clive's mother noted that her son "*uses more positive self-talk… is generally more positive… not putting himself down and having self-belief".*

(5) *Improved wellbeing*. Significant improvements in child's wellbeing were reported by the majority of parents at 12-month follow-up**.** For example, Annie's mother made the following observations of her daughter's mood: "S*he's a lot happier… Just overall, she's more bubbly; she still has her down moments, but the down moments outweighed the happy moments before, whereas now it's the other way around*". Christopher's mother stated that: *"Christopher is doing really well. A lot less anger, we still seem to go through phases where he has a lot of outbursts, but then it settles down for a while… he has more friendships. He's definitely a happier child".*

Eleanor's father noted that his daughter "*is more positive, talks positively about the future, wants to do psychology in the future, she has got goals and direction… She doesn't say things like she wishes she wasn't born, wishes she was dead anymore".* Similarly, Clive's mother noted that her son "*is doing really well,*

grown in confidence". Meanwhile, Ricky's mother reported that her son "*is not as angry, more affectionate".*

(6) *Improved resilience.* Many of the parents of the child participants freely offered examples of their children coping better with situations that had previously caused then distress. For example, Eleanor's father noted that his daughter *"is coping better with the parental separation – she is not wanting to talk about it all the time, not obsessing so much"*. Breanna's father noted "*I think she's improving I, I do [in resilience]… I think she's slowly growing a little bit of confidence there and, and again it may be back to the fact that she is not, not taking everything personally. So that she can see past it if, if some boys are, are a bit nasty it's not every boy, trying to take each situation as it comes".* Eleanor's father noted that Eleanor was "*generally more confident, more resilient, her concentration is better, she is making more friends, getting on with peers better",* and Christopher's mother similarly noted that "*at school he's got a lot more friends' now"*.

Indeed, improvements in the child's capacity to deal with peer-related difficulties at school emerged as a sub-theme within this category. Clive's mother noted that her son was "*dealing better with things at school with certain kids, speaking up for himself, not letting them walk all over him".* Christopher's mother had observed similar improvements with Christopher's capacity to deal with his peers: "*Christopher doesn't seem to come home telling us about kids picking on him and not including him any were near as much as the last few years*". Eleanor's father noted that his daughter "*bounces back; she's bouncing back a little bit better if someone insults her now she's a bit more water off a duck's back so to speak, she's got enough confidence and self-belief to think that, well that person just talking rubbish, that's not me…. She's got enough boundaries and enough confidence to believe in herself now".* Breanna's father noted that his daughter had been able to overcome fears related to social anxiety: *"There's a few times that she's actually mentioned, mentioned that she actually got up in front of the class and spoke… So, and even she's actually had conversations with some of the boys at school*".

Similarly, 12 months post intervention, Eleanor's father noted that his daughter "*is coping when people don't like her, more assertive with her sister, doesn't let her sister's negative comments get to her".* Breanna's father also noted distinct improvements in his daughter's ability to cope with her peers: "*She, she, she*

struggled at school sometimes with, with her thoughts on what, what other people are thinking, other kids are thinking about her at school. And I, I believe she, she has commented a few times that that, it's okay because she, I guess she can't control what the other kids are thinking. So, and that while it may upset her sometimes she, she understands that it's not something that she's necessarily done rather than blaming herself for something, it's just, so.. "Oh well, that's because they're, they're boys," or that's whatever it is, she's not taking it so much personally".

(7) *Improved child-parent relationship.* Every parent who had participated in the intervention reported an improvement in the relationship with their child. For most it was a general sense of being closer: As Eleanor's father noted, "*We get on better now if that is possible, it would get to me when she would beat herself up and be negative. She is so much more positive, you can build on the confidence rather than just cancel out the negatives*". Breanna's father said similarly: **"***I think, I think it has [brought us closer together] although we've always been quite close and done things together*". Likewise, Annie's mother reported "*I feel like we're a bit closer; I think it's because we have this little thing, I suppose it's our thing, it's something that's ours that we don't share with the other kids or [my partner] or anything else, it was our thing*". On a more specific level, Breanna's father noted improved communication between himself and his daughter; "*she will discuss with me how she is feeling".* For one family, the benefits extended past the child-parent relationship; as Christopher's mother commented at 12-month follow-up:

> *I meditate each day and can now recognise when things are starting to spin out of control and let go and regain control. I remind myself each day that I'm doing a great job. These things have really helped me become a calmer, more supportive wife and mother and overall so much happier in life. This would be the best thing that my whole family got out of the group.*

(8) *Improved ability to cope with the challenges of parenting.* All parents noted specific improvements in how they were dealing with the challenges of parenting. There was a theme of improved emotional regulation leading to calmer responses during parenting situations. This process was precipitated by greater mindful awareness. For example, Annie's mother commented that "*I think more now…. And I'm noticing how I'm feeling more than before*". Similarly, Breanna's father noted how he had become more mindful: "*I am recognising my behaviours*

and thoughts – now to change these before acting is the challenge". Another parent commented how they used the Peaceful Pause to break the cycle of reactive parenting: "S*o I just walk away, go and sit in the bedroom or something like that, breathe and then walk out and deal with the situation".* Similarly, one mother noted how she had used the self-compassion break: "*I even take myself outside sometimes and sit there going "I am strong, I can deal with this"*.

Clive's mother specifically identified that she had become less critical of herself as a parent: "*There's so much pressure to be perfect but you can't be, no one's perfect, and just, what's the word, yeah not being so critical of yourself or hard on yourself* ". She linked this to becoming less emotionally reactive in her parenting approach: *"I'm probably not as negative when I do now speak to them if they have done something wrong or if they, yeah. I suppose it's calmer in a way, like not as, yeah you don't react, not go off but yeah*". Annie's mother stated "*I'm more aware now of what I say and how I said things to Abbey, whereas before I was just like whatever comes to the tip of the tongue especially when you're angry, whereas now I sort of sit there and go okay, now how can I word this, how can I…. Sort of thing…. So, she doesn't get upset"*. Annie's mother went on to detail a specific example of adjusting her parenting approach:

> *Last night I think the two girls have been really making an effort to get along and so I pulled them both aside away from the boys and just said look, I'd really like to say thank you so much for making an effort to get along, it's made life so much easier, everyone's a lot happier you know just sort of acknowledging that they are making an effort.*

Christopher's mother reflected further on the personal benefits she had gained from adopting formal mindfulness meditation into her daily routine:

> *I've been doing it [meditating] every single day and I'm just really seeing the benefits…maybe the start of the year I was having a lot of anxiety; I don't know if it was like an anxiety attack but just really tight in the chest, trouble breathing and stuff and like constant throughout the day where now that's just gone and even when I started the meditation I'd find it really hard where now I can just switch off straight away… I'm recognising when I'm starting to get tense can I can then just stop and breathe and actually – yeah, I was*

sort of very sceptical of that sort of thing previously but yeah I can definitely say I can see the benefits now.

Christopher's mother linked these benefits directly to improvements in her parenting approach: "*I think I'm definitely calmer; that I don't lose my patience as much or as quickly, just can sort of word things differently to control the situation I think where before yeah the smaller things would have me lose it when I think it takes a bit more now*".

(9) *Barriers to change.* A number of parents noted challenges they had encountered while trying to implement skills and learnings from the group. For example, Eleanor's father noted the time and effort challenge of incorporating change into their family's routine: "*I think that a lot of the core concepts are really good and trying to get her to implement it into everyday life is another challenge, kids at that age just want to jump around"*. Similarly, Christopher's mother commented post-intervention that her son was resistant to practicing at home: "*I find even trying to do the meditations with him he just – I gave up because it was making me stressed out".*

Meanwhile, Breanna's father reflected that while the process of change had started, he felt there was a considerable way to go before the concepts became fully integrated: *"I think at the moment we're, we're in an awareness mode …. which I think is, it's a positive because that's part of that learning process that we're catching ourselves now, we've just got to learn to catch things earlier… we've got … some tools there to just, to keep working on".* Breanna's father also commented on the challenge of getting the whole family on board: "*And it's, it's just a lesson for me how to implement that through the whole household and get everyone working together".*

Eleanor's father noted the challenges relating to adjusting the daily routines to incorporate new practices: *"Probably need to pay more attention to or prioritise that, that thing in your daily routine more and I guess it's just something that most people when you're in a family situation don't really focus on probably quite as much, although we probably have ample, ample time and space to do that, we just, it's just not something that's been done….we're just still finding our feet as a, as a small little unit really. I guess that could become, it is becoming more of a part of it,*

but it's taking time". However, during the 12-month follow-up interview, Eleanor's father noted how they had overcome this challenge:

> *It's very different, different implementing it into daily life when you've got little kids... And you're busy and so, really, we just try and implement, try and take advantage of the situation when you're actually sitting down and having, before you start chatting and that, just get her to just smell the tea and taste the tea and have a quiet moment where she's just not thinking about anything else*.

4.2.6.2 Satisfaction and feedback survey. Qualitative information obtained from the open-ended questions posed as part of the satisfaction and feedback survey completed by parents was reviewed separately to the interview data, given that it only pertained to one research question (program acceptability). Inspection of the comments revealed that participants specifically enjoyed the group format, the core concepts, and resources/tools provided by the group. Table 6 presents specific statements made by parent participants pertaining to their overall satisfaction with the *Peace by Piece* intervention.

Parent participants were also specifically asked for feedback as to whether they felt that group could be condensed into a shorter number of sessions, for example 6 rather than 10. The unanimous conclusion was that condensing the program would not be ideal; this could jeopardise group cohesion, result in lost content, and/or reduce potential efficacy: "*10 weeks is good…it takes time to challenge and change behaviours and habits.*"

Table 6

Feedback and Satisfaction Survey Comments Pertaining to Program Acceptability

Comment	Source
My daughter actually looked forward to coming and I think because she had that, maybe that buy-in to it that, that she wanted to come along and, and learn things	Eleanor's father
I think she enjoyed participating in that there was other people and other kids here and that she wasn't alone in that regard	Breanna's father
I think the core concepts are really good and I think what you are teaching's great	Ricky's mother
I think you did an awesome job overall. It was really well thought out, planned. I thoroughly enjoyed it and I know that Annie did as well and she looked forward to it – the other day she said "I miss the group"	Annie's mother
Fantastic idea, it is now up to us to take these tools and implement, test and change	Breanna's father
I have found the group extremely helpful for myself. I can see how this group would help many children	Christopher's mother
Thank you for the resources and tools that we now use in our everyday life	Clive's mother

4.3 Discussion

This discussion has been formatted so as to address each of the Research Questions in order. An integrated discussion of these findings within the context of the broader study aim and findings from Studies 2 and 3 will follow in Chapter 7.

4.3.1 RQ 1. How do children under 12 conceptualise self-compassion and mindfulness? To date, little is known regarding how children under 12 conceptualise self-compassion, or whether they can distinguish this from the related concept of mindfulness. Findings from this study revealed that children completing the *Peace by Piece* intervention could conceptualise self-compassion as a way of being kind and looking after oneself during a difficult or challenging time. Furthermore, as previously noted, parents could clearly observe improvements in their child's attitude and behaviour towards themselves following completion of the intervention. This included both the positive aspects (e.g., being nicer to themselves) as well as the negative aspects (e.g., not beating themselves up as much). These effects were still evident 12-months after finishing the group.

In regards to mindfulness, the children completing this intervention mainly associated it with a state of calm and peacefulness. Some child participants articulated a burgeoning understanding of the impermanence of thoughts and feelings, while others reported on the benefits of being more mindful in their day-to-day activities, which they associated with increased pleasure. This particular finding, that mindfulness may enhance appreciation for daily activities, is congruent with the findings reported in Haydicky et al.'s (2017) qualitative study of a mindfulness-based intervention, a process they termed 'discovery'.

Taken together, the results from this study suggest that self-compassion and mindfulness can be conceptualised distinctly by children under 12, albeit in a somewhat rudimentary way, and also that skills to improve self-compassion and mindfulness can be understood and adopted to good effect, particularly with the support of their parents.

4.3.2 RQ 2. How feasible and acceptable is an intervention designed to target self-compassion with a clinical group of children under 12? Results from this pilot study strongly support the acceptability of the *Peace by Piece* intervention. Attrition rate was low (14%) and satisfaction ratings were high; between 80% and 100% of parent participants either 'Agreed' or 'Strongly Agreed' with each statement in regards to satisfaction with the intervention's content, duration, format and delivery. Indeed, findings from the analysis of qualitative data supplied via responses to open-ended questions further confirmed that both the children and the parents enjoyed participating and many looked forward to attending the group each week. These findings add weight to previous studies that have conferred mindfulness-based interventions are generally popular with participants and benefit from low attrition rates (e.g., Saltzman & Goldin, 2008; Vickery & Dorjee, 2015).

4.3.2.1 Participant experiences. Thematic analysis of the information elicited via semi-structured interviews revealed that participants' experiences were overwhelmingly positive; these findings were further echoed in the satisfaction and feedback surveys completed by parents. For example, a major theme emerging from the qualitative data was that parents noticed an improved capacity to deal with challenging parenting situations, as well as more general improvements in their relationship with their child. The parents linked this to the improvements they had also noted in their own emotional regulation capacity, which allowed them to adopt a

less reactive, and more considered, parenting approach. These findings support the models of mindful-parenting proposed by Bögels et al. (2010), and Dumas (2005), as well as previous studies purporting the benefits of mindfulness-based interventions for improved parent-child relationships (e.g., Coatsworth et al., 2010). They also confer with models purporting on benefits of teaching self-regulatory skills to parents and children simultaneously (e.g., Harnett & Dawe, 2012). It was also noteworthy that parents completing the *Peace by Piece* program reported feeling confident incorporating and implementing the information, concepts and skills of self-compassion and mindfulness taught throughout the group, and could provide evidence of specific strategies that were being used consistently—both by themselves and/or with their children—and in a range of situations, to good effect. Most notably of these was the Peaceful Pause, a core practice of the group.

Parents also noted observable improvements in their child's resilience, wellbeing and, more specifically, in their capacity to manage challenges within their peer relationships. These findings concur with the results from the study by Lee et al. (2008), who reported on the benefits of an MBCT-C group run with non-clinical children aged 9-12 years. The MBCT-C intervention was found to be helpful to children across a range of domains, such as self-confidence, managing anger, and coping with being teased by peers. Very similar benefits were reflected in the findings of this study, suggesting that mindfulness-based interventions can offer similar benefits as MBCT to clinical samples of younger children.

In regards to the experiences of the child participants, qualitative findings revealed that these children demonstrated a sound ability to grasp the basic concepts of mindfulness and self-compassion (discussed in further detail below). Interestingly, parents were able to observe clear evidence of their child's adoption of a more compassionate self-attitude, as well as provide examples of how this attitude had assisted their child to negotiate a variety of challenges that previously they had struggled to 'bounce back' from. There was less direct evidence of the children's adoption of the skills and learning regarding mindfulness; this may be simply due to the fact that it is more difficult to 'observe' mindfulness in others, or because the self-compassion skills were more concrete and therefore easier to grasp.

There was clear evidence, however, that the children's ability to regulate their emotions had improved vastly; this being the strongest theme to emerge from

the thematic analysis of participants' interviews. Results suggested that these gains had been maintained by children 12-months post-intervention. This finding can be considered further evidence towards models proposing emotional regulation as an integral mechanism of mindfulness-based interventions (Holzel et al., 2011b; Teper et al., 2013). Most importantly, however, these findings offer preliminary evidence of how self-compassion may augment and enhance the benefits of mindfulness-based interventions for primary-aged children, and thus also support the reciprocal, iterative model prosed by Bluth and Blanton (2014).

4.3.3 RQ 3. Can wellbeing and resilience be enhanced in a clinical group of children via participation in a group-therapy program targeting self-compassion and mindfulness?

4.3.3.1 Wellbeing and resilience. A range of benefits pertaining to improvements in wellbeing and resilience were reported by the *Peace by Piece* participants during interviews conducted post intervention, and at 12-month follow-up. These improvements have been discussed in detail above. Statistical analysis of pre- and post-intervention data, obtained from the SDQ (parent report) and CYRM PMK (i.e., parent report), add further support to the benefits articulated by participants; results revealed that indicators of children's psychosocial wellbeing and resilience both significantly improved following participation in this group intervention.

In regards to the subscales of the SDQ, improvements were noted across the board. Children's emotional, conduct, hyperactivity and peer-related problems all showed significant statistical improvement post-intervention and pro-social behaviours had increased. Remarkably, all these improvements were reportedly maintained at 12-month follow-up. The large effect sizes support the efficacy of this intervention and are echoed in the far-reaching range of benefits reported by participants during post-intervention interviews. It should be noted, however, that caution should be exercised when interpreting the statistical significance of these results, due to the small sample size employed by this study.

While the improvement in scores on the CYRM (as reported by the child) did not meet statistical significance, it was noted that the initial (i.e., pre-intervention) scores were already in the high range, and therefore any improvement would not be detected due to a 'ceiling' effect. Indeed, parent-reported scores on the CYRM

confirmed the qualitative findings that children did, in fact, benefit from improved resilience post-intervention, as evidenced in their ability to cope and approach situations that previously would have been more challenging. Further quantitative examination of the relationships between self-compassion, mindfulness and resilience will be undertaken in Study 2 of this thesis.

4.3.3.2 Depression and anxiety symptomology. Qualitative data analyses failed to reveal any themes purporting specifically as to changes in children's levels of depressive or anxious symptomology. However, improvements in mood overall were identified, as were specific examples of when children had completed tasks that previously would have caused high anxiety (such as speaking to the opposite sex, talking in front of the class, standing up to peers). Quantitative data analyses revealed that there was indeed a statistically significant improvement in children's self-reported levels of depressive symptoms, as well as anxiety symptoms, post participation in the *Peace by Piece* program. Again, large effect sizes further underscored the efficacy of this intervention. However, as previously mentioned, these results should be interpreted with caution, due to the fact that only a small sample was employed in this study.

4.3.3.3 Parents' self-compassion and mindfulness. The content of the *Peace by Piece* program was unique in that it was tailored to meet the needs of primary-aged children, with information and activities designed to be relevant to this age-range. Unlike other interventions that separate the children and parents into two separate groups prior to intervention delivery (e.g., Bögels et al., 2008), this program was completed simultaneously in its entirety by the parent-child dyad (parent hand-outs were supplied at the end of each session, but this content was not taught explicitly). As the vast majority of the program's content was designed to be relevant and understandable children, it was unknown how 'potent' the intervention would be for the parent participants.

Quantitative analyses revealed that parents did, in fact, report statistically higher levels of mindful awareness post-intervention. Indeed, as previously discussed, analysis of interview data and satisfaction surveys revealed that parents felt confident in their understanding and implementation of the core concepts of the *Peace by Piece* program. Specifically, it was noted that parents were able to articulate clear examples of how they had adopted mindfulness into their everyday

lives, such as utilising the Peaceful Pause, adopting daily meditation practice, or by simply 'noticing' their thoughts and feelings. The parents linked their improved mindful awareness—enhanced attunement to their own internal stimuli—to more positive parenting interactions (i.e., less reactive parenting). This also translated into improvements in their relationship with their child. However, it is acknowledged that improvements in the relationship may have been a factor of simply spending regular time-in with one another during the group, rather than a treatment effect. Nevertheless, the findings from this study support the efficacy of the *Peace by Piece* program to improve parental mindfulness. This is an important finding, as parental mindfulness is likely to (indirectly) promote children's mindfulness, according to Haydicky et al.'s (2017) working model of the parallel processes in joint parent-child mindfulness training.

Qualitatively, no themes arose relating directly to parents' adoption of the specific understandings, or skills of self-compassion (although one parent mentioned being less self-critical, and another mentioned utilising the self-compassion break). This finding was reflected in the quantitative data, which revealed no statistically significant improvement in terms of the parents' self-reported levels of self-compassion, as reported on the SCS-SF. This finding is particularly interesting, as self-compassion (rather than mindfulness) was the concept more clearly observed and reported on for the child participants. Whether the parents were less likely to 'notice', or report on their own self-compassion, or whether they simply found mindfulness skills easier to adopt, is currently unknown. Future research can explore this phenomenon in more detail.

4.3.4 Summary and limitations. A synthesis of both quantitative and qualitative results obtained from the pilot *Peace by Piece* program provided convincing support for the feasibility of this novel group-therapy intervention. Acceptability was high and attrition rates low; satisfaction surveys indicated that the program content, duration, format and delivery was well received. Efficacy data suggested that this group intervention can bring about a range of benefits for child participants; thematic analysis revealed that children's wellbeing and resilience were enhanced primarily via improvements in emotion regulation. Benefits for parent participants were reported as improved capacity for emotion regulation leading to less reactive parenting and an enhanced parent-child relationship.

This study adds to the evidence suggesting mindfulness-based group therapy interventions can be efficacious for clinical groups of children, as proposed by Zoogman et al. (2015). It also adds further support to models purporting that group-interventions involving parents as resources can be particularly efficacious (Harnett & Dawe, 2012). Parents completing the *Peace by Piece* program reported improvements in their levels of mindfulness post intervention; thus, Haydicky et al.'s (2017) working model of the parallel processes in joint parent-child mindfulness training can provide a framework to explain the magnitude of improvements that were reported post intervention in terms of the children's emotional regulation. Haydicky et al.'s model of mutual child-parent reinforcement may also explain how these improvements were maintained at follow-up.

Importantly, this study is the first to report on a group therapy intervention targeting self-compassion in a clinical group of children. Children completing the *Peace by Piece* program (mean age = 7.9 years) were able to understand and adopt skills that promoted a healthy self-attitude (i.e., develop their self-compassion), with observable benefits in a range of domains. While self-compassion skills were delivered according to Neff's (2003a) three-component model of self-compassion, the children completing this program identified most strongly with the self-kindness aspect, and the importance of refraining from 'beating themselves up'.

The results of this study offer the first preliminary evidence that group programs targeting self-compassion can successfully build psychosocial wellbeing and resilience in children under 12 years. The magnitude of improvements noted quantitatively, in conjunction with the range of benefits reported by participants qualitatively, adds support to the contention that self-compassion and mindfulness may work iteratively to enhance wellbeing. Thus, the current data is consistent with the model proposed by Bluth and Blanton (2014). However, due to the small sample size employed by this study, the findings must be interpreted with some caution. It is recommended that the promising findings revealed in Study 1 be confirmed via mediation analyses in future studies that employ larger, more diverse samples. Further limitations of this study, and directions for future research, will be discussed in the General Discussion, in Chapter 7.

The *Peace by Piece* program demonstrated that prepubertal children were able to benefit from a self-compassion-based program. However, as yet there does

not appear to be a valid and reliable measure of self-compassion for this cohort. This presents a significant concern for the foundations of evidence-based practice. In light of this shortfall, Study 2 was designed.

The broad aim of Study 2 was to establish whether a valid and reliable measure of self-compassion can be developed for the preadolescent age group, namely children aged between 9-12 years (commonly referred to as 'tweens'). The preadolescent age range was selected in favour of a broader age-range of children so as to capture those within a similar range of cognitive and language abilities. In Australia, this age bracket covers children in their last two years of primary school, i.e., Years 5 and 6. These preadolescents face unique challenges involved with the impending transition into high school. Adopting a balanced and healthy attitude towards the self may help this young cohort to successfully navigate this transition.

CHAPTER 5
STUDY 2, PART A: DEVELOPMENT OF TWO NEW MEASURES OF SELF-COMPASSION FOR PREADOLESCENTS AND THEIR PARENTS

5.1 Chapter Introduction

The current literature continues to debate the most appropriate conceptualisation and measurement of self-compassion, with prominent researchers divided (see Muris et al., 2016b; Neff, 2016a). One camp assert that self-compassion can, and should, continue to be measured with the current version of the Self-Compassion Scale (SCS; Neff, 2003b), or its abbreviated version, the Self-Compassion Scale-Short Form (SCF-SF; Raes et al., 2011). Meanwhile, the opposing camp contests that the use of a total self-compassion score is not warranted—theoretically or statistically—and argues for separating the SCS into two separate scales, one measuring the positive, protective features of self-compassion, and the other measuring a theoretically distinct construct, coined by some 'self-coldness' (e.g., Gilbert, McEwan, Matos, & Rivis, 2011), others 'self-criticism' (e.g., Lopez et al., 2015), and others 'self-condemnation' (e.g., Dundas, Svendsen, Wiker, Granli, & Schanche, 2015).

This chapter opens with a discussion of the processes employed in the initial development and validation of the SCS by Neff (2003b). This is followed by a review of the current theoretical and methodological debates surrounding the most appropriate measurement of self-compassion (as introduced in Chapter 2). A critique of the two published studies that have attempted to measure self-compassion in children under 12 years follows, with an argument that further work is required to develop an appropriate measure of SCS for the preadolescent population.

This chapter then presents the methodology and findings from Study 2, in which a new measure of self-compassion is developed for preadolescents, along with a parent-report version of the same scale. The purpose of developing a parent-perspective scale was to supplement self-report data and thus enhance the assessment of self-compassion in preadolescent children. Results from exploratory factor analyses of the two new measures are presented; data collected from the self-report and parent-report measures are assessed for correspondence. Results from this study are then discussed in reference to recent research that has analysed the SCS and its various incarnations.

5.2 Development and Validation of the SCS

The most widely used measure of self-compassion is the 26-item self-report SCS (Neff, 2003b). Consistent with Neff's (2003a) seminal definition of self-compassion, half of the scale items are designed to capture the core 'positive' components of self-responding, namely self-kindness (e.g., "*When I'm going through a very hard time, I give myself the caring and tenderness I need*"), common humanity (e.g., "*When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people*") and mindfulness (e.g., "*When something upsets me I try to keep my emotions in balance*"). The other half of the items are designed to capture the tendency for 'negative' self-responding; namely self-judgment (e.g., "*When times are really difficult, I tend to be tough on myself*"), isolation (e.g., "*When I'm really struggling, I tend to feel like other people must be having an easier time of it*") and over-identification (e.g., "*When something painful happens I tend to blow the incident out of proportion").*

According to Neff (2003b, 2016b), the SCS has a six-factor correlated structure, with the three positive and three opposing negative components forming an interconnected, dynamic construct. However, this was contrary to Neff's (2003a, 2003b) original expectations that the SCS would form a three-factor model. Indeed, when initially designing and developing the SCS, Neff (2003b) tested a pool of potential items intended convey each of the three components: the self-kindness versus self-judgment component, the common humanity versus isolation component, and the mindfulness versus over-identification component. The items were developed so as to represent the positive and negative aspect of each of these three components, in equal proportion. When this pool of 71 potential items was administered to a sample of undergraduate students (N = 391), responses to items assessing the three distinct components of self-compassion were analysed separately using exploratory factor analyses, and final scale items were selected based on their reliability and factor loadings on their intended subscale. However, confirmatory factor analysis revealed that a two-factor model (one factor representing the positive aspect and one factor representing the negative aspect) fitted the data better than a one-factor model for each of the three components. A series of further confirmatory factor analyses indicated that a six-factor correlated model showed an 'adequate fit' to the data—Non-normed fit index (NNFI) = 0.90; Comparative Fit Index (CFI) =

0.91; Neff, 2003b). Internal consistency reliabilities for each of the six subscale factors ranged from .75 to .81. The Root Mean Square Error of Approximation (RMSEA) was not reported in this study.

Neff (2003b) further found that a higher-order model (NNFI = 0.88, CFI = 0.90) was a reasonable fit to the data, and thus justified the use of a total score to represent a single self-compassion construct. Hence, the current instructions for scoring and interpreting the SCS state firstly to compute scores for each of the six separate subscales by summing items and finding a mean. An overarching 'total' self-compassion score is then derived by summing the means from each of the six subscales, with items from the three negative scales reverse scored (Neff, 2003b).

Similarly, a total self-compassion score can be derived from administering the Self-Compassion Scale-Short Form (SCS-SF; Raes et al., 2011). This condensed and "economical alternative" (p. 254) to the SCS is comprised of 12 items, two items from each of the six subscales of the long form. Validation of the SCS-SF was conducted with two Dutch samples and one English sample (N = 871) of predominately female university students. Confirmatory factor analysis supported the same six-factor correlated structure as found in the long form, as well as a single higher-order factor of self-compassion (English version: NNFI = 0.96, CFI = 0.97, RMSEA = 0.08; Dutch version: NNFI = 0.96, CFI = 0.97, RMSEA = 0.08; Raes et al., 2011). While the SCS-SF total score was a near perfect correlation with the SCS total score ($r \geq .97$), the authors advised against subscale analyses due to variability within the internal consistencies for each subscale; Cronbach's alphas ranged between .55 and .81 for the Dutch version, and .54 and .75 for the English version. Thus, the full 26-item version of the SCS is currently the measure recommended for researchers interested in subscale analyses (Raes et al., 2011).

5.3 Theoretical and Statistical Issues in the Measurement of Self-Compassion

While there is no doubt that the SCS is the most widely employed measure of self-compassion, attempts to validate the SCS in different populations have revealed mixed results. Some researchers have successfully replicated Neff's (2003b) six-factor correlated structure utilising confirmatory factor analyses, in both community (e.g., Garcia-Campayo et al., 2014; Mantzios, Wilson, & Giannou, 2015) and clinical samples (e.g., Castilho et al., 2015). Other studies have been unable to replicate this six-factor factor solution (e.g., Costa et al., 2016; Lopez et al., 2015; Petrocchi,

Ottaviani, & Couyoumdjian, 2013; Williams et al., 2014). Due to these discrepant and inconsistent findings the current literature is divided as to whether analyses of the SCS's individual subscales—as originally recommended by Neff (2003b)—is justified. Furthermore, as only three published studies have replicated the higher-order model of self-compassion (Castilho et al., 2015; Cunha, Xavier, & Castilho, 2016; Dundas et al., 2015), debate is rife as to whether a total self-compassion scale computed from both the positive and negative items is a theoretically valid measure of the self-compassion construct. While Neff at al., (2019) have recently recommended a single-bifactor model as an alternative to the high-order model, they continue to support the interpretation of a total SCS score, or six individual subscale scores. Meanwhile, a growing body of evidence suggests that SCS scores are better interpreted as two separate constructs: compassionate and uncompassionate self-responding (Muris & Petrocchi, 2017). Key findings from recent research on both sides of the debate are now discussed.

Lopez et al. (2015)—in critique of previous validation studies that relied heavily on predominantly female, college-based samples—examined the factor structure of the SCS using a large-scale, representative community-based sample from the Netherlands (N = 1,643). Confirmatory factor analysis did not support Neff's (2003b) proposed six-factor structure of the SCS. A subsequent exploratory factor analysis suggested a two-factor solution, one formed by the positively formulated items ('self-compassion'), and the other by the negatively formulated items ('self-criticism'; Lopez et al., 2015). The two factors had good internal consistency; Cronbach's alpha coefficients of .86 and .90, respectively. In terms of construct validity, the factor formed from the negative items was found to correlate more strongly with negative affect, depressive symptoms, perceived stress, rumination and neuroticism than the factor self-compassion, formed by the positive items. As results from this study did not justify the use of a SCS total score as an overall indicator of self-compassion, the authors advised future researchers to make a "distinction between self-compassion and self-criticism" (Lopez et al., 2015, p. 1).

Similarly, Costa et al. (2016), in their attempt to validate the psychometric properties of the SCS, reported that a two-factor structure—separating the positive items from the negative items—exhibited better fit than either a six-factor model or a higher-order model comprised of one second-order factor and six first-order factors.

The two identified factors were named ‘self-compassionate attitude’ and ‘self-critical attitude’. Results remained consistent across clinical (i.e., individuals with borderline personality disorder, anxiety disorders, and eating disorders) and non-clinical samples (N = 361). These authors concluded that their findings provided further evidence to support the “generalisability of the two-factor model” (p. 460) across diverse populations.

Indeed, according to the evolutionary theories articulated by Gilbert (1989; 2005) compassionate behaviour and uncompassionate behaviour have a different underlying physiology and therefore require separate measurement; Gilbert et al. (2011) state that self-compassion is better represented by *only* the three positive constituents (i.e., self-kindness, common humanity, and mindfulness). This stance is congruent with that of Muris and his colleagues, who have strongly argued for a distinction to be made between the positive, protective qualities of self-compassion, and the opposing qualities that they have termed ‘self-coldness’ (Muris, 2015; Muris et al., 2016a; Muris et al., 2016b). In a recent meta-analysis, Muris and Petrocchi (2017) presented evidence that the items measuring the ‘negative’ components of compassion (i.e., those items that load on to the self-judgement, isolation and over-identification subscales) are more strongly associated with psychopathology (r =.47 to –.50) than the positive components (r = −.27 to −.34). Muris and Petrocchi concluded that use of a total SCS score will result in an “inflated relationship with symptoms of psychopathology” (p. 373) and thus warn future researchers against using any of the negative items when measuring self-compassion using the SCS.

Incongruent findings, and therefore conclusions, drawn from the various attempts to validate the SCS have understandably cast doubt as to the stability of its factor structure. Many researchers have suggested that further robust analyses are necessary; some authors go so far as to advocate for the total redesign of the SCS (Williams et al., 2014). Thus, as an alternative to higher-order models, more recent studies (Cleare, Gumley, Cleare, & O'Connor, 2018; Neff et al., 2017; Tóth-Király et al., 2016) have investigated the factor structure of the SCS via a bi-factorial—rather than higher-order—component, alongside the six-factor subscale model. In contrast to traditional higher-order models that have previously been employed by researchers validating the SCS, a bi-factor model allows for one general trait to explain some proportion of common item variance for all items, whilst also allowing

item subsets to form groups that compete for explaining item variance (Reise, Moore, & Haviland, 2010). Thus, a bifactorial model was suggested by Neff (2016b) as potentially more realistic representation of the factor structure of the SCS.

Tóth-Király et al. (2016) investigated the six-factor correlated and bi-factorial models using the Hungarian version of the SCS administered to a representative online sample (N = 505). In a unique design, these researchers compared model fit of the six-factor correlated model, the higher-order model, and the bi-factorial model using both confirmatory factor analysis and exploratory structural equation modelling (ESEM). ESEM integrates the best features of both exploratory and confirmatory factor analysis techniques (Marsh et al., 2011). Interestingly, Tóth-Király et al. (2016) found that neither the higher-order nor the bi-factorial model was an adequate fit to their data when they used confirmatory factor analysis. However, when the same data was run with ESEM, both models fitted the data; the bi-factorial model showed the best fit with the presence of both a general self-compassion factor and the six specific factors (CFI = 0.972; RMSEA = 0.057.) The authors concluded that the ESEM framework was "superior and useful in uncovering the underlying dimensionality of the SCS" (p. 6).

Similarly, to address the discrepant and contradictory findings within the SCS validation literature, Neff et al. (2017) tested a bi-factor model, a higher-order model, and a 6-factor correlated model, in addition to a 2-factor correlated model, and a 1-factor model in four diverse populations: college undergraduates, community adults, regular meditators, and individuals with recurrent depression (N = 2,221). Results from a series of confirmatory analyses revealed that the 6-factor correlated model (i.e., the model proposed in Neff's 2003b original validation study) demonstrated the best fit across samples; meanwhile, the higher order model (also proposed in the original validation study) was found to be a relatively poor fit. Similarly, the 1- and 2-factor models, described in other attempts to validate the psychometric properties of the SCS, both had relatively poor fit. However, the bi-factorial model was found to be a comparable fit to the six-factor solution in all but the clinical sample. Despite these mixed findings, Neff and colleagues concluded that "a total SCS score could be reliably interpreted" (p. 8), sighting supporting evidence that a general self-compassion factor accounted for 90%, or more, of the

reliable variance in SCS scores across all samples. The authors concluded that future research adopting bi-factorial modelling was warranted.

An attempt to replicate Neff's (2017) bi-factorial model was conducted in Scotland by Cleare et al. (2018), using a sample of 526 students aged between 16-64 years. Confirmatory factor analyses were run to determine whether the six-factor correlated model, the higher-order model (Neff, 2003b), or the bi-factorial model (Neff et al., 2017) demonstrated best fit to the data. These authors further conducted an exploratory factor analysis to examine if there was an alternative model that could be a better fit; however, the resulting five-factor model was not supported by a subsequent confirmatory analysis. Overall, results indicated that the bi-factorial model provided the best fit to the data, followed by the six-factor correlated model. The authors concluded that these results supported those of Neff and colleagues, and advocated for the continued use of the current SCS scoring method, i.e., the computation of six-subscale scores in addition to an overarching self-compassion score. A limitation of this study was identified as the demographics of the sample: the majority of this student sample were female (76%), White (90%), and whilst the age range sampled was broad, the mean age was 24. Thus, the generalisability of Cleare et al.'s (2018) findings to more diverse populations was restricted.

Brenner et al. (2017) conducted a similar, detailed examination of the internal structure of the SCS using oblique, higher-order, and bifactor structural models in a sample of 1,115 college students. In contrast to the findings reported by Tóth-Király et al. (2016), Cleare et al. (2018), and Neff at al. (2017), these researchers found support for a different bi-factor model, one comprised of two general factors—which they termed self-compassion and self-coldness—and six specific factors. These authors drew from the earlier findings of Lopez et al., (2015) and Costa et al., (2015) who both found support for the same two-factor solution (i.e., one factor reflecting positive ways of self-responding, and the other factor representing negative ways of self-responding) via exploratory factor analysis and confirmatory analysis respectively. Furthermore, results from the Brenner et al. (2017) study indicated the self-coldness factor accounted for unique variance in self-reported levels of depression, anxiety, and stress. Meanwhile, the self-compassion factor only accounted for unique variance in depression.

The authors report their findings as compelling evidence that the SCS measures the presence of two "theoretically distinct constructs" (Brenner et al., 2017, p. 696), rather than the one underlying self-compassion factor as advocated by Neff and colleagues. Echoing the conclusions drawn from the Muris and Petrocchi (2017) meta-analysis, these authors called for a re-examination of previous research using a SCS total score as a measure of self-compassion, stating this would have inflated the relationships of self-compassion with psychological outcomes. Similarly, Kandler et al. posted a "cautionary note on current conceptualization and measurement of self-compassion" (2017, p. 167); they tested the factor structure of the SCS with an online sample (N = 576) and also found support for a two-factor (a 'positive' factor and a 'negative' factor) plus six facet solution via confirmatory factor analyses.

In response to the ongoing controversy regarding the most appropriate use and interpretation of the SCS, Neff and colleagues (2019) recently published the largest-scale study (N = 11,685) to examine the factor structure of the SCS. Data were collected from 20 diverse samples and analysed using exploratory structural equation modelling (ESEM). The populations included 10 community, 6 student, 1 mixed community/student, 1 meditator, and 2 clinical samples. For all samples, "excellent fit" (p .2) was found for an ESEM six-factor correlated model and an ESEM single bifactor model—whereby 95% of item variance was explained by a general factor. In conclusion, the authors surmise that their results "support use of a total SCS score, or six subscale scores, but not two separate scores representing compassionate and uncompassionate self-responding" (p. 3). This finding is in direct contrast to the two-factor models (reflecting positive and negative ways of self-responding) indicated by the results of Brenner et al. (2017), Costa et al. (2015), Kandler et al. (2017), and Lopez et al (2016). With two further studies authored by Neff and her colleagues currently in press (see www.self-compassion.org), the debate regarding the factor structure of the SCS continues.

5.4 Measuring Self-Compassion in Youth

The theoretical and methodological issues regarding the most appropriate measurement of self-compassion in adult populations are mirrored within the literature pertaining to youth. The only validated adolescent scale of self-compassion is the Shortened Self-Compassion Scale for Adolescents (S-SCS-A; Muris et al.,

2016a). Consistent with Muris' (2015) argument to reconceptualise self-compassion as a purely positive, protective construct, this nine-item questionnaire was derived from a selection of items from only the positive subscales of Neff's (2003b) original SCS, which were then simplified and modified with the assistance of a panel of three young adolescents and three psychologists. Results from exploratory factor analysis—using a principal components analysis and oblique rotation method—revealed the scale had the hypothesised three-factor structure (i.e., self-kindness, common humanity, and mindfulness). Results further indicated that this scale had adequate internal reliability (i.e., all Cronbach's alphas > .70). Concurrent validity was demonstrated via positive correlations with measures of self-esteem and self-efficacy.

Only two published studies have attempted to measure self-compassion in children under 12. The earliest (Stolow et al., 2016) used an adaptation of Neff's (2003b) original 26-item SCS. Meanwhile, the second study (Sutton et al., 2017) used an adapted version of Raes et al.,'s (2011) condensed 12-item SCS-SF. In contrast to Muris et al.'s (2016a) adolescent measure, the scales used in these studies included items designed to tap into both the positive and negative habits of self-responding, and thus remained consistent with Neff's (2003a; 2003b) original conceptualisation of self-compassion.

Stolow et al. (2016) sampled 193 children and adolescents from New Jersey, USA across three cohorts: Grade 5 (mean age 9.9 years), Grade 8 (mean age 12.7 years), and Grade 11 (mean age 16 years). Utilising an exploratory approach, a principal components analysis with an oblique rotation of their 26-item scale revealed a two-factor solution. Factor 1 was comprised of the 'negative' items from the self-judgment, isolation, and over-identification subscales. Meanwhile, Factor 2 consisted of items from the 'positive' subscales of self-kindness, common humanity, and mindfulness. The two factors did not correlate with one another (r = -.03), indicating that an orthogonal rotation may have provided a clearer solution than the oblique rotation employed (Field, 2009; Tabachnick & Fidell, 2013). All items (bar item 22) loaded onto their respective factors; all factor loadings exceeded .40. Item 22 (measuring the mindfulness component of self-compassion) had a cross-loading that exceeded Tabachnick and Fidell's recommended cut off of .32, and was subsequently removed from the analysis. Stolow et al. (2016) named Factor 2 'Self-

Compassion Scale Positive Items' (SCS-POS), and Factor 1 'Self-Compassion Scale Negative Items' (SCS-NEG). Both factors displayed high internal consistency across the whole sample (SCS-POS Cronbach's alpha = .87; SCS-NEG Cronbach's alpha = .92), and for each age grade (all Cronbach's alphas >.8). The two-factor solution revealed by this analysis is consistent with the findings of Brenner et al. (2017), Costa et al. (2015), Kandler et al. (2017), and Lopez et al (2016) and in their various examinations of the factor structure of the SCS within a range of adult and adolescent populations. Stolow et al. concluded that their results indicate a "need to re-examine the factor structure of the SCS, across age and other demographic variables" (p. 15).

Interestingly, Stolow et al. (2016) also reported the internal consistency of the six subscale factors of self-kindness, self-judgement, common humanity, isolation, mindfulness and over-identification. For the sample as a whole, Cronbach's alphas for each subscale exceeded .70, with the exception of the mindfulness subscale (Cronbach's alpha = .54), which displayed poor reliability across each of the three age groups. The over-identification subscale also yielded poor reliability in the grade 5 group (Cronbach's alpha = .56). The relevance of the findings pertaining to the subscales, however, is unclear, given the two-factor solution revealed by the exploratory factor analysis.

Stolow et al. (2016) compared the scores of girls and boys across the two factors of SCS-POS and SCS-NEG separately. Findings indicated that girls reported higher levels of SCS-NEG than boys (t (189) = -2.75, $p < .01$.). However, there were no reported gender differences in regards to self-reported levels of SCS-POS ($p > .05$). This finding is similar to that of Cunha et al. (2016), who reported that adolescent females tended to be more self-critical, feel more isolated, and become enmeshed with negative thoughts and feelings than their male counterparts. These results also partially support a recent meta-analysis of 71 studies reporting on gender differences in self-compassion in adults, in which males reported slightly higher levels of self-compassion than females, with a small effect size observed (d = .18; Yarnell et al., 2015). It is noted that this meta-analysis did not analyse the positive and negative elements of self-compassion separately, but rather as an overarching construct; therefore, the comparisons that can be drawn are limited.

In regards to concurrent validity, Stolow et al. (2016) compared scores for the two factors of SCS-POS and SCS-NEG with self-reported levels of self-criticism, self-esteem and depressive symptoms. Findings indicated that higher levels of SCS-NEG correlated with higher levels of self-criticism (r = .67). However, no relationship was found between self-criticism and SCS-POS (r = -.11). Both SCS-NEG and SCS-POS correlated significantly with the measure of self-esteem, (r = -.62, p < .01; and r = .23, p < .05 respectively), with SCS-NEG showing a significantly stronger correlation (Z = 4.62, p < .001). While SCS-POS correlated significantly with depressive symptoms (r = -.15, p <.05), again the strength of correlation was greater with SCS-NEG (r = .58, p < .01). These findings suggest that the tendency to self-relate in a negative way (SCS-NEG) has stronger associations with self-criticism, self-esteem and depressive symptoms than does the tendency to engage in compassionate self-responding (SCS-POS). However, the positive aspects of self-compassion were demonstrated to provide a protective function; children and adolescents possessing higher levels of self- kindness, common humanity, and mindfulness exhibited greater decreases in depressive symptoms over a 3-month time period than those who possessed lower levels. Meanwhile, higher levels of self-judgment, isolation, and over-identification (SCS-NEG) did not influence levels of depressive symptoms over time (Stolow et al., 2016).

Unfortunately, Stolow et al. (2016) only provided correlations for the sample as a whole, and not broken down across the three grades that were sampled. Therefore, the interpretability of these results specifically for the preadolescent age group (i.e., the Grade 5 sample set) is unclear; they comprised only roughly one-third of this relatively small sample of 193 youth, whose ages ranged from 9-16 years.

Meanwhile, Sutton et al. (2017) chose to administer a modified version of the 12-item SCS-SF (Raes et al., 2011), which they adapted for children aged 8-12 years in Canada. According to their methodology, the SCS-SF scale was adapted, “by altering the language to be age-appropriate” (Sutton et al., 2017, p. 6). It is apparent that the results of the Stolow et al. (2016) study were not available at the time their article went to print, as they claim this study to be the first to explore self-compassion in individuals under 12 years. Sutton et al. administered their 12-item scale (two of which addressed each of the six components comprising Neff’s

definition of self-compassion) to a sample of 406 children from Grade 4 to Grade 7, in order to explore its reliability and validity.

Sutton et al. (2017) analysed their data via confirmatory factor analyses of three competing models. The first was a unidimensional model, where one common factor (self-compassion) was regressed onto the twelve items; it had poor fit (CFI = 0.51; RMSEA = 0.18). A second model examined the fit of two separate but correlated factors, comprising the negatively worded items and the positively worded respectively; this model had fair fit (CFI = 0.91; RMSEA = 0.08). Finally, based on the recommendations of Neff (2016), a bi-factor model was also examined. While this model showed adequate fit (CFI = 0.96; RMSEA = 0.06), examination of the standardised factor loadings of the items onto the general factor, in addition to their corresponding negative, or positive self-compassion factors, revealed that the general self-compassion factor did not account for significant variance among the items. Rather, items loaded more strongly onto their corresponding negative and positive self-responding factors. Therefore, Sutton et al. concluded that their 12-item scale had two-factor structure, whereby the negatively-worded items and positively-worded items formed two discrete subscales. They named these subscales "positive self-compassion" and "negative self-compassion". Each factor demonstrated acceptable internal consistency (Cronbach's alpha = .81 to .83). Echoing Stolow et al.'s (2016) conclusions, these findings add further weight to the body of literature that has similarly concluded that the SCS (or, in this case the modified SCS-SF) measures two distinct constructs, rather than one coherent and overarching self-compassion construct—e.g., Brenner et al. (2017), Costa et al. (2015), Kandle et al. (2017), Lopez et al (2016), and Stolow et al. (2016).

In regards to construct validity, Sutton et al. (2017) correlated the positive and negative self-compassion factors with self-reported measures of mindfulness, self-concept, wellbeing and psychological adjustment, empathic-related responding, and prosocial goals. The positive self-compassion factor was significantly ($p < .01$) correlated with all the comparison indicators in the expected direction (all *r*s ranging from .60 to -.13) with the exception of negative affect ($r = -.09$). Meanwhile, the negative self-compassion factor was significantly correlated with anxiety ($r = .51$), negative affect ($r = .46$), depression ($r = .43$), mindfulness ($r = -.41$), optimism ($r = -.39$), satisfaction with life ($r = -.25$), empathic concern ($r = .21$), and positive affect

(r = -.16). In contrast to positive self-compassion, negative self-compassion did not correlate significantly with self-concept, perspective-taking, or prosocial goals. Overall, the findings indicated that the positive feelings of self-compassion may be strongly related to how children feel towards others, while negative ways of responding to the self may be more strongly associated with markers of psychopathology (Sutton et al., 2017).

Sutton et al.'s (2017) finding that depression was more strongly associated with the negative aspects of self-compassion (r = .43) than the positive aspects (r = -.22) is consistent with those reported by Stolow et al. (2016), who similarly found that depression had a stronger association with negative aspects of self-compassion than positive elements of self-compassion. However, as Sutton et al. (2017) did not measure self-esteem or self-criticism, and did not report on gender differences, no further comparisons can be drawn between the two studies of self-compassion in children. Findings from both studies indicated that their respective scales measure two distinct constructs (positive and negative aspects of self-compassion), and recommend future research examine the two elements of self-compassion separately.

5.4.1 Methodological limitations of current research with children. Examination of the methodologies employed by both Stolow et al. (2016) and Sutton at al. (2017) reveal an apparent lack of rigour in item selection and scale development. Neither study appears to have employed a clear method of selecting, adapting, or rewording their scale items, nor was item comprehension checked within their child samples prior to scale administration. In contrast, Muris et al. (2016a), outlined a detailed a procedure of item selection, deletion and/or modification in their development of the S-SCS-A.

There are also questions regarding the generalisability of findings from both the Stolow et al. (2016) and Sutton et al. (2017) studies. For example, the unnamed 26-item scale adopted by Stolow et al. (2016) was administered to children from a broad age range (9-16 years), within a relatively small sample (N = 193). Thus, the applicability of their overall findings to the preadolescent age group in particular is uncertain. Meanwhile, Sutton et al. (2017) sampled a larger number of children within a more specific preadolescent age range (8-12 years); however, they used a 12-item measure, ruling out any potential for more detailed subscale analysis.

It was further noted that these two studies adopted different approaches to the factor analysis of their respective scales. Stolow et al. (2016) utilised exploratory factor analysis, while Sutton et al. (2017)—unaware of the findings from Stolow et al.'s study—chose confirmatory factor analyses of their data. Given that the aim of Stolow et al.'s study was to pilot a new measure of self-compassion within an age category previously unexamined, it is unclear why exploratory factor analysis was overlooked. Exploratory techniques enable generation of theory (Henson & Roberts, 2016); instead, confirmatory analyses were utilised to test theories arising from studies of the SCS with adult populations. In choosing to use confirmatory analyses alone, these authors may have prematurely applied theoretical expectations regarding the structure of their data. As little is currently known as to how self-compassion is conceptualised within cohorts of preadolescent children, exploratory factor analysis of any new measure of self-compassion is considered a necessary first step in scale development. Indeed, some have described the process of "skipping exploratory factor analysis altogether in favour of confirmatory factor analysis, while modifying hypothesised items and/or constructs [as a] disturbing practice" (Patil, Singh, Mishra, & Todd Donavan, 2008, p. 162).

In summary, early attempts to measure self-compassion in children suggest that it is meaningful to distinguish the positive elements of self-compassion from the negative, and do not support the use of a SCS total score as a measure of self-compassion. However, the methodological short-comings of the two studies that have attempted to measure self-compassion in children (i.e., Stolow et al., 2016; Sutton et al., 2017) limit the utility of the two scales they have piloted. Therefore, it is clear that there is still work required to develop an appropriate scale to enable meaningful psychometric measurement of self-compassion within the preadolescent age range.

5.5 Informant-Rated Self-Compassion

The current study will be the first to examine a parent-version of the SCS, and thus provide a parent-reported perspective on children's self-compassion. Theoretically, it is expected that self-compassionate attitudes and behaviours in children will be visible to their parents; indeed, current research has suggested that the SCS "measures behaviours that are clearly observable by others" (Neff et al., 2017, p. 2). For example, therapists were able to significantly predict individuals'

SCS scores after a brief interaction (Neff, Kirkpatrick, & Rude, 2007a). Furthermore, strong associations have been found between self-reported and partner-reported scores on the SCS for couples in long-term romantic relationships (Neff & Beretvas, 2013). However, the convergent validity between child self-report and parent-rated self-compassionate responding has yet to be examined in the literature. As such, Study 2 will address this gap in the current knowledge.

5.5.1 Theoretical and practical considerations with parent-report measures. Parents are often viewed as the optimal proxy when children are developmentally unable to provide their own self-report; "by virtue of their daily sharing of the children's experience, parents amass a corpus of observational data that cannot be duplicated, even by the most diligent and persistent researcher" (Seifer, 2005, p. 1953). The preadolescent age group *are* considered developmentally equipped to provide accurate self-report (Marsh, Debus, & Bornholt, 2005)—in fact, research indicates that children as young as 7–8 years can report accurately on their own mental health (Patalay, Deighton, Fonagy, Vostanis, & Wolpert, 2014; Sharp, Goodyer, & Croudace, 2006). Nevertheless, it was deemed that obtaining parents' perspectives would be valuable means of supplementing the child's self-report and gaining a broader understanding of this construct (Snow, Cook, Lin, Morgan, & Magaziner, 2005). Indeed, the results from Study 1 (see Chapter 4) indicated that parents are readily able to observe a self-compassionate attitude in their children, even when the child themselves may not readily articulate this.

Child- and informant-report outcome measures are frequently used as a cost-effective means to measure health and wellbeing related outcomes in community (and clinical) populations (Deighton et al., 2014). Schools frequently use self-report measurements, supplemented with teacher and/or parent-report measurements, to support screening for problems and early intervention (Levitt, 2007). Meta-analyses reveal that cross-informant agreement is approximately $r = .30$ (Achenbach, McConaughy, & Howell, 1987). While this seemingly low correlation could be seen as equating to low reliability between informants, Achenbach et al. (1987) argued that different informants validly contribute different information:

> [I]t is essential to preserve the contributions of different informants, even if they do not correlate well with each other. Low correlations between

> informants may indicate that the target variables differ from one situation to another, rather than that the informants' reports are invalid or unreliable. (p. 213)

Indeed, a review of current instruments' ability to effectively and accurately detect youth with mental health problems revealed that the accuracy of an instrument varied with informant (Levitt, Saka, Hunter Romanelli, & Hoagwood, 2007). For example, the parent-report version of the Strengths and Difficulties Questionnaire (SDQ) was found to be more accurate and more sensitive (i.e., produce more false negatives) than the youth-report version in a representative sample of children aged 5-15 years. Meanwhile, the parent-report of the SDQ had previously been found to be more sensitive that the youth self-report when used to specifically identify anxiety and mood disorders (Goodman, Ford, Simmons, Gatward, & Meltzer, 2000).

Levitt et al. (2007) concluded their review by stating that their results "highlight the importance of relying on multiple informants" in the assessment of childhood disorders (p. 176). This contention is echoed by Achenbach (2006), who argued that despite the fact that discrepancies are frequently found between self-reports and reports by others in the field of child research, the "use of multi-source data is essential for clinical assessment" (p. 94).

5.6 Summary and Link to Aim of Study 2

The aim of the current study was to develop and validate two new measures of self-compassion for preadolescent children—a self-report measure, and a parent-perspective version of the same scale. Preadolescents, colloquially referred to as 'tweens' or 'tweenagers', are young people in the developmental stage between child and teenager, i.e., aged 9-12 years. These 'emerging adolescents' (Bosacki, 2016) face a broad range of biopsychosocial challenges, including the onset of puberty and the approaching transition from primary to high school.

Considerable controversy surrounds the most appropriate means to administer, score and interpret current versions of the SCS, in adult and youth populations. The ongoing discussion regarding the scales' dimensionality, coupled with the fact that limited empirical research has examined the construct of self-compassion among child populations, points to the fact that further development, extension and validation of a 'preadolescent-friendly' self-compassion scale is warranted to enable meaningful psychometric measurement for this cohort.

This research is the first to examine a parent-reported measurement of self-compassion; obtaining information from multiple sources has been recognised as important when assessing children in particular (Achenbach et al., 1987; Levitt et al., 2007). Indeed, obtaining informant-reported data to supplement self-report has the potential to increase both the reliability and generalisability of findings via a process of aggregation: As Rushton, Brainerd, and Pressley (1983) point out, "[s]ingle measures are typically less reliable than multiple measures" (p. 34). Furthermore, Markon, Quilty, Bagby, and Krueger (2013) contend that data from informant-report measures "may be more accurate indices of traits that are highly observable by others" (p.370). As self-compassion does appear to be an observable trait (see, for example, Neff & Beretvas, 2013; Neff et al., 2007a), data obtained via a parent-report scale is expected to make a valuable contribution to the overall assessment of self-compassion in preadolescent youth.

5.6.1 Research questions. The first part of Study 2 aimed to address Research Questions 4, 5 and 6 posed at the commencement of this thesis:

RQ 4. Can a valid and reliable measure of self-compassion be developed for preadolescents (i.e., children aged 9-12 years)? What is the factor structure of this measure?

RQ 5. Can a valid and reliable parent-perspective measure of self-compassion be developed and utilised to improve measurement issues for this cohort?

RQ 6. What are the associations between self-compassion, mindfulness, and indicators of psychosocial wellbeing and resilience in preadolescent children?

In relation to Research Question 6, the following hypotheses were set based on findings from prior research into self-compassion with children, adolescents and adults (reviewed herein): (a) Self-compassion and mindfulness will be positively associated; (b) self-compassion will be positively associated with the positive indicators of psychosocial wellbeing, and negatively associated with the negative indicators of wellbeing; (c) self-compassion will be positively associated with resilience.

The next section will detail the development of the two new self-compassion scales for preadolescents and their parents. The methodology, results and a discussion of the key findings from Study 2 will follow.

5.7 Scale Development

The item development procedure adopted in this research follows the guidelines set out by Colton and Covert (2007). It mirrors the process employed by Jackson and Marsh (1996) in their development of the Flow State Scale, as well as that documented in the construction of the Child and Adolescent Mindfulness Measure (CAMM; Greco, Baer, & Smith, 2011b).

5.7.1 Preadolescent self-report measure. Firstly, an item pool was developed according to the six components articulated in Neff's (2003a) seminal operationalisation of self-compassion, i.e., self-kindness, common humanity, mindfulness, self-judgement, isolation, and over-identification. In generating this item pool, the 26-item Self-Compassion Scale (Neff, 2003b) was examined in conjunction with the 12-item Shortened Self-Compassion Scale (Raes et al., 2011) and the 9-item Shortened Self-Compassion Scale for Adolescents (Muris et al., 2016a). These three measures were used as a reference base from which items were generated and/or reworded so as to enable comprehension by children aged 9-12 years.

An initial pool of 36 items (6 items per subscale) was then evaluated independently by a panel of five researchers and/or clinicians with knowledge and interest in the field of child clinical psychology and self-compassion. These evaluators scrutinised each of the 36 items in terms of perceived relevancy to its proposed dimension, and also provided feedback in regards to wording and comprehensibility. As such, each item was rated for content and face validity; those rated lowly were removed, replaced and/or reworded based on feedback from these evaluators. A refined pool of 26 items remained following this iterative process.

A further process of item modification was guided by the input of eight independent children (four girls and four boys) aged 9-12 years. Each child was asked to read all items and then provide feedback as to their understanding of each item's meaning to demonstrate comprehension. Minor wording changes were made on the basis of the children's feedback, and one item (i.e., *"I try to be loving towards myself when I am sad"*) was removed in its entirety due to a general consensus that it was indistinguishable from another item (i.e., *"I am kind to myself when I feel unhappy"*). The resulting items underwent final review by the initial panel of experts prior to their final inclusion in the scale. Thus, the final instrument was

constructed via an iterative process, whereby continual refinement and revision of the item composition was carried out both systematically and creatively Colton and Covert (2007).

The resulting 25-item instrument was named the Self Compassion Scale for Preadolescents (SCS-P). The final scale consisted of four self-kindness items (e.g., "*I am kind to myself when I feel unhappy"*), four common humanity items (e.g., "*When I fail at something important to me, I remind myself that everybody fails sometimes too"*), four mindfulness items (e.g., "*When I am feeling down, I can still think about positive things"),* five self-judgement items (e.g., *"I am hard on myself when I am not good at something"*), four isolation items (e.g., "*When I'm feeling sad, I feel like most kids are happier than I am"*), and four over-identification items (e.g., "*When I am feeling sad, I can't stop thinking about everything that's wrong").* The final version of the SCS-P can be found in Appendix M.

5.7.2 Parent-report measure. A parent-report version of this instrument (named the SCS-P-PR) was constructed immediately after the SCS-P. The scale items were introduced with the following statement: "*We want to know more about how your child acts towards themselves in difficult times. Please read each statement. Then, circle the number that tells how often each statement is true for your child".*

SCS-P-PR items were developed via simple adaptation of each of the 25 items from the SCS-P scale: Pronouns were changed from "I" to "they". For example, Item 1 from the SCS-P read "*I am hard on myself when I'm not good at something*". On the SCS-P-PR scale, Item 1 became "*They are hard on themselves when they are not good at something*". Item 3 on the SCS-P read *"When I have problems, I remind myself that everybody has problems from time to time".* Item 3 on the SCS-P-PR read "*When they have problems, they are able to see that everybody has problems from time to time*". This simple method of item development was employed in order to preserve the scale's consistency and enable reliable comparison of item responses between the preadolescent and parent-versions of the scale. The final version of the SCS-P-PR can be found in Appendix N.

5.8 Method

5.8.1 Research design and ethical approval. A quantitative method was employed to enable psychometric assessment and evaluation of the two newly

developed new measures of self-compassion. This study was granted approval by the Human Ethics Committee of the University of Southern Queensland, approval number H17REA022.

5.8.2 Participants. Participants were recruited via convenience sampling from local schools in the Toowoomba area. The Department of Education and Training provided ethical clearance to approach principals in regards to collecting data in Education Queensland primary schools in the Toowoomba area (See Appendix I). Similarly, the Diocese of Toowoomba Catholic Schools Office provided approval for principals of Catholic schools to be approached regarding data collection (Appendix J).

Twelve schools in the Toowoomba region were contacted via phone and follow-up email to ascertain their interest in allowing Year 5 and 6 students to participate in this research project. State (public) schools, schools from the Catholic diocese, and independent schools were contacted in an effort to maximise the breadth and diversity of the potential participant pool. Of the 12 schools that were contacted, 5 school principals agreed to meet personally with the researcher to discuss the research project in more detail. Three were state schools and two were independent schools. One of the independent schools was an all-girls education facility; the other was all-boys. The three state schools were co-educational.

Each of the five schools were visited personally by the researcher to discuss the research projects' aims and objectives, participation requirements and ethical matters. Detailed information sheets were provided to each principal (see Appendix K). All five of the school principals that met with the researcher subsequently provided their informed consent to participate. The administration team from each school contacted the parents of Year 5 and 6 students via email to gauge initial interest as to their children's potential participation in the research. Parents registering interest were then provided more detailed information regarding the research project's aims and objectives and participation requirements, via email. Parents were given the option to also opt-in to participate themselves, via completion of online survey instruments. All children who had a parent that had provided informed consent were then provided with information regarding the research (Appendix L) via their school-teacher or Guidance Officer. Children were given the option either assent to participate or opt out without penalty. In an effort to

maximise participation rates, all participating children were put into a draw to win an iPad Air. Children could choose to complete their surveys either online, or with pen and paper. A copy of the paper version of the survey instruments is included in Appendix M.

5.8.3 Measures. A battery of self-report measures comprised the child and parent surveys. As described previously, the SCS-P was designed to measure self-compassion in preadolescent children, and the SCS-P-PR was designed to provide a parent-perspective of this trait. Additional measures, of mindfulness, psychosocial wellbeing and resilience, were included in order to ascertain the new scales' concurrent validity. These measures were also crucial to the research questions posed in the second part of Study 2, the details of which are presented in the following Chapter. When selecting appropriate measures, preference was given to concise, freely available instruments with published reliability and validity data relevant to the preadolescent age-range.

5.8.3.1 Mindfulness. The Child and Adolescent Mindfulness Scale (CAMM; Greco, Baer, & Smith, 2011) is a 10-item self-report scale developed to assess mindfulness skills—present-moment awareness as well as judgmental and nonaccepting responses to thoughts and feelings—in children from Grade 5 upwards. The scale has a one-factor structure and does not include items designed to tap into 'observing' or 'labelling' (facets of mindfulness measured in adult scales of mindfulness), as the authors considered these too complex considering the verbal-cognitive and language abilities of younger children. Items are all negatively worded, (e.g., *"I get upset with myself for having feelings that don't make sense*") and scored on a 5-point Likert Scale (0 = never true;4 = always true). All responses are reverse scored prior to computing a total score, which can theoretically range from 0-40. Higher scores indicate higher levels of mindfulness.

Preliminary research has found the scale to have adequate internal consistency, reliability and validity (de Bruin, Zijlstra, & Bögels, 2013; Greco et al., 2011b). The initial validation study, conducted with children from public schools in the USA, revealed that the CAMM correlated negatively with somatic complaints, internalising and externalising symptoms, and positively with quality of life (Greco et al.). A later validation study, conducted with children aged 10-16 years from the Netherlands, revealed that the CAMM correlated positively with measures of happiness, self-

regulation, and quality of life, and negatively with stress, self-blame, rumination, and catastrophising (de Bruin et al., 2013). Unfortunately, as no parent-report measure of mindfulness currently exists within the literature, it was not possible for the current study to gather a parent-reported assessment of their child's mindfulness.

5.8.3.2 Psychosocial wellbeing. Three measures, comprising six separate scales, were used to assess the multiple components of children's psychosocial wellbeing, including affect, life satisfaction, internalising and externalising problems, and prosocial behaviour.

Affect was measured with the Positive and Negative Affect Schedule for Children, child (PANAS-C; Laurent, Catanzaro, Joiner, Rudolph, & Potter, 1999) and parent version (PANAS-P; Ebesutani et al., 2011), are 27 item self-report scales that measure positive affect (PA) and negative affect (NA) in children. The scale is comprised of a variety of adjectives reflective of mood states (e.g., *happy, sad*). Participants are asked to rate how often they have felt that way in the past few weeks; answers on both scales are rated on a 5-point Likert scale ranging from 1 ("*very slightly or not at all*") to 5 ("*extremely*"). Scores are tallied on two separate scales, PA and NA.

Strong psychometric properties were reported from the initial validation study of the PANAS-C, conducted with children in Grade 4 – Grade 8 in the USA (Laurent et al., 1999). The PANAS-C-P (whose items mirror those of the children's scale) has also evidenced adequate psychometric support, following validation with a school-based sample of 606 children and adolescents, including fit indices supporting two factor structure of NA and PA (Ebesutani et al., 2011). Utilising item-response theory, Ebesutani et al. (2012) shortened both the PANAS-C and PANAS-P into a 5-item PA scale (*joyful, cheerful, happy, lively, proud*) and a 5-item NA scale (*miserable, mad, afraid, scared, sad*). This process was undertaken for the purpose of "simultaneously increasing the assessment efficiency of the PANAS-C/P scales while improving the psychometric properties of the scales" (Ebesutani et al., 2012, p. 191). Total scores on the NA and PA scales can theoretically range from 5-25, with higher scores indicating stronger endorsement of each affective state.

Children's life satisfaction was assessed using the Satisfaction with Life Scale for Children (SWLS-C; Gadermann, Schonert-Reichl, & Zumbo, 2010). This five-item measure is a modified version of the Satisfaction with Life Scale (SWLS;

Diener et al. 1985 (SWLS; Diener et al., 1985), created to assess global life satisfaction (e.g., '*If I could live my life over, I would have it the same way*'). Respondents rated their agreement with items on a five-point Likert scale ranging from 1 (*Disagree a lot*) to 5 (*Agree a lot*). Scores are summed to produce a total score; higher scores indicate higher levels of life satisfaction. Research supports the validity and reliability of the SWLS-C with samples of children and early adolescents (Gadermann, Guhn, & Zumbo, 2011; Gadermann et al., 2010). Unfortunately, there is no parent-report measure of children's SWL, and therefore a parent-reported assessment of this construct could not be obtained.

The Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) was developed to measure both psychosocial problems and strengths in children aged 3–16 years via a multi-informant approach. Separate scales allow for informants (i.e., parents and/or teachers) to report on the difficulties and strengths of children aged between 3-16 years old; youths aged 11–16 years can self-report on their difficulties and strengths. The measure consists of 25 items, formulated as statements. Example items include "*other people my age generally like me*" and "*I am often accused of lying and cheating*". Answers are elicited on the basis of how true the statement has been over the last six-months, on a three-point Likert scale (0 = *not true,* 1 = *somewhat true*, 2 = *certainly true*). After reverse scoring relevant items, scores can be tallied for five subscales: emotional symptoms, conduct problems, peer problems, hyperactivity-inattention, and prosocial behaviour. Adequate reliability and validity data have been reported for the five-factor structure of the SDQ in preadolescent samples (Van Roy, Veenstra, & Clench-Aas, 2008).

However, Goodman, Lamping, and Ploubidis (2010) have published validity studies concluding that—for low-risk and/or non-clinical population samples—subscale scores can be reliably collapsed onto three broader scales: internalising problems (comprised of the 10 items tapping into emotional and peer-problem symptoms), externalising problems (comprised of the 10 items tapping into conduct and hyperactivity-inattention symptoms) and the prosocial scale (5 items). Scores on the internalising and externalising scales can theoretically range from 0-20. Alternatively, an SDQ total difficulties score can be summated from the emotional, peer, behavioural and hyperactivity subscales. This score has been found to be a

psychometrically sound measure in multiple populations (e.g., Achenbach et al., 2008; Goodman, 1997).

The psychometric properties of the self-report and parent-report SDQ for primary-aged children have been well established (see Stone et al., 2010 for a review). The SDQ was also one of the only measures to receive four 'A' ratings in a recent review of the validity and reliability of child and adolescent measures of psychosocial wellbeing (Tsang et al., 2012). While a portion of the child participants surveyed in this study fell below the recommended age of 11 to provide self-report, research has confirmed that the psychometric properties of this measure are satisfactory when completed by non-clinical children as young as 8 years (Muris, Meesters, Eijkelenboom, & Vincken, 2004; Muris, Meesters, & van den Berg, 2003; Van Roy et al., 2008). The inclusion of items about children's strengths (i.e., the prosocial scale) is in keeping with the positive psychology perspective underpinning this research.

5.8.3.3 Resilience. The 12-item Child and Youth Resilience Measure (CYRM-12; Liebenberg et al., 2013) was developed as a shortened version of the 28-item (CYRM; Liebenberg et al., 2012). It is designed to measure resilience, as comprised of individual traits, relationships with caregiver(s), as well as contextual factors known to facilitate a sense of belonging. Thus, it is a measure consistent with the ecological model of resilience adopted by this study. The CYRM-12 has two versions, one for young children (aged 5-9 years), and another for youth (aged 10-23 years). A separate scale is completed by someone who knows the child/youth well, such as a parent or teacher ('Person Most Knowledgeable'). The self-report scale consists of 12 items phrased as statements. Example items include "*I have people I look up to*" and "*my friends stand by me during difficult times*". Responses are provided on either a three or five-point Likert scale, depending on the researcher's preference, with scores provided based on how well individuals believe each statement describes them (*not at all, a little, somewhat, quite a bit, a lot*). The CYRM has been found to be a reliable and valid self-report instrument with adequate psychometric properties (Liebenberg et al., 2012).

5.8.4 Procedure. Both the child and the parent surveys were able to be accessed via the USQ Department of Psychology On-Line Survey Site. When participants entered the website they were directed to read the Informed Consent

form (see Appendix O), which outlined the nature of the study, how their information was to be used and by whom, and advised participants of their right to withdraw from the study at any time. Contact details for the primary researcher and the ethics representative were also provided. Participants were required to endorse that they had read and agreed to the informed consent/assent information before they could proceed to the next stage of the survey.

The first screen of both the parent and child survey collected basic demographic information regarding the child, including gender, date of birth, school and grade attended, and cultural group. The child's first and last initials were collected (rather than a full name) to enable matching of the child's questionnaire with their parent's questionnaire whilst maintaining anonymity. Following the demographics section, child participants completed the SCS-P, the CAMM, the CYRM, the PANAS-C, the SWLS-C, and the SDQ. Instructions were provided for each questionnaire, and there was no time limit, so participants could complete the surveys in their own time. The parents' survey followed the same structure as the child survey, but incorporated the SCS-P-PR, the PANAS-P, the CYRM-PMK, and the SDQ-initial parent-report. Unfortunately, there is no parent-reported measure of children's mindfulness, so this construct could not be captured.

Responses for each questionnaire were forced-choice; participants could not proceed to the next screen unless they had completed every question. There was an indicator on top of the screen that informed participants of their progress on the total survey. Data were collected throughout 2017. For those children who completed their surveys via pen and paper, their data was entered manually onto the master Excel spreadsheet where all was collated prior to analysis.

5.9 Results

5.9.1 Demographic information. A total of 193 children and 108 parents completed the surveys. Ages of children ranged from 9-12 years, with a mean age of 11. Slightly more girls than boys participated. Ninety-eight mothers completed the 'parent' survey, nine fathers, and one grandparent. Culturally, children identifying as Australian dominated the sample (82%). Nine percent identified as Aboriginal Australian or Torres Strait Islander. Other cultural groups represented were South East Asian (2%), Central Asian (2%), South Sea Islander (2%), Northern European

(2%), North African (1%), South American (1%), and Polynesian (1%). Table 7 provides a more detailed demographic breakdown of child participants.

Table 7

Demographic Characteristics of Preadolescent Participants

Characteristics	Frequency	Percentage
Gender		
Male	67	35
Female	126	65
Age		
9	2	1
10	48	25
11	100	52
12	43	22
Grade		
Year 5	81	42
Year 6	112	58
School		
State (Public)	122	63
Independent	71	37

Note. Percentages have been rounded.

5.9.2 Factor analysis of SCS-P. All data analyses were conducted with the statistics package SPSS, version 25. A series of exploratory factor analyses were conducted to examine the factor structure of the SCS-P. As noted above, exploratory factor analysis was chosen over confirmatory factor analysis as: (a) there were no strong theoretical expectations regarding the structure of the data, as prior research with this cohort is sparse; (b) an exploratory method can be used to generate theory; (c) the data is derived from the pilot test of a *new* measure of self-compassion. Henson and Roberts (2016, p. 395) contend that "factor analysis at once both tests measurement integrity and guides further theory refinement".

However, a major criticism of exploratory factor analysis regards the subjectivity of each decision a researcher must make at the various steps of conducting the analysis (Tabacknich & Fidell, 2014). As such, "appropriate use of exploratory factor analysis necessitates thoughtful and informed researcher decision making" (Henson & Roberts, 2016, p. 397). As poor choices regarding methodological decisions can significantly distort results (Fabrigar, Wegener, MacCallum, & Strahan, 1999), a clear rationale regarding the method of factor

extraction, rotation method, and factor retention employed are described below. This is consistent with Henson and Robert's (2016) recommendations regarding improved practice for the use of exploratory factor analysis in published research.

5.9.2.1 Assumptions and data screening. There were no cases with missing data, therefore all cases (n = 193) were retained for analysis. Recommendations as to the minimum sample size necessary to conduct an exploratory factor analysis vary. MacCallum MacCallum, Browne, and Sugawara (1996) state that 100-200 is adequate when the factors are well defined, and communalities in the range of .5. Meanwhile, others (e.g., Field, 2009) recommend computing the Kaiser-Meyer-Olkin (KMO; Kaiser, 1970) statistic—a measure of the proportion of variance among variables that might be common variance— to examine sampling adequacy. Values .5 to .7 are considered mediocre, .7 to .8 are good, .8 to .8 are great, and over .9 are superb (Hutcheson & Sofroniou, 1999). The KMO for this data set fell just short of the 'superb' range, at .88. In addition, Bartlett's Test of Sphericity was significant (χ^2 (300) = 2138.88, p = < .001). Taken as a whole, these findings indicated that the characteristics of this data set were suitable to proceed with exploratory factor analysis.

Following suggestions of Field (2009) and Tabachnick and Fidell (2013), item distributions were also examined to screen for severe nonnormalities (i.e., skewness > 2; kurtosis > 7; West, Finch, & Curran, 1995). None of the SCS-P items showed severe non-normal distribution (all variables = skewness < 1; kurtosis < 1.3). Visual examination of scatterplots revealed that the assumption of linearity was also met (Tabachnick & Fidell).

Multivariate outliers amongst cases were screened for by calculating Mahalanobis distance. Probability calculations indicated that 22 cases (*Child Case IDs 3, 24, 27, 30, 35, 36, 47, 49, 55, 56, 57, 59, 66, 73, 74, 81, 87, 104, 106, 111, 134, 188*) had values < .05. However, visual inspection of individual cases revealed that the cause of outliers was not due to incorrectly entered or measured data, and therefore a decision was made to retain all cases.

Correlations between variables were examined via visual inspection of the correlation matrix. For each variable, there were at minimum several Pearson correlations exceeding .3, and at least half of the correlations met the .01 level of significance. Multicollinearity and singularity were also checked via visual

inspection of the correlation matrix. There were no variables perfectly correlated, and no variable correlated highly (> .8) with multiple other variables. The absence of multicollinearity was confirmed via examination of both the tolerance and variance inflation factors (VIF): tolerance levels were greater than 0.10 for each item, and VIF levels were less than 10 for each item.

5.9.2.2 Statistical power. Power was calculated via the GPower application (version 3.0.10, Faul, 2008). With a sample size of 193, this study had sufficient power (.99) to detect a medium effect size (i.e., d = .3) with an alpha = .05. However, power to detect a small effect size (i.e., d = .1) was low (.40). Therefore, the possibility of Type II errors occurring was taken into consideration during the interpretation of results.

5.9.2.3 Method of factor extraction. Within the current literature examining the factor structure of the SCS (and its relatives) various methods of factor extraction have been employed. Predominantly these have included principal component analysis (e.g., Mantzios et al., 2015; Muris et al., 2016a; Stolow et al., 2016), and maximum likelihood (e.g., Cleare et al., 2018; Lopez et al., 2015). Other studies utilising exploratory factor analysis have neglected to specify the method of extraction utilised (Deniz, Kesici, & Sümer, 2008; Min-Ying, 2015; Neff, 2003b). It has been noted that while principal components analysis is the most frequently adopted method within psychological literature, and often the default setting in many statistical packages, it does not always lead to the best results (Costello & Osbourne, 2005). As the basic intention of principal components is to summarise many variables into fewer components (i.e., data reduction), rather than identify latent constructs (Costello & Osbourne, 2005; Fabrigar et al., 1999; Henson & Roberts, 2016; Tabachnick & Fidell, 2013), it was not deemed consistent with the aims of this study and therefore this method of extraction was ruled out.

Not including principal components, there are six methods of exploratory factor analysis available within the SPSS software package (version 25). The two most popular are maximum likelihood and principal axis factoring; these are generally considered to provide optimal results (Costello & Osbourne, 2005). In deciding between the two, Fabrigar et al. (1999) recommend maximum likelihood as the preferred method when there are no severe violations of multivariate normality (which there were not within this data set; see *Assumptions of exploratory factor*

analysis section above). This is because maximum likelihood "allows for the computation of a wide range of indexes of the goodness of fit of the model [and] permits statistical significance testing of factor loadings and correlations among factors and the computation of confidence intervals" (p. 277). More recently, a study comparing methods of exploratory factor analysis revealed that principal axis factoring marginally outperformed maximum likelihood in certain settings; however, the authors concluded that maximum likelihood "is the most flexible method" (de Winter & Dodou, 2012, p. 708). It was further noted that previous researchers have adopted this method in their factor analyses of the SCS in adult populations (Cleare et al., 2018; Lopez et al., 2015). Maximum likelihood was thus the chosen method of factor extraction, being the most consistent with the aims of this research.

5.9.2.4 Factor retention rule. There are a number of methods that can be employed to determine how many factors to retain following factor analysis. These include Kaiser's eigenvalue greater than 1.0 rule, Velicer's minimum average partial (MAP), Cattell's scree test, Bartlett's chi-square test, and Horn's parallel analysis (see Zwick & Velicer, 1986 for a review). As exploratory factor analysis involves balancing reduction and representation of the correlations within a group of variables (Ledesma & Valero-Mora, 2007), an error will significantly alter the solution, and thus the conclusions drawn from an analysis. Therefore, selection of an appropriate method is vital to preserve the integrity of the results (Henson & Roberts, 2016). The use of parallel analysis (Horn, 1965) is frequently sighted as the most consistently accurate method of determining how many items to retain in exploratory factor analysis (Ledesma & Valero-Mora, 2007; Patil et al., 2008; Zwick & Velicer, 1986). To run a parallel analysis, eigenvalues are extracted from a randomly generated correlation matrix (with the same sample size and number of variables) and compared with eigenvalues extracted from the data set; eigenvalues from the 'true' data set are only retained if they exceed those generated from the randomly generated data set (Patil et al., 2008). Essentially the parallel analysis determines whether an eigenvalue found via exploratory factor analysis is larger than what would be expected by chance alone.

Following this procedure, a parallel analysis was run using the SPSS syntax provided by O'Connor (2000) and compared to the initial results from an exploratory factor analysis using a maximum likelihood method. The most popular

recommendation is to use the eigenvalue corresponding to the 95th percentile of the random data set (Glorfeld, 1995); this indicated a two-factor solution was the most appropriate. According to the recommendations of Henson and Roberts (2016), researchers should use multiple criteria when determining the number of factors to retain. Examination of the scree plot has been recommended as "a complementary method used in conjunction with parallel analysis" (Zwick & Velicer, 1986, p. 441). The scree plot also indicated that a two-factor solution was the best fit for the data.

Therefore, a subsequent factor analysis using the maximum likelihood method was conducted with two factors specified (Field, 2009). With an eigenvalue of 6.93, Factor 1 explained 27.71% of the variance. Factor 2 had an eigenvalue of 4.54 and explained 18.14% of the variance. The eigenvalue of the first factor not retained was 1.46.

5.9.2.5 Rotation method. The goal of rotation is to simplify the factor structure (Osborne, 2015). When deciding between orthogonal or oblique rotations, Tabachnick and Fidell (2013) advise to firstly request an oblique rotation and look at the correlations between factors. If the correlation is less than .32, there is insufficient variance to warrant oblique rotation; if the correlation exceeds .32 the factor analysis should be run again with an orthogonal rotation. This is also consistent with the recommendations of Henson and Roberts (2016). As the initial analyses (run with a Promax rotation) revealed that the correlation between factors was .218, a subsequent maximum likelihood analysis was run with an orthogonal (Varimax) rotation specified. After Varimax rotation, the 13 negatively formulated items (i.e., items worded to tap into the tendencies towards self-judgement, isolation and over-identification) loaded onto the first factor, and the 12 positively formulated items (i.e., items worded to tap into the tendencies towards self-kindness, common humanity and mindfulness) loaded onto the second factor; all loadings exceeded .5. The total explained variance of this two-factor rotated solution was 41.27%. The percentage of unexplained variance was attributed to the high heterogeneity of the SCS-P's items. Loadings of factors on variables pre and post-rotation, communalities, and precents of variance and covariance are shown in Table 8. Negative formulated items were reverse scored prior to analyses.

5.9.2.6 Factor analyses of subscales. Two additional maximum likelihood factor analyses were conducted to examine the structure of Factor 1 and Factor 2

individually; specifically, to see if the self-judgment, isolation and over-identification components emerged within Factor 1, labelled ‘Uncompassionate self-responding’ (Uncompassionate SR), and the self-kindness, common humanity and mindfulness components emerged within Factor 2, labelled ‘Compassionate self-responding’ (Compassionate SR). Results from the Kaiser-Meyer-Olkin Measure of Sampling Adequacy revealed that the data sets fell into the ‘superb’ range (Uncompassionate SR KMO = .92; Compassionate SR KMO = .90). Bartlett's Test of Sphericity also indicated that both data sets met the minimum standards for this type of analysis (Uncompassionate SR = χ^2 (78) = 1075. 87, p = < .001; Compassionate SR = χ^2 (66) = 895.341, p = < .001).

Table 8

SCS-P Item-factor Loadings Before and After Rotation for Exploratory Factor Analysis

Item description	Non-rotated		Rotated (Varimax)		
	Factor 1	Factor 2	Factor 1	Factor 2	h^2
20. *When I am upset, I am hard on myself*	0.76	0	**0.79**	0	0.63
7. *When things go wrong, I am really hard on myself*	0.70	0	**0.79**	0	0.65
24. *When I fail at something important to me, I feel like I' m all alone*	0.63	0	**0.73**	0	0.53
1. *I am hard on myself when I'm not good at something*	0.63	0	**0.68**	0	0.47
5. *When I fail at something important to me, I feel like I'm not good enough*	0.62	0	**0.67**	0	0.46
10. *I get frustrated or upset about parts of my personality that I don't like*	0.62	0	**0.64**	0	0.41
15. *I get down on myself when I see things about me that I don' t like*	0.57	0	**0.62**	0	0.39
19. *When something upsets me I get carried away with my feelings*	0.58	0	**0.62**	0	0.39
23. *I over-react when things go wrong*	0.57	0	**0.58**	0	0.36
4. *My weaknesses make me feel very different from everyone else*	0.49	0	**0.57**	0	0.32
2. *When I'm feeling sad, I can't stop thinking about everything that's wrong*	0.49	0	**0.56**	0	0.31
12. *When I' m feeling sad, I feel like most kids are happier than I am*	0.43	0	**0.53**	0	0.29
17. *When things are going bad, it feels like everyone else has it easier*	0.49	0	**0.52**	0	0.28
9. *When I feel like I'm not good enough, I remind myself that everyone feels that way sometimes*	0	0.63	0	**0.74**	0.54
14. *When I fail at something, I remind myself that everybody fails sometimes too*	0	0.66	0	**0.73**	0.53
22. *When I make a mistake, I remind myself that it's ok to make mistakes*	0.47	0.55	0	**0.71**	0.52

16. *When I fail at something really important, I remind myself that it is not the end of the world*	0	0.60	0	**0.67**	0.45
21. *When I am feeling down, I can still think about positive things*	0.50	0.44	0	**0.64**	0.44
13. *When something bad happens, I try to focus on the good things as well*	0.50	0.41	0	**0.61**	0.42
6. *When I feel sad, I remind myself that I am not the only person in the world feeling like this*	0	0.56	0	**0.60**	0.37
11. *When I' m going through a very hard time, I' m nice to myself*	0.43	0.4	0	**0.57**	0.36
3. *When I have problems, I remind myself that everybody has problems from time to time*	0	0.47	0	**0.56**	0.31
25. *I am kind towards those things about myself I don't like*	0	0.44	0	**0.56**	0.32
18. *I am kind to myself when I feel unhappy*	0.40	0	0	**0.54**	0.31
8. *When something upsets me I try to stay calm*	0	0	0	**0.50**	0.27
Trace			5.55	4.78	10.32
% of variance			22.20	19.12	41.27

Note. Variables are ordered and grouped by size of loading post-rotation to facilitate interpretation. Coefficients lower than .4 are replaced with zeros. Percentage variance is post-rotation; because there were 25 measured variables, percentage of variance is trace divided by 25, times 100. h^2 = communality coefficient. Factor 1: ‘Uncompassionate self-responding’; Factor 2: ‘Compassionate self-responding’.

Examination of the scree plots in conjunction with the results of a parallel analysis suggested one-factor solutions for both factors. Therefore, a second set of maximum likelihood factor analyses were conducted with one fixed factor specified. In regards to the Uncompassionate SR scale, a one-factor solution (eigenvalue = 6.01) accounted for 46.23% of the variance. The eigenvalue of the first factor not retained was 1.18. In regards to the Compassionate SR scale, a one-factor solution (eigenvalue = 5.30) accounted for 44.13% of the variance. The eigenvalue of the first factor not retained was 1.29. For the Uncompassionate SR scale, item factor loadings ranged from .80 to .53. For the Compassionate SR scale, item factor loadings ranged from .73 to .51.

Taken together, these results indicate that the SCS-P measures two distinct constructs: the tendency to respond to the self in a negative fashion (Uncompassionate SR), and the tendency to respond to the self with compassion (Compassionate SR). This is consistent with the results of confirmatory factor analysis conducted with previous versions of the SCS within child populations (i.e., Stolow et al., 2016; Sutton et al., 2017). As such, the following analyses examine the reliability and validity of these two factors—Compassionate SR and Uncompassionate SR—separately.

5.9.2.7 Reliability. The internal consistency of the two emerging factors was analysed with Cronbach's alpha statistic. Values of .80 or higher were considered as good, and over .70 acceptable (Gliem & Gliem, 2003). As displayed in Table 9, Cronbach's alphas for both the Uncompassionate SR factor and the Compassionate SR factor indicated good internal consistency. Examination of the item-total statistics table revealed that that removal of any item would result in a lower Cronbach's alphas, and thus all items were retained for both factors.

Table 9

Means and Standard Deviations of Study Variables from Preadolescent Participants

Variable (Scale)	*M*	*SD*	*Cronbach's α*
Compassionate self-responding (SCS-P)	37.71	9.61	.88
Uncompassionate self-responding (SCS-P)	36.85	11.40	.90
Mindfulness (CAMM)	22.19	6.91	.75
Psychosocial wellbeing indicators			
Positive affect (PANAS-PA)	10.54	4.91	.86
Negative affect (PANAS-NA)	17.87	4.61	.88
Internalising difficulties (Emotional and Peer-related subscales; SDQ)	7.55	3.60	**.55**
Externalising difficulties (Conduct and Hyperactivity subscales; SDQ)	7.06	3.70	.75
Satisfaction with life (SWLS-C)	17.83	4.83	.83
Prosocial behaviour (SDQ)	7.54	2.00	**.68**
Resilience (CYRM)	47.43	9.54	.89

Note. Cronbach's alphas under .70 are highlighted in bold. Compassionate self-responding scores can range from 12-60. Uncompassionate self-responding scores can range from 13-65. CAMM = Child and Adolescent Mindfulness Measure; scores can range from 0-40. PANAS-PA = Positive and Negative Affect Scale for Children-Positive Affect subscale; scores can range from 5-25. PANAS-NA = Positive and Negative Affect Scale for Children-Negative Affect subscale; scores can range from 5-25. SDQ = Strengths and Difficulties Scale; scores can range from 25-75. SWLS-C = Satisfaction with Life Scale-Child; scores can range from 5-25. CYRM = Child and Youth Resilience Measure; scores can range from 12-60.

5.9.2.8 Concurrent validity. The mean scores and standard deviations of all study variables are presented in Table 9, along with Cronbach's alphas for each scale. Pearson correlations were used to test the associations between Compassionate SR and Uncompassionate SR with the measures of psychosocial wellbeing and resilience. Following the recommendations of Goodman et al. (2010) for low-risk and/or general population samples, results from the SDQ were analysed via three-subscales: internalising problems (10 items tapping into emotional and peer-problem symptoms), externalising problems (10 items tapping into conduct and hyperactivity symptoms) and the prosocial scale (5 items). Correlations coefficients below .3 were interpreted as small or weak, from .3 to .5 as moderate and above .5 as strong (Cohen, 1988). Table 10 details these correlations.

Table 10

Pearson Correlations of SCS-P Subscales with Self-Report Measures of Mindfulness, Psychosocial Wellbeing and Resilience

Variable (Measure)	Compassionate Self-Responding	Uncompassionate Self-Responding
Mindfulness (CAMM)	-.07	**-.27****
Psychosocial wellbeing indicators		
Positive affect (PANAS-PA)	**.19****	**-.25****
Negative affect (PANAS-NA)	**-.14***	**.33****
Internalising problems (SDQ)	-.12	**.42****
Externalising problems (SDQ)	**-.31****	**.42****
Prosocial behaviour (SDQ)	**.19****	-.10
Satisfaction with Life (SWLS-C)	**.35****	**-.35****
Resilience (CYRM)	**.32****	**-.33****

Note. *$p < .05$; **$p < .01$. SCS-P = Self-Compassion Scale-Preadolescent; CAMM = Child and Adolescent Mindfulness Measure; PANAS-PA = Positive and Negative Affect Scale for Children-Positive Affect subscale; PANAS-NA = Positive and Negative Affect Scale for Children-Negative Affect subscale; SDQ = Strengths and Difficulties Scale; SWLS-C = Satisfaction with Life Scale-Child; CYRM = Child and Youth Resilience Measure.

As can be seen from Table 10, Compassionate SR was significantly related to all the comparison indicators in the expected directions, with the exception of mindfulness, and internalising problems. Compassionate SR showed the strongest positive associations with resilience and satisfaction with life. Weaker associations were revealed with positive affect and prosocial behaviour. The strongest negative association was with externalising problems, while a weaker association was revealed with negative affect.

Meanwhile, Uncompassionate SR was significantly related to all the comparison indicators in the expected directions with the exception of prosocial behaviour. It showed moderate positive associations with internalising problems, externalising problems, and negative affect. The strongest associations in the negative direction were with satisfaction with life and resilience. Weaker negative associations were found with mindfulness and positive affect.

5.9.3 Factor analysis of SCS-P-PR. This Chapter will now outline the steps taken in the factor analysis of the SCS-P-PR, a unique parent-reported measure of

self-compassion designed to supplement the assessment of self-compassion in preadolescents.

Following the same steps as the SCS-P, a series of exploratory factor analyses were conducted to examine the factor structure of the SCS-P-PR. The sample size was considered small for this type of analysis (n = 108); however, inspection of communalities revealed that they fell in the range of .6 (mean = .62), and thus the size of this sample was not considered problematic (Field, 2009). Indeed, results from the Kaiser-Meyer-Olkin Measure of Sampling Adequacy revealed that this data set fell into the 'superb' range (KMO = .92); Bartlett's Test of Sphericity also indicated that the data met the minimum standards for this type of analysis (χ^2 (300) = 2278.39, p = < .001).

Multivariate outliers amongst cases were screened for by calculating Mahalanobis distance. Probability calculations indicated that 14 cases (*Parent Case IDs 4, 8, 9, 17, 18, 27, 31, 38, 65, 73, 78, 91, 92, 104)* had values < 0.05. However, visual inspection of individual cases revealed that the cause of outliers was not due to incorrectly entered or measured data, and therefore a decision was made to retain all cases.

Following suggestions of Field (2009) and Tabachnick and Fidell (2013), item distributions were also examined to screen for severe nonnormalities. None of the SCS-P-PR items showed severe non-normal distribution (all variables = skewness < 1; kurtosis < 1.3). Visual examination of scatterplots revealed that the assumption of linearity was also met (Tabachnick & Fidell, 2013).

Correlations between variables were examined via visual inspection of the correlation matrix. For each variable, there were at minimum several Pearson correlations exceeding .3, and at least half of the correlations met the .01 level of significance. Multicollinearity and singularity were also checked via visual inspection of the correlation matrix. There were no variables perfectly correlated, and no variable correlated highly (> .8) with multiple other variables. The absence of multicollinearity was confirmed via examination of both the tolerance and variance inflation factors (VIF): tolerance levels were greater than .10 for each item, and VIF levels were less than 10 for each item.

5.9.3.1 Statistical power. Power was calculated via the GPower application. With a sample size of 108, this study had sufficient power (.93) to detect a medium

effect size (i.e., d = .3) with an alpha = .05. However, power to detect a small effect size (i.e., d = .1) was low (.27). Therefore, the possibility of Type II errors occurring was taken into consideration during the interpretation of results.

An exploratory factor analysis using the maximum likelihood method and oblique (Promax) rotation was conducted to see if factors were correlated. As a strong positive correlation was revealed between factors (.70), results from the Promax rotation were retained; in these conditions they are considered more likely to be reliable than those obtained after orthogonal rotation (Field, 2009). Examination of the scree plot in conjunction with the results of a parallel analysis—as per the recommendations of Zwick and Velicer (1986)—suggested a two-factor solution was the best fit for the data. As Item 25 did not load significantly on either factor, it was removed prior to a subsequent factor analysis. Following the deletion of item 25, with an eigenvalue of 12.79, Factor 1 explained 53.3% of the variance. Factor 2 had an eigenvalue of 2.22 and explained 9.25% of the variance. The eigenvalue of the first factor not retained was 1.09. After rotation, Factor 1 and Factor 2 comprised items from the negative and positive elements of self-responding respectively. No cross loadings exceeded .36. The percentage of unexplained variance was attributed to the high heterogeneity of the SCS-P-PR's items. Loadings of factors on variables, communalities, and percent of variance and covariance are shown in Table 11.

Table 11

SCS-P-PR Item-Factor Loadings Before and After Rotation for Exploratory Factor Analysis

	Non-Rotated		Rotated (Promax)		
Item description	Factor 1	Factor 2	Factor 1	Factor 2	h^2
1. They are hard on themselves when they are not good at something	0.65	0.45	**0.91**	0	.62
4. Their weaknesses make them feel like they are very different from everyone else	0.65	0.42	**0.87**	0	.60
5. When they fail at something important to them, they feel as if they are not good enough	0.75	0	**0.85**	0	.70
7. When things go wrong, they are really hard on themselves	0.76	0	**0.80**	0	.69
15. They get down on themselves when they see things about themselves that they don't like	0.62	0	**0.77**	0	.51
24. When they fail at something that's important to them, they feel like they are all alone	0.71	0	**0.76**	0	.60
2. When they are feeling sad, they fixate on everything that's wrong	0.74	0	**0.70**	0	.62
23. They over-react when things go wrong	0.77	0	**0.63**	0	.64
17. When things are going bad, they feel like everyone else has it easier	0.74	0	**0.61**	0	.59
10. They get frustrated or upset about parts of their personality that they don't like	0.49	0	**0.58**	0	.30
12. When they are feeling sad, they feel most kids are happier than they are	0.52	0	**0.56**	0	.32
20. When they are upset, they are hard on themselves	0.72	0	**0.55**	0	.54
19. When something upsets them, they get carried away with their feelings	0.75	0	**0.46**	0	.56
9. When they feel like they are not good enough, they remind themselves that everyone feels that way sometimes	0.74	0	**0.42**	0	.84

6. When they feel sad, they remind themselves that they are not the only person in the world feeling that way	0.79	-0.45	**0**	**1.05**	.70
21. When they are feeling down, they can still think about positive things	0.69	-0.48	0	**1.02**	.71
3. When they have problems, they are able to see that everybody has problems from time to time	0.81	0	0	**0.76**	.54
11. When they are going through a very hard time, they are nice to themselves	0.68	0	0	**0.75**	.59
16. When they fail at something really important, they remind themselves that it is not the end of the world	0.73	0	0	**0.75**	.74
8. When something upsets them, they try to stay calm	0.84	0	0	**0.72**	.48
14. When they fail at something, they remember that everybody fails sometimes too	0.65	0	0	**0.70**	.71
22. When they make a mistake, they remind themselves that it's ok to make mistakes	0.84	0	0	**0.62**	.58
18. They are kind to themselves when they feel unhappy	0.75	0	0	**0.59**	.49
13. When something bad happens, they try to focus on the good things as well	0.69	0	0	**0.51**	.58
Trace			10.93	10.65	14.25
%			45.54	44.38	59.38

Note. Variables are ordered and grouped by size of loading to facilitate interpretation. Coefficients lower than .40 are replaced with zeros. Percentage variance is post-rotation; because there were 24 measured variables after Item 25 was deleted, percentage of variance is trace divided by 24, times 100. h^2 = communality coefficient.

5.9.3.2 Factor analyses of subscales. Two additional maximum likelihood factor analyses were conducted to examine the structure of Factor 1 and Factor 2 individually; specifically, to see if the self-judgment, isolation and over-identification components emerged within Factor 1, labelled 'Uncompassionate self-responding' (Uncompassionate SR), and the self-kindness, common humanity and mindfulness components emerged within Factor 2, labelled 'Compassionate self-responding' (Compassionate SR). Results from the Kaiser-Meyer-Olkin Measure of Sampling Adequacy revealed that the data sets each fell into the 'superb' range (Uncompassionate SR KMO = .90; Compassionate SR KMO = .91; Bartlett's Test of Sphericity also indicated that the data sets met the minimum standards for this type of analysis (Uncompassionate SR = χ^2 (78) = 1000.34, p = < .001; Compassionate SR = χ^2 (55) = 960.02, p = < .001). Examination of the scree plots in conjunction with the results of a parallel analysis suggested one-factor solutions for both factors. In regards to Uncompassionate SR, a one-factor solution (eigenvalue = 7.63) accounted for 58.72% of the variance. The eigenvalue of the first factor not retained was .99. In regards to Compassionate SR, a one-factor solution (eigenvalue = 7.13) accounted for 64.81% of the variance. The eigenvalue of the first factor not retained was .84. All item factor loadings ranged between .83 and .55 for Uncompassionate SR. For Compassionate SR, item factor loadings ranged from .86 to .69.

Mirroring the results from the exploratory factor analysis of the SCS-P, these results indicate that the SCS-P-PR measures two distinct constructs: the tendency to respond to the self in a negative fashion (Uncompassionate SR); and the tendency to respond to the self with compassion (Compassionate SR). As such, the following analyses examine the reliability and validity of these two factors (Compassionate SR and Uncompassionate SR) separately.

5.9.3.3 Reliability. As with the SCS-P, internal consistency of the two emerging factors was analysed with Cronbach's alpha statistic, with values of .80 or higher were considered good (Gliem & Gliem, 2003). As displayed in Table 12, Cronbach's alphas for both the Uncompassionate SR factor and the Compassionate SR factor indicated very good internal consistency. Examination of the item-total statistics table revealed that that removal of any item would result in a lower Cronbach's alphas, and thus all items were retained for both factors.

5.9.3.4 Concurrent Validity. The mean scores and standard deviations of all study variables are presented in Table 12, along with Cronbach's alphas for each measure. As with the preadolescent self-report measure, Pearson correlations were used to test the associations between parent-reported Compassionate SR and Uncompassionate SR indicators of children's psychosocial wellbeing and resilience. Correlations coefficients below .3 were interpreted as small or weak, from .3 to .5 as moderate and above .5 as strong (Cohen, 1988).

Table 12

Means, Standard Deviations and Cronbach alphas of Study Variables, Parent Data

Variable (Scale)	*M*	*SD*	*Cronbach's α*
Compassionate self-responding (SCS-P-PR)	36.95	9.47	.95
Uncompassionate self-responding (SCS-P-PR)	39.86	10.86	.94
Psychosocial wellbeing indicators			
Positive affect (PANAS-P-PA)	18.97	3.73	.88
Negative affect (PANAS-P-NA)	9.61	4.18	.87
Internalising difficulties (SDQ-Parent Form)	5.99	3.53	.75
Externalising difficulties (SDQ-Parent Form)	4.90	3.77	.82
Prosocial behaviour (SDQ-Parent Form)	8.16	1.68	**.27**
Resilience (CYRM-PMK)	49.75	8.10	.89

Note. Cronbach's alphas under .70 are highlighted in bold. Compassionate self-responding scores can range from 12-60. Uncompassionate self-responding scores can range from 13-65. SCS-P-PR = Self-Compassion Scale-Preadolescent, self-report; scores can range from 25-125. PANAS-PA = Positive Affect Scale for Children-Positive Affect subscale, Parent report; scores can range from 5-25. PANAS-NA = Negative Affect Schedule for Children-Negative Affect subscale; scores can range from 5-25. SDQ = Strengths and Difficulties Scale; scores can range from 25-75. SWLS-C = Satisfaction with Life Scale-Child; scores can range from 5-25. CYRM = Child and Youth Resilience Measure; scores can range from 12-60. Cronbach's alphas under .70 are highlighted in bold.

As can be seen from Table 13, Compassionate SR was significantly related to all the comparison indicators in the expected directions. Compassionate SR showed moderate positive associations with positive affect, resilience and prosocial behaviour. Strong negative associations were revealed between Compassionate SR and internalising problems on the SDQ; moderate associations were evident between Compassionate SR and negative affect, and externalising problems on the SDQ.

Table 13

Correlations of SCS-P-PR Subscales with Parent-Reported Measures of Child's Psychosocial Wellbeing and Resilience

Variable (Measure)	Compassionate self-responding	Uncompassionate self-responding
Positive affect (PANAS-P-PA)	**.44****	**-.51****
Negative affect (PANAS-P-NA)	**-.49****	**.61****
Internalising problems (SDQ)	**-.51****	**.60****
Externalising problems (SDQ)	**-.49****	**.47****
Prosocial behaviour (SDQ)	**.46****	**-.41****
Resilience (CYRM PMK)	**.37****	**-.40****

Note. *$p < .05$; **$p < .01$. SCS-P-PR = Self-Compassion Scale-Preadolescent-Parent; PANAS-P-PA = Positive and Negative Affect Schedule for Children-Parent-Positive Affect subscale; PANAS-P-NA = Positive and Negative Affect Schedule for Children-Parent-Negative Affect subscale; SDQ = Strengths and Difficulties Scale; CYRM PMK = Child and Youth Resilience Measure-Person Most Knowledgeable.

Meanwhile, Uncompassionate SR was also significantly related to all the comparison indicators in the expected directions. Uncompassionate SR showed strong negative associations with positive affect, and a moderately strong association with resilience and prosocial behaviour. Strong associations in the positive direction were revealed with negative affect, and internalising problems, while a moderate association was found with externalising problems.

5.9.4 Cross-informant correlations. Within the child-report data set, there were 65 cases that could be successfully matched with their parents' data. Pearson correlations were used to test the associations between the two factors of Compassionate SR and Uncompassionate SR as self-reported by preadolescent children on the SCS-P, with the same two factors as measured by parents on the SCS-P-PR. Power was assessed via the GPower application. With a sample size of 65, this study had sufficient power (.81) to detect a medium effect size (i.e., $d = .3$) with an alpha = .05. However, power to detect a small effect size (i.e., $d = .1$) was low (.20). Therefore, the possibility of Type II errors occurring was taken into consideration during the interpretation of findings.

Results are presented in Table 14. For the purposes of comparison, the Pearson correlations between the child and parent-reported data obtained via the

SDQ, CYRM, PANAS are also provided in this table. As before, correlation coefficients below .3 were interpreted as small or weak, from .3 to .5 as moderate and above .5 as strong (Cohen, 1988).

As displayed in Table 14, moderate correlations were observed between Compassionate SR as reported by children on the SCS-P, and Compassionate SR as reported by their parent on the SCS-P-PR. Similar correlations were revealed between Uncompassionate SR as reported by children on the SCS-P, and Uncompassionate SR as reported by their parent on the SCS-P-PR. The associations of both Compassionate SR and Uncompassionate SR were stronger than those observed between the measures of positive affect on the PANAS-C and PANAS-P, and the SDQ child and parent forms. In this study, non-significant correlations were observed between child and parent-reported resilience on the CYRM/CYRM-PMK, negative affect on the PANAS, and externalising problems on the SDQ. It is considered likely that these non-significant correlations are largely due to the small sample size available from which to conduct comparisons; this weakened the power of the statistical tests to detect small effect sizes.

Table 14

Cross-Informant Correlations of Self- and Parent-reported Measures of Self-Compassion, Psychosocial Wellbeing and Resilience

Variable (Self-Report / Parent-Report)		Pearson Correlation
Self-Compassion (SCS-P / SCS-P-PR)	Compassionate SR	**.30****
	Uncompassionate SR	**.40****
Indicators of Psychosocial Wellbeing (PANAS-C / PANAS-P)	Positive affect	**.21***
	Negative affect	.20
(SDQ / SDQ parent-report)	Internalising problems	**.32****
	Externalising problems	.03
	Prosocial behaviour	**.22***
Resilience (CYRM / CYRM PMK)	Resilience	.01

Note. *$p < .05$; **$p < .01$. SCS-P = Self-Compassion Scale-Preadolescent; SCS-P-PR = Self-Compassion Scale-Preadolescent-Parent; Compassionate SR = Compassionate self-responding; Uncompassionate SR = Uncompassionate self-responding; PANAS-C = Positive and Negative Affect Scale for Children; PANAS-P = Positive and Negative Affect Scale for Children-Parent; SDQ = Strengths and Difficulties Scale; CYRM PMK = Child and Youth Resilience Measure-Person Most Knowledgeable.

5.10 Discussion

This discussion has been formatted so as to address each of the Research Questions in order. An integrated discussion of these findings within the context of the broader study aims will follow in Chapter 6.

5.10.1 RQ 4. Can a valid and reliable measure of self-compassion be developed for preadolescent children (i.e., aged 9-12 years)? What is the factor structure of this measure?

Exploratory factor analysis of the pilot data collected from 193 preadolescents via the 26-item SCS-P revealed a two-factor orthogonal structure. The items designed to tap into the facets of self-kindness, common humanity and mindfulness loaded onto one factor (Compassionate self-responding; Compassionate SR), while the items designed to measure self-judgement, isolation and over-identification loaded on to a separate factor (Uncompassionate self-responding; Uncompassionate SR). Internal consistencies of each factor were strong (Cronbach's alphas = .88 and .90 respectively). The findings from this study are consistent with the results of both exploratory and confirmatory factor analyses

conducted with similar measures of self-compassion in children (i.e., Stolow et al, 2016; Sutton et al., 2017). They also mirror findings reported in factor analyses of the SCS with adult populations, conducted by Brenner et al. (2017), Costa et al. (2015), Kandler et al., (2017) and Lopez et al (2016). However, calculating two separate 'positive' and 'negative' scores from the SCS-P, rather than aggregating a total self-compassion score, runs counter to the current recommendations for scoring and interpreting the SCS (Neff, 2003b, 2016b; Neff et al., 2019), or SCS-SF (Raes et al., 2011).

Moreover, the finding that the two factors of the SCS-P were not correlated adds weight to the notion that the capacity to treat oneself with compassion and the tendency to respond negatively towards the self during times of suffering, are not mutually exclusive. Rather, both tendencies can co-occur within one individual (Neff, 2003a). In other words, these findings confirm that it is theoretically possible (for example) that an individual can be highly compassionate towards the self in some instances, whist at other times engage in harsh self-criticism. This finding suggests that both the tendency to respond to the self with compassion, as well as the tendency to respond to the self with harsh condemnation, warrant examination within preadolescents. This is counter to the arguments put forward by Muris and colleagues (Muris, 2015; Muris et al., 2016a), who have advocated for the removal of all 'negative' items from all measures of self-compassion.

Inspection of the correlations of Compassionate SR and Uncompassionate SR with measures of mindfulness, wellbeing and resilience provided further evidence for the differential meaning of the positive and negative aspects of self-compassion. These relationships will be discussed in detail in RQ 6.

5.10.2 RQ 5. Can a valid and reliable parent-perspective measure of self-compassion be developed and utilised to improve measurement issues for this cohort? This study was the first to attempt to measure self-compassion in children as rated via an informant, in this case a parent. The SCS-P-PR was designed as a complementary method of obtaining information regarding a preadolescent child's self-compassion. Mirroring the results from the SCS-P, exploratory factor analysis of the pilot data collected via the 25-item SCS-P revealed a two-factor structure, with positive and negative aspects of self-responding forming two distinct constructs (termed Compassionate self-responding; Compassionate SR, and Uncompassionate

self-responding; Uncompassionate SR), each with very good internal reliability (Cronbach's alphas .94 and .95 respectively).

Construct validity of each factor was confirmed via analysis of correlations with parent-reported measures of their child's wellbeing and resilience. Compassionate SR was significantly related to all the comparison indicators in the expected directions (i.e., positive affect, resilience and prosocial behaviour in the positive direction, and internalising problems, negative affect, and externalising problems in the negative direction). Meanwhile, Uncompassionate SR was also significantly related to all the comparison indicators in the expected directions (i.e. negative associations with positive affect, resilience and prosocial behaviour, and positive associations with externalising problems, internalising problems and negative affect). Unfortunately, correlations with Compassionate SR and Uncompassionate SR and prosocial behaviour could not be reliably interpreted, due to the very low Cronbach's alpha found for this scale (.27) when reported by parents.

Moreover, correlations between the scores provided by parents on the SCS-P-PR and the self-reported scores of their children on the SCS-P revealed moderate associations for both Compassionate SR (r = .30*)* and Uncompassionate SR (r = .40). This level of inter-rater correlation is consistent with other psychometric measures, such as the SDQ, where parents and their children's ratings show modest agreement (Goodman, 2001; Roy, Veenstra & Clench, 2008). Indeed, in comparison to the other self- and parent-reported measures adopted in this research (i.e., the PANAS, SDQ and CYRM), the correlations between the SCS-P and SCS-P-PR showed stronger relationships (see Table 14).

Given the modest sample size of matched child-parent surveys (n = 65), the power of the present study to detect small effects was low. Therefore, further attempts to validate this measure of parent-reported preadolescent self-compassion with larger samples is warranted. However, the promising results from this study indicate that the SCS-P-PR has the potential to make a useful addition to the holistic assessment of self-compassion in preadolescent children, in a similar way that the parent-report measures SDQ, PANAS-P, and CYRM-PMK contribute to the assessment of childhood wellbeing and resilience, and add to the body of research suggesting that self-compassion is an observable trait (Neff & Beretvas, 2013).

5.10.3 RQ 6. What are the associations between self-compassion, mindfulness, and indicators of psychosocial wellbeing and resilience in preadolescent children aged 9-12 years?

5.10.3.1 Hypothesis 1. It was firstly hypothesised that self-compassion and mindfulness would be positively associated. Examination of findings from the SCS-P offered mixed support for this hypothesis; while the positive elements of self-compassion (i.e., Compassionate SR) were not significantly correlated with mindfulness, the negative aspects of self-responding (i.e., Uncompassionate SR) were significantly associated with mindfulness in the negative direction. In other words, preadolescents who tended to respond to themselves with judgement, to experience feelings of isolation and to over-identify with emotion also tended to report low mindfulness (or, 'mindlessness'). Meanwhile, preadolescents who tended to respond to themselves positively when faced with inadequacy or suffering did not necessarily report higher levels of mindfulness.

This finding was surprising, given the body of research showing strong associations between self-compassion with mindfulness in a broad range of adult (e.g., Baer, Lykins, & Peters, 2012; Van Dam et al., 2011), and adolescent (e.g., Bluth & Blanton, 2014; Neff & Germer, 2013) samples. However, as prior research has typically looked at self-compassion as an aggregate of the positive and negative subscales, rather than two separate constructs, further research should examine the relationship of each aspect with mindfulness to establish if the results from this study can be replicated.

Indeed, the findings from this study do mirror those of Sutton et al. (2017), who utilised a different measure of mindfulness, the Mindful Attention and Awareness Scale for Children (MAAS-C; Lawlor et al. 2014), in their study of children aged 8-12 years. Sutton et al.'s findings revealed that compassionate self-responding (which they termed 'positive self-compassion') had a weak, positive correlation with mindfulness (.16), while negative self-compassion had a moderate negative correlation with mindfulness (-.41) in children aged 8-12 years. Meanwhile, in this study, the relationship between compassionate self-responding and mindfulness, as measured on the CAMM, was not significant (.07), while the relationship between uncompassionate self-responding and mindfulness was significant, but weak (-.27). The smaller sample size employed by the current study

(n = 193) compared to that of Sutton et al. (n = 382) may have increased the probability of Type II errors (this study had weak power to detect small effect sizes). Together, these results indicate that the tendency to respond to the self with kindness and acceptance are, at best, only weakly related to mindfulness in preadolescence, which is contrary to the body of research conducted with older populations.

These findings, along with those of Sutton et al. (2017), suggest that the capacity for compassionate self-responding, and the capacity for mindful awareness, develop differentially in the preadolescent age group. Certainly, future research may investigate the relationship between the different facets of self-compassion with mindfulness further; subsequent studies may reveal a different pattern. Findings from this study do indicate, however, that mindfulness, compassionate self-responding and uncompassionate self-responding warrant measurement as three distinct constructs within the preadolescent age group.

5.10.3.2 Hypothesis 2. It was hypothesised that self-compassion would be positively associated with the positive indicators of psychosocial wellbeing and negatively associated with the negative indicators of psychosocial wellbeing. Findings from both the SCS-P-PR and SCS-P supported this hypothesis: The positive components of self-compassion, were, as expected, significantly correlated with the psychosocial indicators of wellbeing (i.e., positive affect, satisfaction with life, and prosocial behaviour in the positive direction; externalising problems and negative affect in the negative direction), within this cohort.

The finding that self-compassion (positive and negative aspects) correlated with the majority of psychosocial indicators of wellbeing is consistent with prior research reporting on associations of self-compassion with wellbeing in adult (e.g., MacBeth & Gumley, 2012), adolescent (e.g., Marsh et al., 2018; Neff & McGehee, 2010), and child (Sutton et al. 2017) populations. Interestingly, however, results from the SCS-P (but not the SCS-P-PR) indicated that children who reported a tendency to respond to themselves with self-compassion were *not* less likely to report internalising problems. It is possible that this unexpected finding may simply be a result of this study's low-power to detect small effect sizes; it should further be noted that Cronbach's alpha for the internalising scale was low, at .56 and therefore results involving this scale must be interpreted with caution. However, another tentative explanation for this finding is that children who respond to themselves with

kindness and take a balanced perspective to their difficulties are more 'in-tune' with their internal landscape, and thus report more openly and honestly regarding their difficulties in this domain.

Meanwhile, children who were more likely to respond to themselves with harsh judgement and criticism, did, as expected, report more internalising problems, externalising problems, and experience more negative affect on the SCS-P. These results mirror those of Sutton et al., (2017) who similarly reported that the negative components of their self-compassion scale negatively correlated with optimism, satisfaction with life, positive affect and self-concept, in their study of children aged 8-12 years. However, no association was found between Uncompassionate SR and prosocial behaviour; in other words, children who tended to respond to themselves in a negative fashion did not (necessarily) engage in less prosocial behaviours. This finding runs counter to research with older populations that has revealed positive associations between self-compassion and empathetic concern (Boellinghaus et al., 2012; Neff & Beretvas, 2013), prosocial intentions (Welp & Brown, 2013), and prosocial behaviour (Yang, Guo, Kou, & Liu, 2019)—although it is noted these studies have measured self-compassion as one construct, rather than two positive and negative aspects. However, Sutton et al. (2017) also found no relationship between the negative factor of self-compassion and prosocial goals in their study of children aged 8-12 years. A tentative explanation for the similar findings of the current study and that of Sutton et al. is that negative thoughts, feelings and behaviours directed towards the self in childhood, develop separately and differentially to socialisation behaviours. In other words, a negative self-attitude does not translate to negative social behaviours for this younger cohort.

5.10.3.3 Hypothesis 3. Lastly, it was hypothesised that self-compassion would be positively associated with resilience. This hypothesis was based on previous findings from research conducted in adult and adolescent populations, as resilience has yet to be explicitly examined in children under 12. Findings elicited from both preadolescents (reporting on the SCS-P) and their parents (reporting on the SCS-P-PR) provided preliminary support for this hypothesis. Consistent with the theorised role of self-compassion as a protective resource, possessing a self-compassionate attitude was moderately related to the availability of resilience resources available to youth at individual, relational, and communal levels.

Similarly, the negative aspects of self-compassion were moderately related with lower levels of resilience resources.

This finding was expected; theoretically, adopting a self-compassionate attitude presents a valuable individual source of resiliency at the individual level as it promotes a more balanced self-concept (thus reducing catastrophic and over-personalising thinking; Leary et al., 2007), and improved self-regulatory capacities (that prevent emotional overload and/or shutdown; Neff, 2003a). Self-compassionate individuals have also been theorised to be more likely to act in ways which are ultimately more helpful to them and their situation, for example engaging in self-care or asking for help (Neff, 2003a). Therefore, it can be theorised that self-compassionate individuals are more likely to recognise, and access, resiliency resources at the wider family and community levels. Indeed, a meta-analysis of research with adults conducted by MacBeth and Gumley (2012) concluded that self-compassion was important for "increasing resilience to stress" (p. 550); similarly, Neff and McGehee (2010), and Bluth et al., (2018) have reported that self-compassion promotes resilience in adolescents. The findings from the current study are the first to confirm the expected relationship between self-compassion and resilience in preadolescent children.

Overall, the findings from RQ 6 largely support those revealed in previous research with children (Stolow et al., 2016; Sutton et al., 2017): Compassionate self-responding can act in a protective capacity to enhance wellbeing and improve resilience to life stressors; uncompassionate self-responding, on the other hand, appears to increase a child's vulnerability to life's difficulties, and thus wellbeing and resilience are reduced.

5.10.4 Summary. The findings of this study indicate that both the SCS-P and the SCS-P-PR are reliable and valid measures of compassionate self-responding and uncompassionate self-responding in preadolescent children aged 9-12 years. Exploratory factor analyses of the data collected from both these new scales indicated that the items tap into two distinct factors; the tendency to respond to the self in a negative fashion (Uncompassionate SR), and the tendency to respond to the self with compassion (Compassionate SR). Indeed, the internal consistency were satisfactory on both the positive (Cronbach's alpha = .88) and negative (Cronbach's

alpha = .90) scales of the SCS-P, and the SCS-P-PR (Compassionate SR Cronbach's alpha = .94; Uncompassionate SR Cronbach's alpha = .95).

Unexpectedly, the tendency for preadolescents to treat themselves with compassion was not related to mindfulness (although, the tendency to treat the self poorly *was* negatively associated with mindfulness); a possible explanation is that this study simply lacked the power to detect small effect sizes. It is also possible that these capacities develop differentially in this age group. In regards to resilience and psychosocial wellbeing, Compassionate SR and Uncompassionate SR were associated with the majority of indicators in the expected directions. However, it was also noted that Uncompassionate SR (as reported by preadolescents) was not related prosocial behaviour, and Compassionate SR (as reported by preadolescents) was not related to internalising problems. The interpretations that have been presented in light of these results are tentative; future research will need to be conducted to ascertain if these findings are replicated in larger samples.

More generally, the findings from this study add weight to the argument that it is necessary to distinguish between the positive aspects of self-compassion and the negative aspects of self-responding, rather than view self-compassion as an overarching construct, at the very least within the preadolescent age group. This is counter to the current recommendations for scoring and interpreting the SCS (Neff, 2003b) or SCS-SF (Raes et al., 2011). These finding are consistent, however, with the results from two earlier adaptations of the SCS administered to children under 12 years (Stolow et al., 2016; Sutton et al., 2017).

There were a number of limitations of this study, including modest small sample sizes employed in some of the analyses, and reliance on convenience sampling methods; these issues will be discussed in Chapter 7. Nevertheless, the findings from this study make an important contribution to the self-compassion literature via the introduction of a scale developed and validated specifically within the preadolescent age group (SCS-P), alongside a unique parent-report measure to supplement the assessment (SCS-P-PR). Encouragingly, results from correlation analyses revealed that for these two scales, both Compassionate SR and Uncompassionate SR were moderately correlated (r = .30 and .40 and respectively). This finding supports the contention that information obtained from parents

regarding their children has the potential to make a valid and useful contribution to the overall assessment of self-compassion in the preadolescent age group.

The final stage of this research, presented in the following Chapter, aimed to examine the relationships between compassionate self-responding, uncompassionate self-responding, mindfulness, psychosocial wellbeing and resilience in preadolescents in greater detail. Gathering this depth of knowledge was considered invaluable to the appropriate design and development of future interventions relevant to this cohort of young people.

CHAPTER 6
STUDY 2, PART B: EXAMINING THE RELATIONSHIPS BETWEEN COMPASSIONATE SELF-RESPONDING, UNCOMPASSIONATE SELF-RESPONDING, MINDFULNESS, WELLBEING AND RESILIENCE IN PREADOLESCENT CHILDREN

6.1 Chapter Introduction

This Chapter details the final analyses conducted with the data sets collected for Study 2. Research questions are presented, with a brief review of the literature that underpinning them. Test assumptions and data screening protocols are presented, before results from a series of regression analyses designed to address the final research questions are detailed. A discussion of these results concludes this Chapter.

The final stage of analysis in Study 2 involved examining the relationships between the main variables of interest. The last three research questions, posed at the commencement of this thesis, were answered:

RQ 7. What are the relative contributions of self-compassion and mindfulness to indicators of wellbeing and resilience in preadolescent children (i.e., aged 9-12 years)?

RQ 8. Is there support for the reciprocal model of self-compassion and mindfulness, similar to that proposed by Bluth and Blanton (2014)?

RQ 9. Are there significant gender and/or age differences in the levels of self-compassion and mindfulness reported in preadolescent children?

Based on the findings from Part A of Study 2, the variable 'self-compassion' was examined as two separate constructs, namely compassionate self-responding and uncompassionate self-responding. Due to the scarcity of research conducted with children, and the inconsistent findings revealed within older cohorts, no specific hypotheses were set for RQ 7 and RQ 9. However, for RQ 8, it was hypothesised that there would be support for Bluth and Blanton's reciprocal model, based on the qualitative findings of Study 1 whereby it was indicated that that self-compassion and mindfulness may work iteratively to enhance wellbeing in children.

Two additional research questions were posed as a direct result of the findings from Part A of Study 2:

RQ 10. Are the relationships between compassionate self-responding and indicators of psychosocial wellbeing and resilience mediated by uncompassionate self-responding?

RQ 11. Are the relationships between uncompassionate self-responding and negative indicators of psychosocial wellbeing mediated by compassionate self-responding?

These additional two research questions flowed from the results of exploratory factor analyses (detailed in Chapter 5) of the SCS-P and SCS-P-PR. As discussed, factor analyses revealed that the construct of self-compassion, for preadolescents, is best understood as two (statistically and theoretically) distinct constructs: Firstly, the tendency to respond to the self with compassion (termed 'compassionate self-responding'); secondly, the tendency to respond to the self in a negative fashion (termed 'uncompassionate self-responding'). Moreover, the finding that these two factors were not correlated supported the contention that the capacity to treat oneself with compassion *and* the tendency to respond negatively towards the self during times of suffering, can simultaneously exist within one individual (Neff, 2003a). In other words, it is theoretically possible that a preadolescent can endorse both highly self-compassionate and highly negative styles of self-responding in response to failure, distress or hardship.

Following on, findings from a series of correlational analyses indicated that the tendency to respond to the self with compassion enjoyed positive associations with positive affect, satisfaction with life, prosocial behaviour, and resilience. Meanwhile, the tendency to adopt a negative style of self-responding was associated with the negative indicators of wellbeing, namely negative affect, internalising problems (i.e., emotional and peer-related) and externalising problems (i.e., conduct and hyperactivity). Whilst analysing these results, the question presented itself as to what extent (if any) does uncompassionate self-responding (i.e., an individual's tendency to relate to the self with judgment, isolation and over-identification with emotional experience), impact the relationships that exist between compassionate self-responding and positive indicators of wellbeing and resilience? Conversely, to what extent (if any) does compassionate self-responding (i.e., the ability to hold painful feelings with a sense of warmth, connection, and concern) impact the

relationship between uncompassionate self-responding and negative indicators of wellbeing?

To surmise, the final two research questions were designed to investigate whether (a), the facets of uncompassionate self-responding mediate the impact of compassionate self-responding on indicators of psychosocial wellbeing and resilience, and (b), the facets of compassionate self-responding mediate the impact of uncompassionate self-responding on psychosocial wellbeing in preadolescent children.

6.2 Test Assumptions

Prior to running the multiple regression analyses required to answer the research questions, the preadolescent self-report data set (n = 193) was assessed for violations of test assumptions; namely, univariate normality, linearity and homoscedasticity. Following the recommendations of (Meyers, Gamst, & Guarino, 2006), an elimination process was followed for cases showing large residual values (i.e., absolute standardised residual values greater than 3). As a result of this iterative process of elimination, 14 cases were eventually excluded from the final analysis (Child Case Ids 140, 156, 157, 161, 85, 169, 82, 3, 146, 149, 154, 81, 64, 134). A final visual inspection of the histograms, normal q-q plots and residuals' scatterplots revealed no major linearity or homoscedasticity violations (Meyers et al.). In regards to variance, the values for skewness and kurtosis all fell within the acceptable range (i.e., between +1.0 and – 1.0; Meyers et al.).

Multicollinearity between the variables was low (r < .9); inspection of the tolerance and VIF values confirmed that all were all well within acceptable limits (Tabachnick & Fidell, 2013). The final sample size (n = 179) was considered sufficient for the regression analysis given the case-to-variable ratio recommended by Tabachnick and Fidell (2013), being $n > 50 + 8m$, where m equals number of independent variables.

6.2.1 Statistical power. Power was calculated via the GPower application (version 3.0.10; Faul, 2008). With a final sample size of 179, this study had sufficient power (.99) to detect a medium effect size (i.e., d = .3) with an alpha level of .05 (Cronbach, 1950). However, power to detect a small effect size (i.e., d = .1) was low (.38). Therefore, the possibility of Type II errors occurring was taken into consideration during the interpretation of results.

Unfortunately, the parent-reported data set was not of adequate size to run these analyses with sufficient power to detect small or medium effect sizes. Therefore, from here-on-in, all reported data analyses were conducted with data collected from the preadolescent participants of this study only.

6.3 Data Analyses

To assess the unique contribution of each predictor variable—i.e., compassionate self-responding (Compassionate SR), uncompassionate self-responding (Uncompassionate SR) and mindfulness—to the prediction of each dependent variable—i.e., resilience and indicators of psychosocial wellbeing (i.e., positive affect, negative affect, satisfaction with life, internalising problems, externalising problems and prosocial behaviour)—a series of standard multiple regressions were conducted.

Table 15

Variable Means, Standard Deviations, and Standardised Coefficients from Multiple Regression Analyses – Preadolescent Data Set

Variables (Measure)			Standardised coefficients (*Beta*) Predictor variables		
	M	*SD*	Com SR	Uncom SR	Mindfulness
Dependent variables					
Resilience	48.82	*7.56*	**.41****	**-.22****	-.04
Positive affect	18.34	*4.26*	**.26****	**-.20****	-.05
Negative affect	10.03	*4.41*	-.14	**.36****	-.05
Satisfaction with life	18.27	*4.51*	**.37****	**-.24****	.02
Psychosocial difficulties	14.11	*5.72*	**-.20****	**.44****	-.06
Prosocial behaviour	7.74	*1.71*	**.21****	.01	-.12
Predictor variables					
1. Compassionate SR	37.51	9.62			
2. Uncompassionate SR	36.52	*11.43*			
3. Mindfulness	22.37	*6.74*			

Note. Higher scores indicate higher levels of each construct. * p = < .05, ** p = < .01 Com SR = Compassionate self-responding; Uncom SR = Uncompassionate self-responding; Resilience was measured on Child and Youth Resilience Measure; Positive affect was measured on the Positive and Negative Affect Scale for Children-Positive Affect subscale; Negative affect was measured on the Positive and Negative Affect Scale for Children-Negative Affect subscale; Satisfaction with Life was measured on the Satisfaction with Life Scale-Child; Psychosocial difficulties were measured by the emotional, peer-related, conduct, and hyperactivity subscales of the Strengths and Difficulties Scale; Prosocial behaviour was measured on the prosocial subscale of the Strengths and Difficulties Scale. Compassionate self-responding was measured from the Compassionate SR subscale of the Self-Compassion Scale-Preadolescent; Uncompassionate self-responding was measured from the Uncompassionate SR scale from the Self-Compassion Scale-Preadolescent; Mindfulness was measured on the Child and Adolescent Mindfulness Measure.

A summary of the relationships between the variables of interest is presented in Table 15. Compassionate self-responding was the strongest unique predictor of four dependent variables, namely resilience, positive affect, satisfaction with life, and prosocial behaviour. Meanwhile, uncompassionate self-responding was the strongest unique predictor of negative affect, and psychosocial difficulties. Overall, compassionate self-responding was a significant predictor of all dependent variables with the exception of negative affect. Meanwhile, uncompassionate self-responding

was a significant predictor of all variables with the exception of prosocial behaviour. Mindfulness did not predict any of the dependent variables.

In order to address RQ 8, i.e., determine if there was the hypothesised support for the model proposed by Bluth and Blanton (2014)—whereby it is theorised that self-compassion and mindfulness work iteratively in promoting emotional wellbeing—path analyses were planned, with both mindfulness and compassionate self-responding to be assessed as potential mediators. To determine mediation, four conditions must be first met (Baron & Kenny, 1986): the independent variable must affect the dependent variable; the independent variable must affect the mediator variable; the mediator variable must affect the dependent variable when controlling for the independent variable; and when controlling for the mediator, the effect of the independent variable on the dependent variable is eliminated or reduced (MacKinnon, 2008).

Unfortunately, and unexpectedly (see Table 15), no direct relationships were found between mindfulness and any of the dependent variables in this study. Therefore, no viable mediation analyses could be run. Results from Study 2, therefore, did not provide support for the reciprocal model of self-compassion and mindfulness proposed by Bluth and Blanton (2014). This was direct contrast to the findings of Study 1, whereby qualitative data analyses revealed strong support for the same model (*see Chapters 4 and 7 for a full discussion of Study 1 findings*). Potential implications and interpretations of this finding are discussed at the end of this Chapter.

To address RQ 9., i.e., assess if there were significant age differences in the levels of self-compassion and mindfulness reported in children 9-12 years, correlations between age, mindfulness, positive-self-compassion and uncompassionate self-responding were examined (see Table 16). No correlations were significant ($p > .05$). To examine the effect of age further, correlations between age and all study variables were examined. Age was not significantly correlated with any of the study variables, with the exception of internalising problems—as measured via the emotional and peer-problem subscales of the SDQ—which showed a weak, negative correlation with age. This finding suggests that as age increases in preadolescence, the instances of internalising difficulties reduce. This finding is

intuitive, given that it is well documented that neurological advances in this age bracket bring improved skills of emotional regulation (Wagner & Heatherton, 2016).

Table 16

Pearson Correlations Between Age and All Study Variables

	Corr. Coefficient	Sig. (2-tailed)
Compassionate self-responding	-.04	.63
Uncompassionate self-responding	-.04	.58
Mindfulness	-.03	.68
Psychosocial wellbeing indicators		
Positive affect	.05	.52
Negative affect	-.02	.74
Satisfaction with life	.04	.61
Psychosocial difficulties	-.17*	.02
Prosocial behaviour	.11	.13
Resilience	.07	.34

Note. * p = < .05, ** p = < .01 Compassionate self-responding was measured from the Compassionate SR subscale of the Self-Compassion Scale-Preadolescent; Uncompassionate self-responding was measured from the Uncompassionate SR scale from the Self-Compassion Scale-Preadolescent; Mindfulness was measured on the Child and Adolescent Mindfulness Measure. Positive affect was measured on the Positive and Negative Affect Scale for Children-Positive Affect subscale; Negative affect was measured on the Positive and Negative Affect Scale for Children-Negative Affect subscale; Satisfaction with Life was measured on the Satisfaction with Life Scale-Child; Psychosocial difficulties were measured by emotional, peer-related, conduct, and hyperactivity subscales of the Strengths and Difficulties Questionnaire (SDQ); Prosocial behaviour was measured on the prosocial subscale of the SDQ. Resilience was measured on Child and Youth Resilience Measure.

To assess if there were significant gender differences in the levels of self-compassion and mindfulness reported in children 9-12 years, T-tests were conducted to compare the scores of boys and girls on the measures of mindfulness, compassionate self-responding, uncompassionate self-responding. While a visual inspection of means indicated that girls reported lower levels of compassionate self-responding, and higher levels of uncompassionate self-responding, than boys, results from the T-tests indicated that these differences were not significant: $t(191) = .872$, $p = .38$; $t(191) = .-1.356$, $p = .18$. Similarly, there was no significant difference in mean levels of mindfulness reported by boys and girls, $t(191) = .353$, $p = .73$. Means and standard deviations across gender and Year level are presented in Table 17.

To explore this research question further, a series of two-way analyses of variance (ANOVA) were conducted to see if there was an interaction effect between age and gender on compassionate self-responding, uncompassionate self-responding and/or mindfulness. Gender (male or female) and Year level (5 or 6) were entered as the independent variables. To establish that the assumption of homoscedasticity was met, Levene's test of homogeneity of variances was checked and found to be not significant ($p < .05$). Results from the ANOVAs indicated that the interaction between gender and Year level was not significant on levels of compassionate self-responding ($F(1,193) = 3.231$, $p = .074$, $\eta^2 = .017$), uncompassionate self-responding, ($F(1,193) = 3.004$, $p = .085$, $\eta^2 = .016$), or mindfulness ($F(1,193) = .491$, $p = .484$, $\eta^2 = .003$).

Table 17

Means and Standard Deviations for Compassionate Self-Responding, Uncompassionate Self-Responding and Mindfulness across Gender and Grade

Measure	Gender				Grade			
	Boys		Girls		Grade 5		Grade 6	
	Mean	*SD*	Mean	*SD*	Mean	*SD*	Mean	*SD*
Com SR	38.37	*10.23*	37.02	*9.27*	38.18	*9.89*	37.07	*9.46*
Uncom SR	35.26	*10.78*	37.23	*11.77*	37.44	*11.97*	35.89	*11.06*
Mindfulness	22.45	*6.96*	22.32	*6.64*	22.43	*6.21*	22.33	*7.10*

Note. Levene's test of homogeneity of variances were not significant ($p < .05$) Com SR = Compassionate self-responding; Uncom SR = Uncompassionate self-responding; Compassionate self-responding was measured from the compassionate self-responding subscale of the Self-Compassion Scale-Preadolescent; Uncompassionate self-responding was measured from the uncompassionate self-responding scale from the Self-Compassion Scale-Preadolescent; Mindfulness was measured on the Child and Adolescent Mindfulness Measure.

The final two research questions set out to determine (a) if the relationship between uncompassionate self-responding and indicators of psychosocial wellbeing and resilience are mediated by compassionate self-responding, and (b) if the relationship between compassionate self-responding and indicators of psychosocial wellbeing are mediated by uncompassionate self-responding. A path analysis model was used to estimate the effects of the predictor on the mediator and the mediator on each of the six dependent variables. In keeping with the conceptualisation of compassionate self-responding as a protective factor, and negative self-compassion

as a vulnerability factor (Muris & Petrocchi, 2017; Stolow et al., 2016), it was hypothesised that all models would show partial mediation.

Four separate models were created to estimate the parameters of the mediator negative self-compassion on the relationship of compassionate self-responding with four separate dependent variables, namely: satisfaction with life, positive affect, prosocial behaviour, and resilience. Meanwhile, two further models were created to estimate the parameters of the mediator compassionate self-responding, on the relationship of negative self-compassion with two separate dependent variables, namely: psychosocial difficulties, and negative affect. These models are described in detail in the following section.

Theoretically, the justification for the models that were tested came from the findings of Research Question 7; the positive elements of self-compassion showed the strongest unique relationship with the positive indicators of wellbeing and resilience, while uncompassionate self-responding was found to have the strongest relationships with the negative indicators of wellbeing. Therefore, for each model, the strongest predictor was entered as the independent variable, and the weaker predictor variable was entered as the mediator.

6.3.1 Model 1. In order to establish if the variable Uncompassionate SR mediated the relationship between compassionate self-responding (Compassionate SR) and resilience, regression analyses were carried out following Baron and Kenny's (1986) four steps. The first step aimed to establish if there was a direct relationship between the initial variable (Compassionate SR) and the outcome variable (resilience); this is known as the c-path (see Figure 15). In this case, Compassionate SR was found to be a significant predictor of resilience *(*b = .46, p < .001*).* The second step aimed to ascertain whether there was a direct relationship between the initial variable and the mediator variable (the a-path). In this case, Compassionate SR was found to be a significant predictor of uncompassionate self-responding (Uncompassionate SR; b = -.23, p < .01). The third step assessed the relationship between the mediator variable and the outcome variable (the b-path), as well as the relationship between the predictor variable and the outcome variable when the mediator was controlled (the c'-path). In this case Uncompassionate SR was found to be a significant predictor of resilience (b = -.21, p < .001). The relationship between Compassionate SR and resilience remained significant when

Uncompassionate SR was controlled (*b* = .42; *p* <.001). Because both the a-path and b-path were significant, mediation analyses were tested using the bootstrapping method with bias-corrected confidence estimates (MacKinnon, Lockwood, & Williams, 2004; Preacher & Hayes, 2004). The bootstrapping method is recommended for determining significance of mediation when utilizing small to medium-sized samples (MacKinnon et al.; Preacher & Hayes). In the present study, the 95% confidence interval of the indirect effects (i.e., the difference between paths c - c′, or the estimation of the mediated effect), was obtained with 5000 bootstrap resamples (Preacher & Hayes, 2008). Results of the mediation analysis confirmed the mediating role of Uncompassionate SR in the relationship between Compassionate SR and resilience *(b = .045*; CI = .0041 to .0787). Approximately 26% of the variance in resilience was accounted for by the predictors (R^2 = .26).

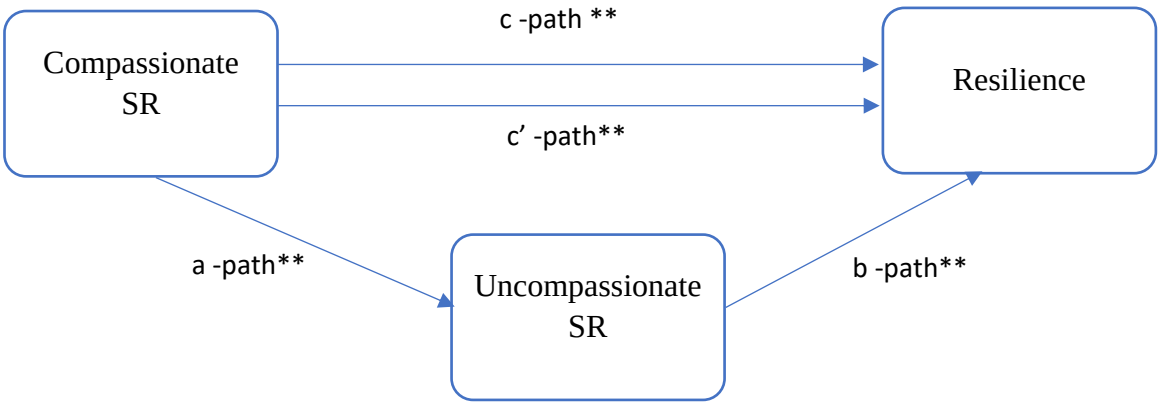


Figure 15. Model 1. Indirect effect of compassionate self-responding on resilience through uncompassionate self-responding. * *p* = < .05, ** *p* = < .01

6.3.2 Model 2. In order to establish if Uncompassionate SR mediated any relationship between Compassionate SR and satisfaction with life (SWL), Baron and Kenny's (1986) four steps were again followed. Please refer to Figure 16. The first step ascertained that Compassionate SR was a significant predictor of SWL (*b* = .42, *p* < 001). The second step was satisfied (as per Model 1), with a direct relationship between Compassionate SR and the mediator variable Uncompassionate SR (*b* = -.23, *p* < .01). The third step revealed that Uncompassionate SR was found to be a significant predictor of SWL (*b* = -.25, *p* < .001); the relationship between Compassionate SR and SWL remained significant when Uncompassionate SR was controlled (*b* = .37, *p* <.001). Because both the a-path and b-path were significant, mediation analyses were tested using the bootstrapping method, as before

(MacKinnon, Lockwood, & Williams, 2004; Preacher & Hayes, 2004). Results of the mediation analysis confirmed the mediating role of Uncompassionate SR in the relation between Compassionate SR and SWL (*b* = .055; CI = .0048 to .0573). Approximately 24% of the variance in SWL was accounted for by the predictors (R^2 = .24).

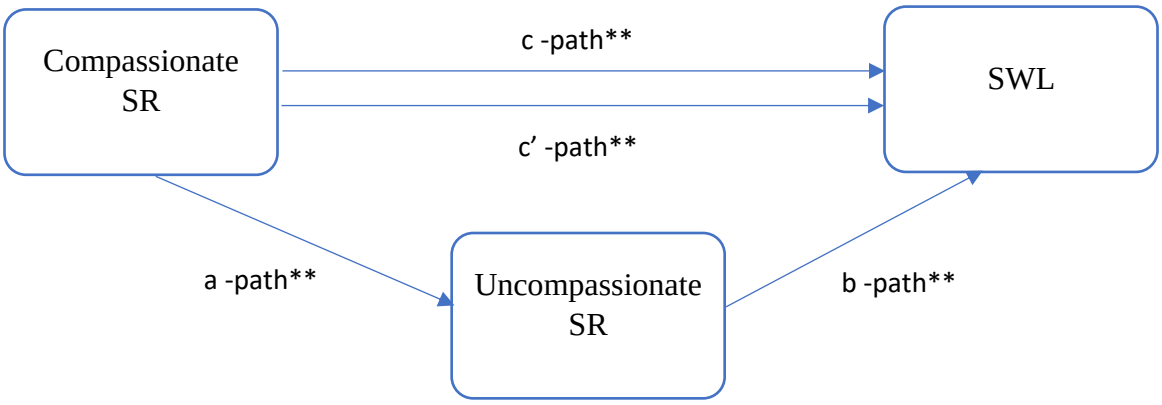


Figure 16. Model 2 Indirect effect of compassionate self-responding on satisfaction with life through uncompassionate self-responding. * *p* = < .05, ** *p* = < .01

6.3.3 Model 3. In order to establish if Uncompassionate SR mediated any relationship between Compassionate SR and positive affect, Baron and Kenny's (1986) steps were followed. Please refer to Figure 17. The first step ascertained that Compassionate SR was a significant predictor of positive affect (*b* = .29 *p* < .001). The second step was satisfied (as per Models 1 and 2), with a direct relationship between the initial variable (Compassionate SR) and the mediator variable Uncompassionate SR (*b* = -.23, *p* < .01). The third step revealed that Uncompassionate SR was a significant predictor of positive affect (*b* = -18, *p* < .01); the relationship between Compassionate SR and positive affect remained significant when Uncompassionate SR was controlled (*b* = .25, *p* < .001). Results of the follow-up mediation analysis (Preacher & Hayes, 2008) confirmed the mediating role of Uncompassionate SR in the relation between Compassionate SR and positive affect (*b* = .04; CI = .0005 to .0467). Approximately 12% of the variance in positive affect was accounted for by the predictors (R^2 = .12).

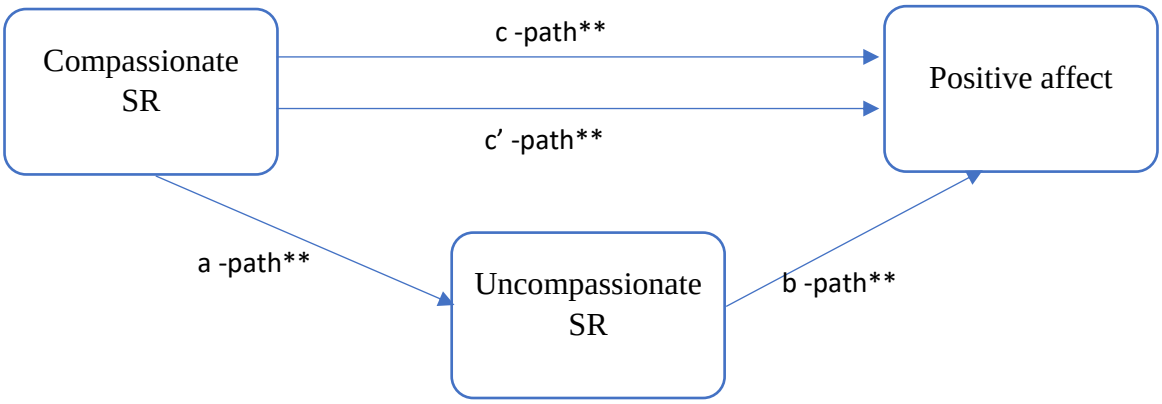


Figure 17. Model 3. Indirect effect of compassionate self-responding on positive affect through uncompassionate self-responding. * p = < .05, ** p = < .01

6.3.4 Model 4. In order to establish if Uncompassionate SR mediated any relationship between Compassionate SR and prosocial behaviour, Baron and Kenny's (1986) four steps were again followed. Please refer to Figure 18. The first step ascertained that Compassionate SR was a significant predictor of prosocial behaviour (b = .218, p < .01). The second step was satisfied (as per Models 1, 2 and 3), with a direct relationship between the initial variable (Compassionate SR) and the mediator variable (Uncompassionate SR; b = -.23, p < .01). The third step revealed Uncompassionate SR was not a significant predictor of Prosocial behaviour (b = .05, p = .49*) and therefore it was not appropriate to proceed with any further mediation analysis.

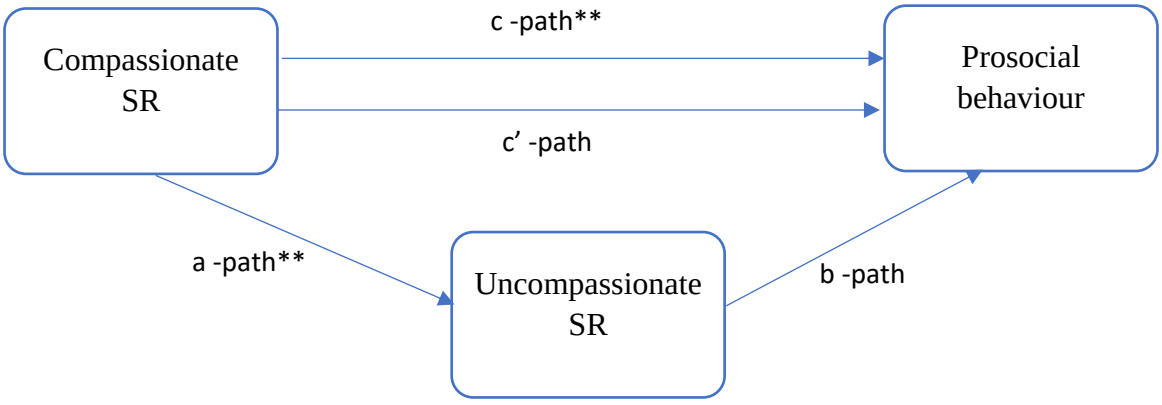


Figure 18. Model 4. Indirect effect of compassionate self-responding on prosocial behavior through uncompassionate self-responding. * p = < .05, ** p = < .01

6.3.5 Model 5. In order to establish if Compassionate SR mediated any relationship between Uncompassionate SR and negative affect, Baron and Kenny's (1986) steps were followed. The first step ascertained that Uncompassionate SR was

a significant predictor of negative affect (*b* = .40 *p* = <.001). The second step aimed to ascertain whether there was a direct relationship between the initial variable (Uncompassionate SR) and the mediator variable (Compassionate SR). In this case, Uncompassionate SR was found to be a significant predictor of Compassionate SR (*b* = -.23, *p* < .01). The third step assessed the relationship between the mediator variable and the outcome variable. In this case Compassionate SR was not found to be a significant predictor of negative affect (*b* = -.13, *p* = .07). Therefore, no further mediation analyses were undertaken.

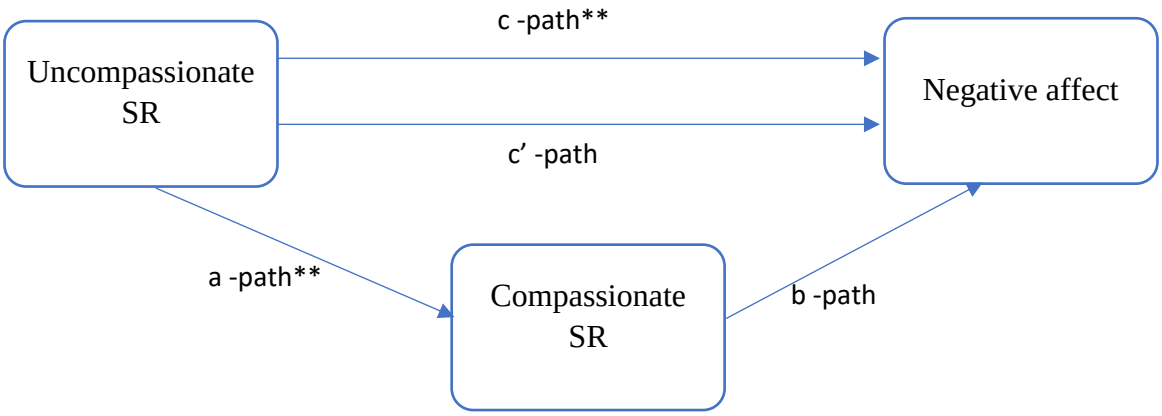


Figure 19. Model 5. Indirect effect of uncompassionate self-responding on negative affect through compassionate self-responding. * *p* = < .05, ** *p* = < .01

6.3.6 Model 6. In order to establish if Compassionate SR mediated any relationship between Uncompassionate SR and psychosocial difficulties, Baron and Kenny's (1986) four steps were again followed. The first step ascertained that Uncompassionate SR was a significant predictor of psychosocial difficulties (*b* = .51, *p* <.000). The second step ascertained that there was a direct relationship between the initial variable (Uncompassionate SR) and the mediator variable Compassionate SR (*b* = -.23, *p* =.002). The third step assessed the relationship between the mediator variable and the outcome variable. In this case Compassionate SR was found to be a significant predictor of psychosocial difficulties (*b* = -.193, *p* = .004); the relationship between Uncompassionate SR and psychosocial difficulties remained significant when Compassionate SR was controlled (*b* = .46, *p* < .001). Results of the mediation analysis confirmed that Compassionate SR mediated in the relationship between Uncompassionate SR and psychosocial difficulties (*b* = .048; CI = -.0032 to .0440). Approximately 29% of the variance in psychosocial difficulties was accounted for by the predictors (R^2 = .29).

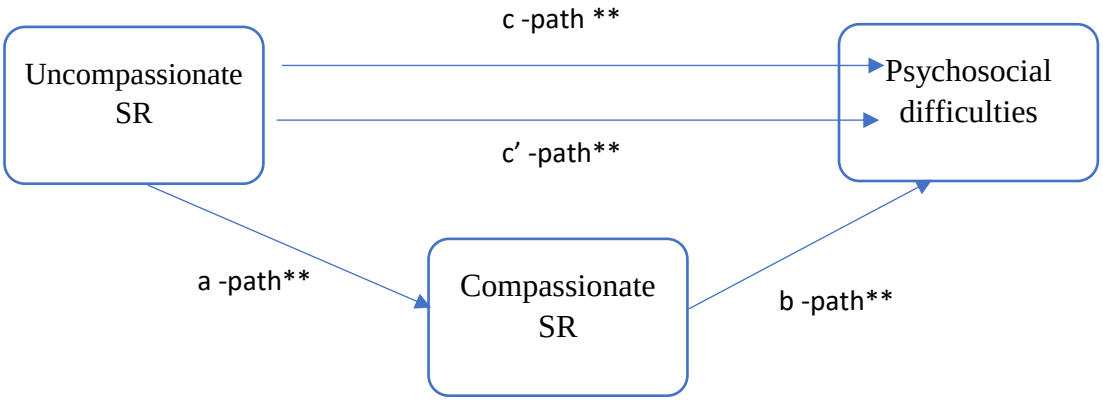


Figure 20. Model 6. Indirect effect of uncompassionate self-responding on psychosocial indicators of wellbeing through compassionate self-responding. * p = < .05, ** p = < .01

6.4 Discussion

The second aim of Study 2 was to examine the relationships between self-compassion, mindfulness, psychosocial wellbeing and resilience. To this end, the final three research questions—posed at the commencement of this thesis—were addressed. An additional two questions were formulated following analysis of the results from the first part of Study 2 (see Chapter 5). This discussion will address the findings pertaining to each of these five research questions in turn.

6.4.1 RQ 7. What are the relative contributions of self-compassion and mindfulness to indicators of wellbeing and resilience in preadolescent children aged 9-12 years? Results were analysed to determine the relative contributions of self-compassion and mindfulness to indicators of wellbeing and resilience to preadolescent children. Results were somewhat unexpected: Mindfulness (as measured via the CAMM), did not predict any of the psychosocial wellbeing or resilience indicators in either direction. This finding is in stark contrast to the literature espousing strong links between mindfulness and a range of positive indicators of emotional and social wellbeing and behaviour in children (e.g., Burke, 2009; Greenburg & Harris, 2012). Indeed, the initial validation study of the CAMM reported that scores showed significant (albeit small to moderate) negative correlations with internalising symptoms and externalising behaviour problems, and positive associations with overall quality of life (Greco et al., 2011b). The findings from this study also contrast with that of López et al. (2016), who found mindfulness to be a more significant predictor of positive affect than self-compassion in adults, as measured by the Five Facet Mindfulness Questionnaire and the SCS.

However, the current study's finding that self-compassion is a stronger predictor than mindfulness for indicators of wellbeing is consistent with other prior research. For example, Van Dam et al. (2011) found self-compassion to be a better predictor than mindfulness of symptom severity and quality of life in a sample of adults with mixed anxiety and depression. Similarly, Woodruff et al. (2013) found that self-compassion demonstrated a stronger ability than single-factor mindfulness to predict variance in psychological health in a sample of non-clinical undergraduates.

As previously noted, it is possible that this quantitative study simply lacked the power to detect a small effect size, and a larger sample may have revealed a relationship between mindfulness and the other variables of interest. Alternatively, a different measure of mindfulness may have elicited significant results. Indeed, a recent review of the psychometric properties of mindfulness measures revealed that that while the reading level for the CAMM was Year 5, 80% of the items were abstract; this may have presented comprehension difficulties for some of the preadolescents sampled in the current study (Pallozzi, Wertheim, Paxton, & Ong, 2016). As the CAMM has not been extensively validated in the lower end of the preadolescent age category, it is possible that measurement error did contribute to the non-significant findings. It was noted, however, that Cronbach's alpha for the CAMM in the current research fell within an acceptable range (.75).

In fact, broader issues regarding the content validity of available mindfulness scales have been raised: For example, Grossman (2011) argues that current measures generally focus on the attentional aspect of mindfulness; qualities such as joyfulness, equanimity, and sense of interest, consistent with Eastern definitions, are overlooked. While the CAMM does assess a broader range of mindfulness aspects than most other scales available to those interested in the assessment of mindfulness in youth (Pallozzi et al., 2016), it may be the case that the CAMM simply does not capture the full scope of the mindfulness construct adequately when administered within the preadolescent age-range. To surmise, future researchers may wish to see if they can replicate these results in more diverse samples and/or utilising different measures of mindfulness.

An important finding of this research is that compassionate self-responding and uncompassionate self-responding were both found to be unique predictors for

the majority of wellbeing and resilience indicators. Compassionate self-responding showed the strongest predictive abilities with the positive subscales (satisfaction with life, resilience, positive affect and prosocial behaviour). Uncompassionate self-responding, meanwhile, showed the strongest predictive ability with the negative indicators (i.e., negative affect and psychosocial difficulties). This finding is consistent with those of Sutton et al. (2017), who similarly analysed the positive and negative components of self-compassion separately with a sample of children aged 8-12 years in Canada. Their findings revealed that the negative elements of self-compassion tended to show stronger associations with indicators of psychological maladjustment, while the positive aspects of self-compassion showed stronger associations with perspective taking and prosocial goals. Stolow et al. (2016), also noted that the positive and negative aspects of self-compassion functioned differentially in their analyses of the prediction of depressive symptoms over time in children aged 9-16 years.

Taken as a whole, the findings from Study 2 indicate that for children, the tendency to treat the self with kindness and acceptance is linked to more positive interactions and feelings towards other people; this may in turn lead to a greater sense of resilience and satisfaction with life. Meanwhile, the tendency to treat the self with judgement and non-acceptance is more closely linked to reduced psychosocial wellbeing. These findings are consistent with the conceptualisation of compassionate self-responding as a protective factor that can preserve a sense of wellbeing in children and uncompassionate self-responding as a vulnerability factor,that weakens resilience and thus increases the likelihood of poorer psychosocial wellbeing. The findings from this study also imply that self-compassion (in comparison to mindfulness) may offer more potential as a target for wellbeing interventions designed for preadolescent children.

6.4.2 RQ 8. Is there support for the reciprocal model of self-compassion and mindfulness, similar to that proposed by Bluth and Blanton (2014)? It has been posited that mindfulness and self-compassion are related and mutually enhance each other (Bluth & Blanton, 2014; Neff & Germer, 2013). Indeed, findings elucidated in Study 1 of this thesis supported this model of a reciprocal relationship, whereby improvements in children's mindfulness brought about improvements in

self-compassion, and vice versa, in an iterative process (see Chapter 7 for a full discussion of Study 1 findings).

In Study 2, mindfulness (as measured by the CAMM) was not significantly related to compassionate self-responding, or any of the resilience or wellbeing indicators, therefore, no statistical analyses could be run in this regard. As mentioned in the previous section, it is possible that these findings were due to insufficient power, or problems inherent in the measure of mindfulness employed in this research.

However, findings from Study 2 did suggest evidence for a different model, whereby the positive and negative elements of self-compassion simultaneously, yet independently, influence a child's resilience and wellbeing. According to this model, it is equally important to teach children how to reduce their propensity for harsh self-evaluation, whilst also supporting their development of compassionate self-responding. Indeed, this theory provided the foundation for two further research questions; a discussion of the findings pertinent to the precise models explored can be found below (see RQ 10 and RQ 11).

6.4.3 RQ 9. Are there significant gender and/or age differences in the levels of self-compassion and mindfulness reported in children 9-12? The findings from this study did not reveal any significant gender differences in the levels of compassionate self-responding, uncompassionate self-responding, or mindfulness as reported by preadolescents. As gender differences were not reported in the study of children aged 8-12 years by Sutton et al. (2017), it is not possible to compare these findings with the only other study that has specifically focussed on preadolescent children. However, the study by Stolow et al. (2016) found girls aged between 9-16 years reported higher levels of negative self-compassion (but not compassionate self-responding). Further research in the preadolescent age group is required to see if these results are replicated in different samples.

The findings from this study did not reveal any significant age differences in the levels of compassionate self-responding, uncompassionate self-responding, or mindfulness reported by preadolescents. In fact, the only significant association between age and any of the variables of interest was a weak negative correlation with psychosocial difficulties, as measured by the difficulties subscales of the SDQ (i.e., scales that capture emotional, peer-related, conduct and hyperactivity problems).

These findings contrast to those reported by Stolow et al. (2016), who found older participants reported significantly higher levels of negative self-compassion (but not compassionate self-responding) than younger participants. However, as the age range captured by Stolow et al.'s study (9-16 years), was broader than preadolescence, direct comparison of study findings is not possible. Meanwhile, Sutton et al. (2017) did not report on age differences, and therefore no comparisons can be made between this study and the only other to uniquely study preadolescents (i.e., children aged 8-12 years).

It is possible that the low power of this study to detect small effect sizes may have potentially masked age (and gender) difference. Therefore, future research with larger, more diverse preadolescent samples is required to see if the results from this study are replicated in other samples. It is possible, however, that age and gender differences simply do not develop until later in adolescence, when cognitive and physiological differences become more prevalent.

6.4.4 RQ 10. Is the relationship between positive self-responding and indicators of psychosocial wellbeing and resilience mediated by uncompassionate self-responding? And, RQ 11. Is the relationship between uncompassionate self-responding and indicators of psychosocial wellbeing mediated by compassionate self-responding? The final two research questions were designed to further explore the relationships between the variables of interest. The questions were posed in light of the previous findings revealed by Study 2, namely (a) that self-compassion was best measured as two distinct constructs, compassionate self-responding and uncompassionate self-responding, (b) these two constructs were independent, and therefore could theoretically both exist within the same individual, and (c) both the positive and negative aspects of self-compassion showed significant associations with the positive indicators of wellbeing and resilience, and the negative indicators of wellbeing, respectively.

In RQ 10, four separate models were tested in order to examine whether the relationships between compassionate self-responding and indicators of psychosocial wellbeing (i.e., positive affect, satisfaction with life, prosocial behaviour, and resilience) were mediated by uncompassionate self-responding. Results confirmed that uncompassionate self-responding did mediate in all but one of the models—prosocial behaviour. The finding that uncompassionate self-

responding did account for a proportion of the variance in the relationship between positive affect, satisfaction with life, and resilience, suggests that negative styles of self-responding can increase preadolescents' vulnerability to reduced psychosocial wellbeing, and weaken resilience, even when they possess skills of compassionate self-responding. This finding was expected; it supports previous research with children suggesting that a negative style of self-responding acts as a vulnerability factor (Stolow et al., 2016).

However, according to the current findings, uncompassionate self-responding does not have the same deleterious impact on an individual's likelihood to engage in prosocial behaviour. The implications of this finding are unclear; it is possible future research will reveal different results. Indeed, it is noted that the Cronbach's alpha for the SDQ Prosocial scale was relatively weak at .56. Therefore, results involving this scale must be interpreted with caution. One possible explanation is that preadolescents develop skills of self-responding and skills of socialisation, differentially: children regularly attending school may be more likely to be influenced by the social norms that promote prosocial behaviour, and therefore more likely to engage socially acceptable ways, regardless of their style of self-responding.

To answer RQ 11, two further models were tested so as to examine the relationships between uncompassionate self-responding and the negative indicators of psychosocial wellbeing, and to see if these were mediated by the tendency to respond to the self with self-compassion. Results indicated that uncompassionate self-responding mediated the relationship between positive self-responding and psychosocial difficulties, but not negative affect. The finding that compassionate self-responding can serve to protect, or buffer, against the negative impact of uncompassionate self-responding on psychosocial wellbeing, was expected; it is in keeping with Stolow et al.'s (2016) finding that compassionate self-responding acts as a protective factor. This is also consistent with Neff's (2003a) conceptualisation of self-compassion as a protective factor against personal failure, or suffering.

However, according to the findings of the current study, self-compassion does not seem to have the same protective ability when it comes to negative affect. This seems counterintuitive; however, if children are more self-aware, and more open to their emotional experiences, it may be that they are more in-tune with

themselves and thus more likely to report on their negative (as well as positive) affective experiences.

While the current study is the first study to explore the positive and negative elements of self-compassion separately for children within a mediation model, a recent study by Dundas et al. (2015) also performed mediation analysis with data collected from university students. Their findings similarly revealed that compassionate self-responding mediated the relationship of self-condemnation (i.e., uncompassionate self-responding) with depressive symptoms; however, this was only true when self-compassion was high (i.e., above the mean score for the group). The authors surmised that compassionate self-responding has to exceed a certain level before it can act as a buffer against the negative effects of self-condemnation. While the current study did not compare preadolescent children who scored highly on self-compassion with those did not, this may offer a valuable direction for future research.

An integrated discussion of findings from Study 1, and both parts of Study 2, will be presented in the following Chapter. Implications, limitations and directions for future research will also be presented.

CHAPTER 7
GENERAL DISCUSSION AND CONCLUSION

7.1 Chapter Introduction

This discussion integrates the findings from Study 1 and 2, with reference to the broad research aims and specific research questions. Key findings are presented, with a discussion of how these findings add to the existing body of knowledge. It is argued that this research makes a valued contribution to the body of self-compassion literature, as well as theories underlying the application of this construct to children under 12 years, and, more specifically, the preadolescent age category. This chapter presents implications for program design and delivery to support children's wellbeing and resilience. Finally, an overview of the limitations of this research is provided, along with directions for future research.

As identified in the literature review, one of the major gaps in current knowledge regards the conceptualisation and measurement of self-compassion within young cohorts. Meanwhile, the closely related construct of mindfulness, has received considerably more attention in the childhood literature (see Burke, 2009). Indeed, a meta-analysis of mindfulness interventions in youth populations revealed the superiority of mindfulness treatments over active control comparison conditions (Zoogman et al., 2015). Zoogman et al. (2015) recommended that future research focus on youth in clinical settings (rather than community, school-based populations), as significantly larger effect sizes were found in studies drawn from clinical samples compared to non-clinical samples (.50 vs. .20, $p = .024$).

Meanwhile, the field of self-compassion has accumulated robust empirical evidence to support the links between self-compassion and multiple indicators of wellbeing and resilience in a variety of adult (see MacBeth & Gumley, 2012; Zessin et al., 2015 for meta-analytic reviews) and adolescent populations (e.g., Marsh et al., 2018; Muris et al., 2016a; Neff & McGehee, 2010). While the research conducted with children under 12 years is scarce, two published studies have included children as young as 8 years; both report results mirroring those found within older counterparts (Stolow et al., 2016; Sutton et al., 2017). These early, but promising, findings point to the potential of self-compassion as a relevant and effective point of intervention to enhance children's wellbeing and improve their resilience to the inevitable stresses and strains of impending adolescence.

The rationale for this thesis was to both broaden and deepen the current knowledge within the field of self-compassion via further examination of the relevance of this construct to primary school-aged children, with a specific focus on the preadolescent age group. Colloquially referred to as 'tweens' or 'tweenagers', these emerging adolescents are aged 9-12 years. The exploratory nature of this subject area necessitated a mixed-methods approach to examine both conceptual and measurement issues. Furthermore, an investigation of the relationships between self-compassion, mindfulness, and wellbeing and resilience indicators was undertaken to further expand the knowledge (and thus, the potential application) of these constructs to youth in their crucial preadolescent years. It is argued that the findings from this research make an important contribution within the field of child and youth mental health and wellness.

The two main aims of this thesis were (a) to explore whether self-compassion offers a relevant, and effective therapeutic avenue for improving primary school-aged children's resilience and psychosocial wellbeing, and (b) to develop scales—including a parent-reported measure—suitable for measuring this construct within the preadolescent age-group. To these ends, this research was divided into two studies; Study 1 addressed three research questions relevant to the first thesis aim, while Study 2 was separated into two parts, each addressing a further three research questions relevant to the second thesis aim.

The remainder of this chapter will focus on examination of the key findings from each study in turn; interpretations and implications are discussed. Following the findings of Study 1, a new theoretical model is presented to account for the mechanisms via which interventions targeting self-compassion and mindfulness increase psychosocial wellbeing and resilience in children referred for psychological therapy. Meanwhile, findings from Study 2 will be presented in light of the current debate and controversy within the literature regarding the most appropriate way to measure and conceptualise self-compassion.

7.2 Key Findings from Study 1

The *Peace by Piece* program was developed as a group-therapy program to pioneer the potential of self-compassion as a relevant and efficacious treatment intervention for a clinical group of primary-aged children. The pilot program was run with a group of 7 child-parent dyads; the participating children were aged

between 7-9 years. Six dyads completed the 10-week program in its entirety. Three key findings emerged from this pilot program, integrated from qualitative and quantitative data analyses. These findings will be discussed in turn.

7.2.1 Key finding 1. Firstly, it emerged that children had the necessary metacognitive awareness to accurately conceptualise the positive and negative aspects of self-compassion, and (to a more rudimental extent), mindfulness. This finding is encouraging, particularly as the age-range of children who participated in the *Peace by Piece* program was relatively young (7-9 years). According to Piaget (1964), children need to be closer to 11 years before they possess the metacognitive awareness necessary to understand such abstract concepts. The fact that children from this study could articulate, accurately, the fundamental features of a positive and negative self-attitude, as well as the discuss—the arguably more abstract concept of—mindfulness, is in line with more recent research that states children as young as 6 years are able to provide an accurate reflection on their own cognitions (see Schraw & Moshman, 1995, for a review). Indeed, it is increasingly well established that early-primary aged children can benefit from mindfulness-based interventions (Flook et al., 2015; Flook et al., 2010). However, the current research finding is unique in that it provides the first documented evidence that children as young as 7 years can conceptualise self-compassion effectively. Moreover, children who completed the program were clearly able to adopt and display skills indicative of improved self-compassionate responding, according to the observations of their parents. One parent articulated their child's improved self-compassion with the following observation: *"Eleanor has become more self-nurturing, become more mature, more understanding of herself; doesn't call herself dumb anymore, realising that she is only human and can have another go if she doesn't get it right first time. Doesn't beat herself up so much if she does something wrong or makes mistake – be it with homework or building lego*". Meanwhile, a mother noted that her son Clive "*uses more positive self-talk… is generally more positive… not putting himself down and having self-belief"*.

These findings support the relevance of targeting self-compassion in cohorts as young as 7 years. Indeed, these early years, when the development of the conceptual self is still under construction (Bosacki, 2016), may present a particularly malleable 'window' in which positive skills of self-responding can be embedded.

With attrition rates low (14%) and satisfaction ratings high (between 80% and 100% of parent participants either 'Agreed' or 'Strongly Agreed' with each statement in regards to satisfaction with the intervention's content, duration, format and delivery), the *Peace by Piece* program is one example of an acceptable and viable intervention through which self-compassion (and mindfulness) many be enhanced.

7.2.2 Key finding 2. The second key finding from Study 1 was that the *Peace by Piece* program was found to be effective in bringing about improvements not only in self-compassion, but also in mindfulness, wellbeing and resilience. Statistical analysis of quantitative data collected pre- and post-intervention data—which must be interpreted with caution due to the small sample size employed—nevertheless clearly supported the qualitative data provided verbally during interviews: Results overwhelmingly concurred that children's psychosocial wellbeing and resilience to stressful and challenging situations significantly improved following participation in the *Peace by Piece* intervention.

Indeed, of the nine themes that emerged following thematic analysis of the qualitative data provided by both child and parent participants, four directly related to improvements noted in these areas: improved self-compassion (theme 4); improved sense of wellbeing (theme 5); and improved resilience (theme 6). While improvements in children's mindfulness did not emerge as a specific theme in its own right, improvements in children's emotional regulation (theme 3) were consistently discussed. Moreover, parents noted their own enhanced skills of mindfulness post-intervention, specifically as they related to an improved capacity to cope with challenging parenting situations (theme 8), and improvements in the child-parent relationship (theme 7). Moreover, the benefits of the program appeared to be enduring, lasting at least 12-months after completion of the program, according to reports from the participating children's parents.

7.2.3 Key finding 3. The last key finding from Study 1 was that the major mechanism through which the *Peace by Piece* program achieved therapeutic benefit—according to the analysis of qualitative data supplied by both child and parent participants—was via improvements in both parental and child emotional regulation. Parent participants further articulated that their improved skills of emotional regulation led to improvements in the child-parent relationship, as well as improved child-peer relationships. Thus, the current findings support a variety of

models previously presented in the literature. For example, results support the model presented by Roeser and Eccles (2015), regarding developmental trajectories of mindfulness and compassion (see Figure 6, Chapter 3). Specifically, findings from Study 1 concur that both mindfulness and (self-) compassion are innate capacities that can be enhanced via socialisation and training. Findings from Study 1 also support those of previous studies that show mindfulness-based interventions to be beneficial for child-parent relationships (Coatsworth et al., 2010). More generally, findings support the contention that that the benefits of teaching self-regulatory skills are enhanced when provided to children and parents simultaneously (Harnett & Dawe, 2012). Findings also support the models of mindful parenting, as proposed by Bögels et al. (2010), and Dumas (2005). However, the additional knowledge elicited from the findings of Study 1—in particular those relating to the contribution of self-compassion—provides an opportunity to expand on these current models.

7.2.4 A working model. Based on an integration of qualitative and quantitative findings from Study 1, a working model of the parallel process contributing to improved resilience and psychosocial wellbeing in joint parent-child mindfulness training is presented in Figure 21. Essentially, this model proposes that as children learn (via training) to become more mindful of themselves and their environment (i.e., attuned to their internal and external landscapes), their capacity to adopt a kind and balanced self-attitude is supported. As children learn to be more self-accepting, their capacity for mindful awareness improves. Thus, an iterative process whereby mindful awareness supports self-compassion, and vice versa, is commenced. This part of the model is in keeping with the theorised model of mindfulness and self-compassion put forward by Bluth and Blanton (2014).

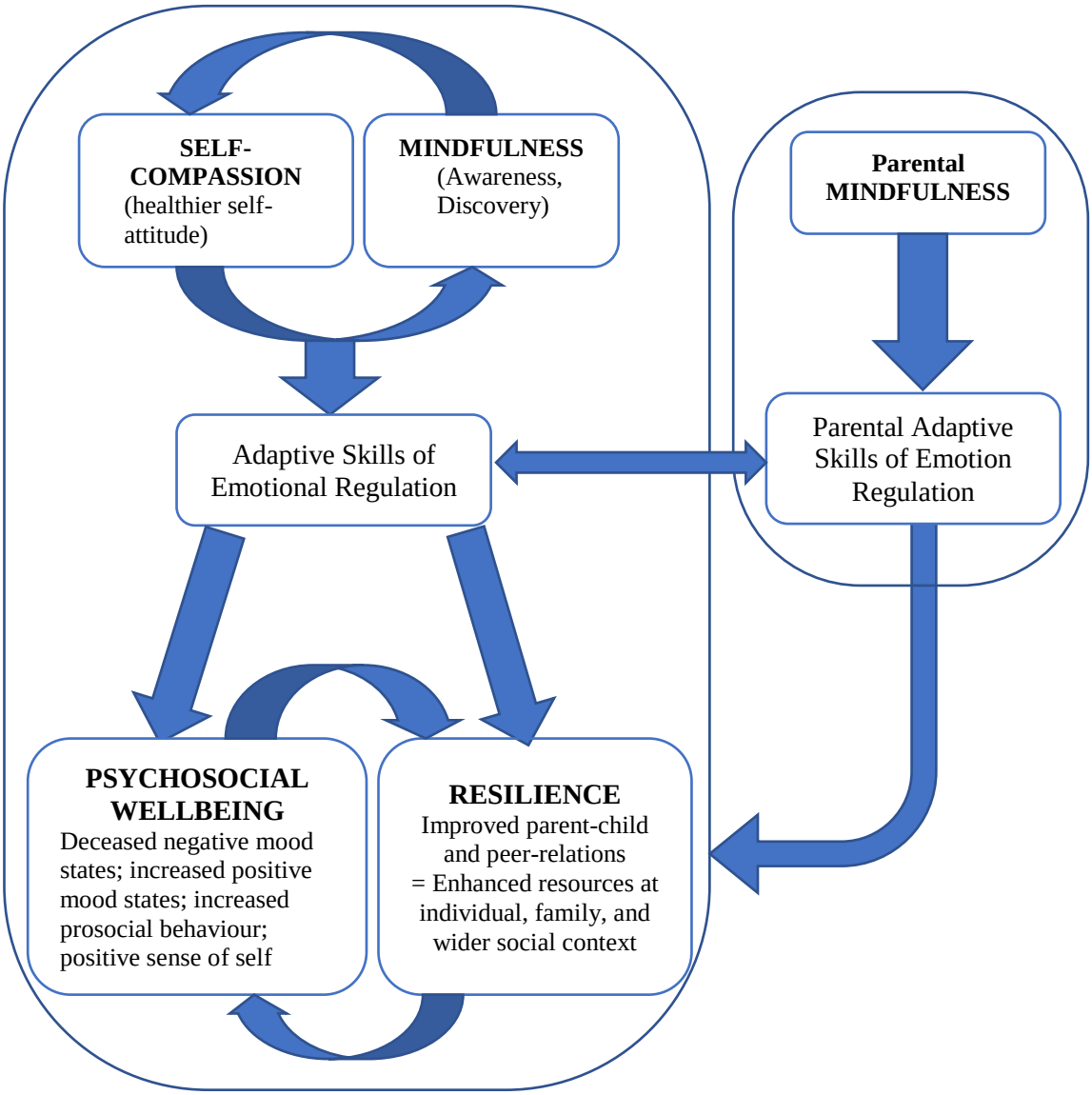


Figure 21. A working model of the parallel processes contributing to improved resilience and psychosocial wellbeing when self-compassion and mindfulness training is delivered to children in a clinical setting, with an accompanying parent. Based on results of Study 1.

The second part of this model proposes that as children's self-compassion and mindful awareness improve, adaptive emotional regulation skills are enhanced. Parallel to this, as parent's mindfulness improves, so does their capacity for appropriate emotional regulation. This part of the model is consistent with the model proposed by Haydicky et al. (2017), in regards to the parallel process in joint mindfulness training (see Figure 9, Chapter 3). It is theorised that the improved capacity for both parents and children to emotionally regulate leads to more mutually satisfying parent-child interactions, which benefits the parent-child relationship and thus provides an indirect resiliency resource for the child. Moreover, as parents

model more appropriate emotional regulation to their children, their children's skills are likely to improve further. More directly, as children become more skilled at regulating their emotions, psychosocial wellbeing is enhanced: emotional symptoms reduce, conduct problems are alleviated, hyperactivity/attention improves and prosocial behaviour becomes more common, leading to less peer-problems. Likewise, improvements in emotional regulation translate to improved resources for resiliency at the individual, family, and wider social context levels, via enhanced relational abilities. Improvements in wellbeing and resiliency mutually enhance one another, in another interactive process.

This theorised model represents an important first step in understanding the potential mechanisms via which self-compassion may augment mindfulness-based interventions when delivered to children and an accompanying parent in a clinical setting. However, future research is required to ascertain further empirical support of this newly proposed model.

To surmise, as prior research has been consistent in proving self-compassion is an important aspect of mental wellness, the creation of a program that successfully teaches children how to be more self-compassionate should be of interest to those working with young people. The *Peace by Piece* program helps children learn how to stop 'beating themselves up', and instead become to be more accepting of their imperfect selves. This process not only alleviates suffering but promotes feelings of connection and healthier ways of connecting with others. Thus, not only is wellbeing enhanced, but resilience to life's challenges can be bolstered. The *Peace by Piece* program therefore offers an alternative to solely mindfulness-based interventions, which currently predominate the literature. While many of the mindfulness-focused programs purport to bring about improvements in terms of wellbeing, the *Peace by Piece* program, with its emphasis on self-compassion, makes a unique contribution, and may demonstrate particular benefits for the development of resiliency in children referred for psychotherapy (see Figure 22).

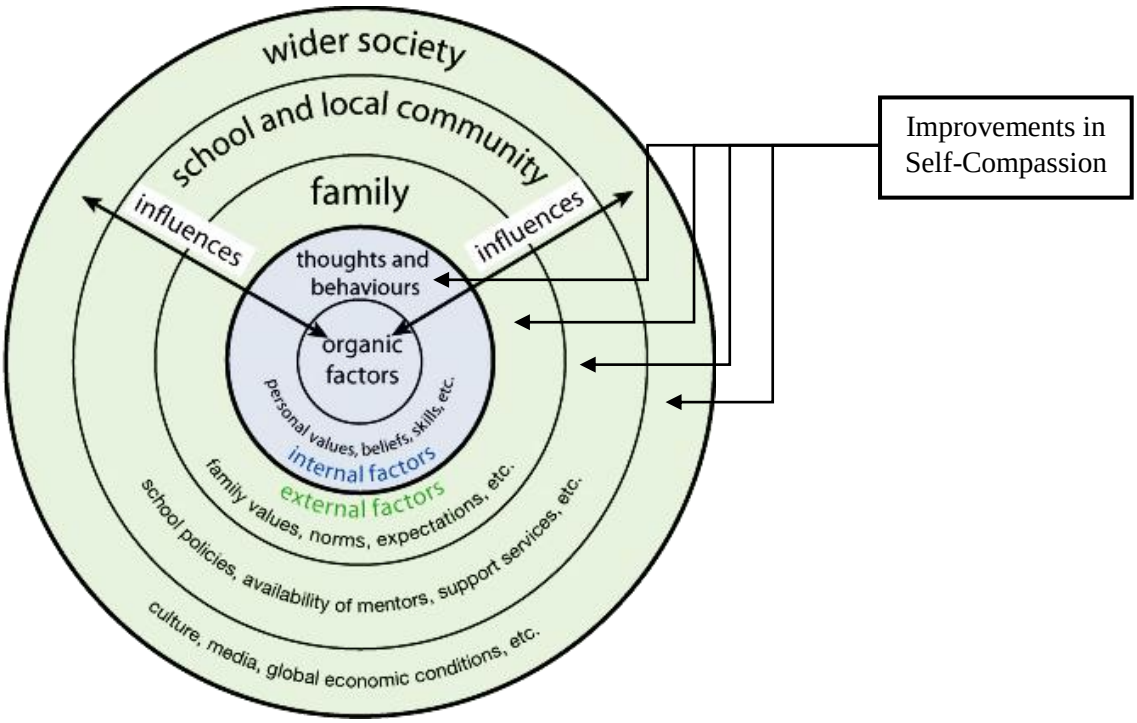


Figure 22. The theoretical impact of improved self-compassion at multiple levels of the ecological model of resiliency. Source: Adapted from Mental Health Foundation of Australia (http://www.mhfa.org.au/).

Analysis of the qualitative data collected from parents in Study 1 suggests that the development of a more self-compassionate attitude provides an individual source of resilience via a more balanced self-concept (Alvord & Grados, 2005), which is consistent with the findings of Neff and McGehee (2010) in their exploration of self-compassion within adolescent populations. However, according to the parents of children participating in the *Peace by Piece* program, it also appears that a healthier self-attitude paves the way for improved relationships; thus, resilience can be sourced from family, peer relationships, as well (potentially) connections to the wider community via improved social competence (Alvord & Grados, 2005). Again, these findings resonate with those of Neff and McGehee (2010), who reported that self-compassion correlated strongly with greater feelings of social connectedness (r = .51).

Given the prevalence of mental health concerns in middle-years of childhood (see Lawrence et al., 2016) and the emphasis on early intervention, the importance of developing and implementing programs that are effective in ameliorating psychosocial distress, improving psychosocial wellbeing, and/or enhancing resilience to life's challenges across multiple levels of the ecological model, is underscored. Thus, the

Peace by Piece program represents a valuable contribution to the repertoire of such interventions.

7.3 Relevance of Study 2, Part A

The very promising findings from Study 1—indicating the potential relevance and efficacy of self-compassion as a treatment intervention—paved the way for Study 2. The first aim of Study 2 was to develop and pilot two new measures of self-compassion for children in their preadolescent years (i.e., aged 9-12 years). The 'tween' years were chosen in favour of a younger, or broader age-range of children, so as to capture those within a similar range of cognitive and language abilities. In Australia, this age bracket covers children in their last two years of primary school (i.e., Years 5 and 6), and thus face an impending transition to high school. Therefore, self-compassion may hold particular relevance to this cohort, who will undoubtedly benefit from support to successfully navigate this transition

Two scales were developed so as to enable sound psychometric evaluation of self-compassion in preadolescent children; a necessary step to enable accurate and consistent evaluation of intervention efficacy. The purpose of a parent-perspective scale was to supplement the children's self-report and thus provide a more detailed, and holistic, assessment of the self-compassion construct. Indeed, the findings of Study 1 underscored the potential importance of obtaining parent-reported data; the information supplied by parents provided invaluable observations in regards to self-compassionate behaviour that had often been overlooked by the child themselves.

As discussed in Chapter 3, the two studies that have aimed to investigate self-compassion in children under 12 years both adapted different measures of the construct. Stolow et al. (2016) reworded Neff's (2003b) 26-item SCS and administered it to children aged 9-16 years. Meanwhile, Sutton et al (2017) developed the SCS-C, a 'child-friendly' adaptation of the 12-item SCS-SF and administered it to children aged 8-12 years. Scrutiny of the methodologies from each published study revealed a lack of rigour in regards to both item selection and scale development. Neither study employed a clear method of selecting, adapting or rewording their scale items, nor checked for item comprehension within their child samples prior to scale administration. Thus, neither measure was deemed suitable to explore self-compassion within the preadolescent age group.

Following a similar process to Muris et al. (2016), who outlined a detailed a procedure of item selection, deletion and/or modification in their development of the S-SCS-A, the 26-item SCS-P was developed, using Neff's (2003b) SCS as a template. The SCS-P-PR became the parent-perspective measure, utilising the same order and wording of items to facilitate comparison with the child-reported measure. This process was consistent with that of other measures that have informant-rated scales to supplement the child-self report, such as the PANAS-C and SDQ.

7.4 Key Findings from Study 2, Part A

Following the advice of Patil et al. (2008), exploratory factor analysis was the chosen method of factor analysis for both the SCS-P and SCS-P-PR: Exploratory methods are necessary when prior research is scarce, and/or when piloting new measures. As little is known regarding the conceptualisation of self-compassion within cohorts of preadolescent children, and the two measures were being piloted for the first time, an exploratory method of factor analysis was deemed most appropriate. Two key findings emerged following these exploratory factor analyses; each will now be discussed.

7.4.1 Key finding 1. Firstly, the pilot testing of the SCS-P and SCS-P-PR revealed that both measures have sound psychometric properties: From a maximum likelihood method a two-factor solution emerged as the best fit to the data, for both measures. In both cases, the same items loaded onto the same two factors: one representing the 'positive' facets of self-compassion (i.e., the items designed to tap into self-kindness, common humanity and mindfulness), and the other representing the 'negative' facets of self-compassion (i.e., self-judgement, isolation and over-identification). Internal consistencies for each of these two factors on both measures were strong (Cronbach's alphas ranged from .88 to .95). Evidence for concurrent validity was established for both the SCS-P and SCS-P-PR via examination of the correlations between each of the two factors (i.e., compassionate self-responding and uncompassionate self-responding) with other variables of interest, namely resilience, and indicators of psychosocial wellbeing (i.e., positive and negative affect, satisfaction with life, internalising difficulties and externalising difficulties, and prosocial behaviour).

The finding that both the SCS-P and SCS-P-PR displayed good psychometric properties is a promising discovery; it indicates that both scales can be used by

researchers as reliable and valid measures of self-compassion in children aged 9-12 years. In fact, most psychometric indicators exceed those found for the other measures employed by the study (such as the SDQ, SWL-C, and CYRM), the majority of which have well established evidence of their reliability and validity.

Furthermore, convergent validity between the children's self-report, and the parent-reported measure of self-compassion was confirmed via significant, moderate correlations between the scales of the SCS-P and the SCS-P-PR ($.30 < r < .40$). This is an important finding for a number of reasons. Firstly, it supports prior research that has suggested that self-compassion is a trait observable by others (e.g., Neff & Beretvas, 2013). Secondly, it indicates the viability of collecting potentially invaluable data regarding a child's self-compassion from an informant. In fact, the method of triangulation of data from multiple informants is frequently recommended by researchers interested in studying psychological phenomenon, as a method to enhance assessment (Snow et al., 2005). As no prior research had assessed the convergent validity between child self-report and parent-rated self-compassionate responding, Study 2 addressed this gap in the current knowledge.

7.4.2 Key finding 2. The second key finding identified from Study 2 was that the results of exploratory factor analysis revealed that scores on the SCS-P and SCS-P-PR are best represented by two distinct factors; a 'positive' factor (termed by this paper 'compassionate self-responding') and a 'negative' factor (termed 'uncompassionate self-responding'). Thus, the common practice of combining the positive and negative items into one overarching total self-compassion score (as per Neff's 2003b recommendations for the SCS) was not supported by the results of this study.

The finding that items on the SCS-P and SCS-P-PR formed two orthogonal constructs was not particularly surprising; a number of recent studies investigating the factor structure of the SCS and the shortened SCS-SF have similarly reported evidence of a two-factor model, where the positive and negatively worded items form two separate factors (e.g., Brenner et al., 2017, Costa et al. 2015; Castilho et al. 2015; López et al. 2015). Indeed, the current findings are also consistent with the two published studies that have similarly aimed to measure the self-compassion construct in children under 12 years (i.e., Stolow et al., 2016; Sutton et al., 2017). Thus, this key finding contributes to the growing body of literature that questions the

standard practice (see Neff, 2003b) of combining reverse-scored negatively worded items with positively worded items to create one overall self-compassion score.

There is related argument in the literature (Muris, 2015; Muris et al., 2016a; Muris et al., 2016b; Muris & Petrocchi, 2017), that posits the negatively worded items should be excluded in their entirety from all measures of self-compassion. According to these researchers, the negative items represent indicators of psychological maladjustment, such as anxiety and depression, and therefore are not relevant to the 'true' protective nature of self-compassion. Indeed, Muris et al. (2016a) do not include any of the negatively worded items in their adolescent measure of self-compassion (S-SCS-A). However, the results from this thesis indicate that it is equally important to measure the negative aspects of self-compassion as it is the positive aspects; there is evidence that both tendencies can operate independently within preadolescent children, and are not mutually exclusive (i.e., they are not two ends of the same scale). In other words, the findings from this study imply that reducing preadolescents' tendency to think self-critically, feel isolated and over-identify with emotions is equally as important as learning skills to respond to the self in healthy, more balanced ways. Thus, any intervention designed to target self-compassion will need to address both the positive and negative aspects of self-responding in order to be efficacious.

The findings from Study 2, therefore, do offer support for Neff's (2003a, 2003b, 2016a, 2016b) assertions that both the negative and positively worded items on the SCS tap into important elements relevant to the assessment of an individual's tendencies to relate to themselves during times of suffering, and thus warrant inclusion on measures of self-compassion. The recognition of both positive, and negative, aspects of self-responding is also consistent with the Buddhist teachings on self-compassion (Kraus & Sears, 2008). However, the current findings indicate that, rather than two inherent components of the self-compassion construct, compassionate self-responding and negative-self responding (as measured with the SCS-P and SCS-P-PR) operate as two theoretically and psychometrically distinct constructs. As previously mentioned, this finding has been mirrored in two earlier investigations of self-compassion in children, which both used similar adaptations of Neff's SCS scale (Stolow et al., 2016; Sutton et al., 2017).

It is important to note that measurement factors may have also influenced the results obtained by the factor analysis of the SCS-P and SCS-P-PR. While it is often recommended to phrase half of a scale's items in a positive direction, and half in a negative direction to control for respondent response bias (Comrey, 1988), it has also been revealed that positively and negatively worded items frequently load onto distinct factors (see Spector, Van Katwyk, Brannick, & Chen, 1977 for a review of how item characteristics can produce artifactual factors). Indeed, research conducted with children from Grades 4–6 (i.e., aged 8-12 years) revealed that the children found it difficult to indicate agreement by disagreeing with a negative statement; in other words, the children were more likely to agree with an item that was positively-worded than they were to disagree with an item that was negatively worded (Benson & Hocevar, 1985). However, following the evolutionary arguments of Gilbert et al., (2011) it can be contended that it is theoretically logical that the positive and negative aspects of self-responding should be measured separately, as they are related to different affective and physiological systems (see Figure 3, Chapter 1). Therefore, to rule out measurement artefact as the sole cause of the scores separating into a positive and negative factor, further research with the SCS-P and SCS-P-PR is needed. Future research should apply different methods of balancing item phrasing to correct for this type of response bias. Alternately, supplementing the self-reported data with that obtained from a parent-reported measure of self-compassion (i.e., the SCS-P-PR) may prove another viable option.

To surmise, the availability of psychometrically sound instruments is essential to enable accurate and consistent measurement of the self-compassion construct in preadolescent populations. Study 2 addressed the identified gap in the availability of such instruments for measuring self-compassion in preadolescent children via the development and pilot testing of the SCS-P and SCS-P-PR. These measures have the potential to be used as screening tools to identify individuals with problematic styles of self-responding, and/or those who may benefit from early interventions designed to promote a healthier self-relationship. Robust measures are also crucial to the determination of intervention efficacy. However, as validation is an ongoing process, further research using the SCS-P and SCS-P-PR across more diverse populations is required to ensure that the promising results from the pilot study can be replicated.

7.5 Key Findings from Study 2, Part B

The final stage of analysis for the data collected in Study 2 was an examination of the relationships between self-compassion, mindfulness, indicators of wellbeing, and resilience. Three key findings were identified. These will be discussed in turn.

7.5.1 Key finding 1. Firstly, compassionate self-responding and uncompassionate self-responding were both found to be unique predictors of psychosocial wellbeing indicators, and resilience. These findings were not unexpected; prior research has shown robust relationships between self-compassion, wellbeing and resilience in adult and adolescent populations (Neff et al., 2007a; Neff & McGehee, 2010; Neff et al., 2007b); emerging evidence has shown similar associations between self-compassion and wellbeing in child populations (Sutton et al., 2017). However, as this is the first time self-compassion and resilience have been specifically examined within the preadolescent age group, the associations that were revealed represent unique, and potentially important, new findings. Consistent with the ecological model of resilience (and the results of Study 1), potential interpretations of the associations revealed by Study 2 are that responding to the self with compassion during times of hardship can provide both an internal source of resilience (e.g., via improved self-concept; Alvord & Grados, 2005), and an external source of resilience (e.g., via social competence, Alvord & Grados, 2005). Conversely, engaging in negative ways of self-responding during challenging times will inevitably decrease resiliency resources; this may occur at the individual level (e.g., by over-identifying with negative thoughts or feelings) and/or external levels (e.g., via social isolation, causing detachment from resilience resources that may be present in the family or community). Future research is needed to explore the relationships between styles of self-responding and resilience in greater detail.

To date, only Sutton et al. (2017) have reported on the relationships of positive and negative aspects of self-compassion with indicators of wellbeing in preadolescents. Similar to the current study, Sutton et al. found that both positive and negative aspects of self-compassion were significantly associated with satisfaction with life, and positive affect. Therefore, the findings from the current study add weight to this prior research; together, they suggest that positive ways of responding to the self (i.e., with kindness, connection and acceptance), may lead to

more objective evaluations, and greater appreciation of life's experiences in general. Conversely, a negative mode of self-responding during times of hardship may entail becoming over-identified with negative internal and external experiences; thus, positive affect is reduced, along with satisfaction with life in general. Future qualitative research in this area will enable further light to be shed on the nature of these associations.

This study also extends the knowledge regarding self-compassion's relationship with other aspects of psychosocial wellbeing. For example, the current study was the first to examine, and reveal, that compassionate self-responding was inversely associated with measures of preadolescent externalising difficulties (i.e., conduct and hyperactivity problems), while uncompassionate self-responding was positively associated with these difficulties. One possible interpretation of this finding is that the adoption of a self-compassionate mode of responding during difficult times reduces the likelihood of getting 'caught-up' in uncomfortable thoughts and feelings that may otherwise lead to disruptive, externalised behaviour. It is recommended that future researchers further explore the nature of the relationship between self-compassion and psychosocial difficulties, as this has the potential to inform programs aimed at reducing these problematic behaviours.

7.5.2 Key finding 2. The second key finding was that both compassionate self-responding and uncompassionate self-responding were stronger predictors of wellbeing and resilience than mindfulness. This finding was somewhat surprising; current research is divided as to which of the two constructs (i.e., self-compassion or mindfulness) shares the strongest relationship with indicators of psychological health (see Lopez et al., 2016; Van Dam et al., 2012; Woodruff et al., 2013). However, results from Study 1 echoed the finding that self-compassion was (at least) as important as mindfulness in enhancing the wellbeing and resilience for children completing the *Peace by Piece* program. These findings suggest that, for this cohort in particular, the concept of self-compassion might be more readily understood, and therefore more easily adopted, than the more abstract notion of mindfulness. This is a potentially important finding pertinent to the design and development of effective interventions for this age group, and therefore it is strongly recommended that future research explores this area in further detail.

7.5.3 Key finding 3. The third key finding revealed by Study 2 pertained to the result from a series of mediation analyses. Results broadly suggested that compassionate self-responding may protect, or buffer, the detrimental impacts of uncompassionate self-responding on negative indicators of psychosocial wellbeing. Furthermore, uncompassionate self-responding may increase vulnerability by reducing resilience and lowering psychosocial wellbeing, even when compassionate self-responding is present in an individual.

Taken together, these findings support Stolow et al.'s (2016) description of compassionate self-responding as exerting a protective function, and negative self-compassion (as they termed it) being a vulnerability factor in their longitudinal study of depressive symptoms in children and adolescents. Similarly, Dundas et al. (2015)—who collected data from 227 university students—conducted a moderation analysis indicating that the association between self-condemnation (their term for uncompassionate self-responding), and depressive symptoms was weaker for individuals 'high' in compassionate self-responding. Conversely, for individuals high in compassionate self-responding, self-compassion worked to reduce depressive symptoms by inversely affecting self-condemnation. Dundas et al. concluded that compassionate self-responding, if above a certain level, can keep negative styles of self-responding "in check" (p. 58). While Study 2 did not examine the association of levels of compassionate self-responding and uncompassionate self-responding with measures of psychopathology (such as anxiety or depression), future research in this area is recommended. Indeed, it is well established that preventative and early intervention approaches are essential to improve mental health outcomes for Australian youth. Further research can extend the research platform from which efficacious interventions can be developed for this cohort.

Finally, it is noted that gender and age were not found to be related to compassionate self-responding or uncompassionate self-responding in this study. This finding was not unexpected, as prior research has provided mixed results in this regard. It may be the case that preadolescent children display reduced gender differences than when compared with their adolescent counterparts (see Bluth & Blanton, 2015), as gender differences are less pronounced during this phase of development. The relatively narrow age-range surveyed may also naturally mean that any differences that are present will be less obvious and harder to detect in a

small sample. However, future research with larger samples will be necessary before the presence or absence of age and/or gender differences in the preadolescent age-range can be determined.

7.6 Limitations and Recommendations for Future Research

A number of limitations have already been noted, along with recommendations for future research, throughout this chapter and in previous sections of this paper. In regards to Study 1, several limitations are emphasised: All findings must be interpreted with caution due to the small sample size recruited for participation in the *Peace by Piece* Program, and lack of a control group. As there was no comparison control group, it is not possible to rule out that the improvements in functioning reported by parent and child participants may be due to factors other than the treatment intervention; for example, the maturity of the children participating, or other activities the children were engaged in outside of the group. It is also noted that the researchers who facilitated the program also conducted the interviews with participants post-intervention, which may have introduced bias in responding. Furthermore, while mechanisms of change have been proposed, the small sample size limits the study's power to thoroughly investigate mechanisms of change. However, this study marks an important first step in establishing the feasibility of self-compassion, in conjunction with mindfulness, as an effective intervention for children referred for psychotherapy in a clinical setting.

A limitation of Study 2 was the employment of a cross-sectional, rather than longitudinal, design. Therefore, causal pathways in the models presented cannot be determined. Longitudinal studies investigating the variables of interest are recommended to future researchers. In addition, while efforts were made to employ a large, diverse sample of Year 5 and Year 6 students, recruitment difficulties limited the final pool of participants and therefore generalisability is limited. Replication of these findings with additional populations of children is vital, as self-compassion is likely to be interpreted differently depending on culture, race, ethnicity, and social economic status. It is also noted that, while unlikely, participant characteristics may have been unduly influenced by the prospect of potentially winning an iPad Air.

Despite these limitations, the findings from both Study 1 and Study 2 of this thesis represent an important step in examining the relevance, and potential efficacy, of self-compassion to children under 12 years and, specifically, the preadolescent

age group. Establishing whether positive aspects of self-compassion may protect, and/or the negative aspects of self-compassion promote vulnerability towards psychosocial wellbeing and resilience in preadolescent children is a critical direction for future research. In particular, any future evaluation of Peace by Piece groups should aim to determine whether individuals obtain benefit primarily via increases in their compassionate self-responding, or via decreases in uncompassionate self-responding.

7.7 Summary and Conclusion

The overarching aims of this thesis were two-fold: to explore whether self-compassion offers a relevant, and effective therapeutic avenue for improving primary school-aged children's resilience and psychosocial wellbeing, and to develop two new, psychometrically sound measures of self-compassion for the preadolescent age group. To these ends, a two-phase, mixed methods design, was adopted. An overview of the main findings revealed a number of significant contributions to the field of self-compassion research.

Firstly, the *Peace by Piece* program—a 10-week group-therapy program designed to teach skills of mindfulness and self-compassion to children under 12 years in a clinical setting—was designed to test the feasibility of a program developed to teach skills of self-compassion to primary-aged children. Analyses of both qualitative and quantitative findings revealed convincing support for the feasibility of this novel group-therapy intervention: Acceptability was high, while attrition rates were low. Meanwhile, satisfaction surveys indicated that the program content, duration, format and delivery were well received by the child and parent participants.

Moreover, efficacy data suggested that the *Peace by Piece* group intervention brought about a range of benefits for child participants. Thematic analysis revealed that improvements in emotion regulation appeared to be the major mechanism via which children's wellbeing and resilience were enhanced. There were also benefits reported by the parent participants: These included improved capacity for emotion regulation, leading to less reactive parenting, and an enhanced parent-child relationship. Based on these findings, a theorised model of the parallel processes contributing to improved resilience and psychosocial wellbeing, when self-compassion and mindfulness training is delivered to children and an accompanying

parent, within a clinical setting, was proposed. This model will require replication in larger, and more diverse samples.

Phase 2 of this research involved the design and pilot-testing of two new measures of self-compassion. The resulting measures, named the Self-Compassion Scale-Preadolescent (SCS-P) and the Self-Compassion Scale-Preadolescent-Parent Report (SCS-P-PR), were administered to Year 5 and Year 6 students, and their parents. Results revealed both measures to have sound psychometric properties. Moreover, convergent validity between the children's self-report, and the parent-reported measure of self-compassion was confirmed via significant, moderate correlations between the scales of the SCS-P and SCS-P-PR ($.30 < r < .40$). This is an important finding; the SCS-P-PR is the first informant-reported measure of self-compassion to be developed and pilot tested. Inclusion of a parent-perspective measure in the assessment of self-compassion has the potential to enhance the understanding of preadolescent tendencies when self-responding.

As such, the validation of the SCS-P, and in particular the SCS-P-PR, represent valuable contributions to the toolbox of measures available for the assessment of self-compassion in preadolescents. Should future validation research support the promising psychometric findings found in the current study, the SCS-P and SCS-P-PR can be applied to expand the knowledge regarding the predictors of self-compassion, as well as factors that may mediate or moderate their outcomes. These measures may also be used for applied purposes, such as to improve the effective targeting and evaluation of interventions (such as the *Peace by Piece* program), developed for preadolescent children. The availability of robust measures can also enable more effective screening, and thus facilitate well targeted early intervention programs.

Findings from the second part of Study 2, which aimed to examine the relationships between self-compassion, mindfulness, resilience and psychosocial wellbeing, revealed that both compassionate self-responding and uncompassionate self-responding were unique predictors of the majority of wellbeing and resilience indicators. Moreover, results from mediation analyses suggested that compassionate self-responding may protect, or buffer, the detrimental impacts of uncompassionate self-responding on indicators of psychosocial wellbeing. Furthermore, uncompassionate self-responding may increase vulnerability to a range of

psychosocial factors, and lower resilience, even when compassionate self-responding is present. Together, findings from Study 2 point to the importance of recognising and targeting both the positive and negative aspects of the self-compassion construct when engaging with the preadolescent age group. The findings did not support the contention that all the negative items should be removed from measures of self-compassion (see Muris et al., 2017); rather they confirmed the relevance of both aspects of self-responding.

To surmise, the overall findings from this thesis contribute valuable new knowledge to the field of self-compassion, as well as point to directions for future research. This research suggests that self-compassion is a relevant, and potentially highly efficacious, target for intervention when working with children under 12 years. Importantly, this thesis was the first to report on a group-therapy intervention targeting self-compassion in a clinical group of children: Program evaluation revealed a number of very promising findings that support the ongoing development and evaluation of interventions designed to improve self-compassion (and mindfulness) within this cohort.

This research also provided preliminary evidence supporting the viability of a parent-reported measure of self-compassion. The SCS-S-PR can be used to both supplement and enhance the assessment of this construct within the preadolescent age-range. Indeed, the development and validation of the SCS-P and SCS-P-PR mark an important step towards improving the measurement and screening of self-compassion within this cohort. These measures can be utilised to more effectively target early interventions designed to redress compassionate self-responding. Furthermore, the SCS-P-PR offers a means to both educate and include parents in the assessment of their child's style of self-responding and enable the accurate identification of both protective features and vulnerabilities.

This research also adds to the growing body of literature that warns against the common practice of viewing self-compassion as one overarching construct (as originally articulated by Neff, 2003a). Rather, findings from this research support the contention (see, for example, Brenner et al., 2017) that self-compassion is best understood as two separate—and equally important—constructs, termed by this research compassionate self-responding and uncompassionate self-responding. Thus, a comprehensive assessment of self-compassion in the preadolescent age-

range entails recognising the role of these constructs in both protecting, and increasing vulnerability, to a variety of psychological outcomes. Future research can build from the findings that have been elucidated from this pioneering research. Specifically, qualitative research methods may provide a deeper understanding of how compassionate self-responding, and uncompassionate self-responding, interact and influence mental health and wellness in Australian youth.

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APPENDIX A - *Peace by Piece* Weekly Session Plans & Themes

The *Peace by Piece* program involves 10 x 60-90minute sessions

Weeks 1-3. Introduction
Apart from a big, heartful welcome to the group, we start get to know our minds, as well as learn about our brains, breathing, mindfulness, and kindness (central elements which are incorporated into coming weeks). We also learn about attention and how exactly we do that.

- Week 1 theme: Peace, Breath and Hands
- Week 2 theme: Nature
- Week 3 theme: Space

Week 4. Thoughts and Feelings and Action
Building on from the introduction weeks, we learn about thoughts and feelings, how they are connected with each other, and with our body and actions. We learn ways to become more skilled in checking in to ourselves, becoming more aware of our thoughts and feelings, and how they affect what we do. We bring it all together with key skills to be more responsive rather than reactive to our thoughts, feelings and body sensations.

- Week 4 theme: Beaches & Oceans (and Weather Reporting)

Week 5. Thoughts
We expand this week on what we have learnt so far about thoughts, looking further at how to be more aware of what we're thinking, more about how our thoughts affect our feelings, body and actions, and what we can do about our thoughts. A key message is that it is ok to have thoughts, and we don't have to believe everything we think. We learn ways to quiet our minds, so that we can have more choice in our actions.

- Week 5 theme: Up in the clouds (and Weather Reporting)

Week 6. Feelings
We then look at emotions, such as sadness, fear, worry, and anger, as well as other feelings that 'visit' us too, like happiness and boredom. We learn about what they are, how to notice them, how they naturally come and go, and how to deal with them in a friendly way! All feelings are ok and normal, even the difficult ones. We practice how to calm ourselves, kindly, so that we have more choice about how our feelings affect us and those around us.

- Week 6 theme: Houses (and Weather Reporting)

Weeks 7-8. Body Awareness & Mindful Sensing
These weeks are all about our body and senses. We look at how our body and brains are connected, and we practice observing and paying attention to the messages from our bodies and senses. Listening to our bodies, but also looking after and being grateful for our bodies is so important! As we have already learnt, we can use our bodies to calm our minds and feel less stressed, and we learn some

other techniques like body scan and progressive muscle relaxation, as well as using our imaginations. We also learn and practice some more fun ways to 'work out' our attention muscles, with mindful listening, seeing, and eating.

- Week 7 theme: Bodies
- Week 8 theme: Food

Week 9. Kindness, Compassion, Being Thankful, & Relationships

Being kind to others, as well as to ourselves, is an important way to be happy in our lives. This week we add on from the self-compassion, kindness and gratitude we have already developed throughout the previous weeks in the group. We also talk about bullies, being a friend, and seeing from others points of view.

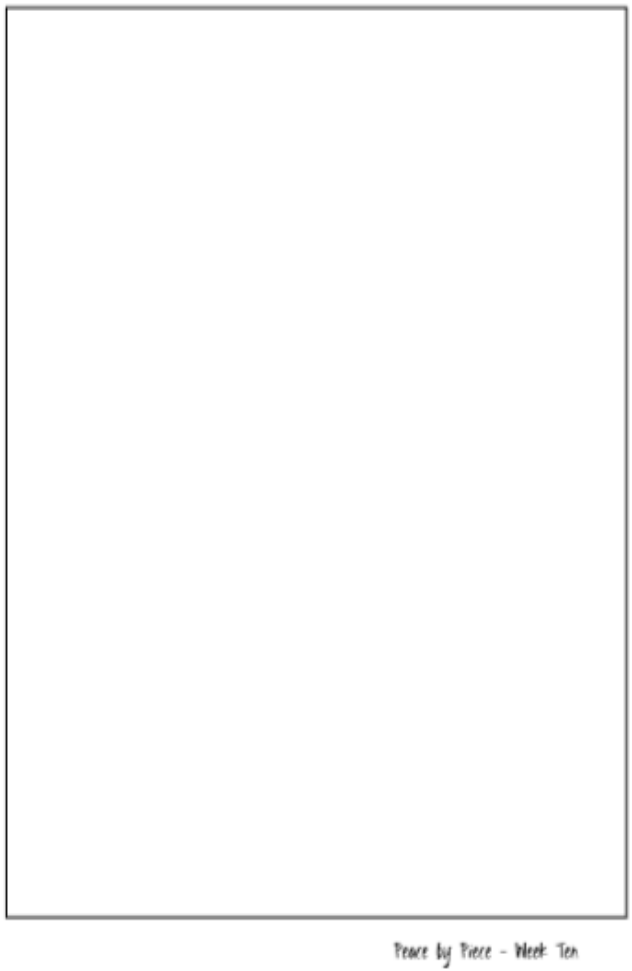
- Week 9 theme: Hearts and Circles

Week 10. Summary

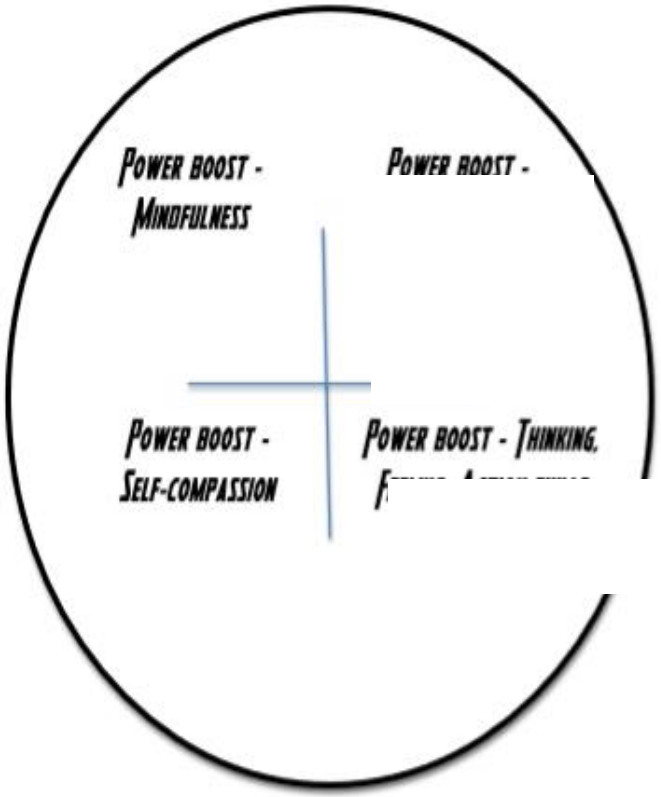
In the final week we review and reflect on all of our learnings from the group, especially what we have learnt about ourselves and our strengths – and of course our skills of mindfulness and self-compassion. We discuss ways we can continue to practice and develop these skills and strengths in our lives at home, school and other places, so that we can be happier and more peaceful in our lives.

- Week 10 theme: Superheroes

APPENDIX B - *Peace by Piece* Weekly Journaling Activity (sample pages)



Write one skill you will remember for each Power Boost in the wheel below:



What is your Mission?

Your mission is What Really Matters to you.

What did I learn from the group this week?
What will I practice/remember to do?

APPENDIX C - *Peace by Piece* - Take-Home Journal (sample pages)

Home Practice Journal

_____

(Name)

Peace by Piece - Week Ten

Peaceful Pause

***Pause and breathe peacefully,**

[breathing in] AND [breathing out]

[breathing in] AND [breathing out]

[breathing in] AND [breathing out]

...

***Notice what is going on here and now,**

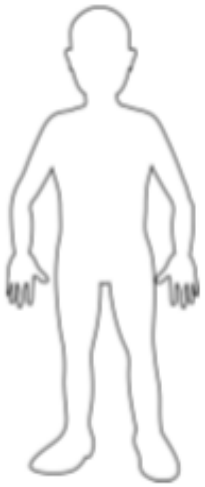
[inside of you] AND [outside of you]

Peace by Piece - Week Ten

peaceful pause

Draw a picture of yourself doing a Peaceful Pause, strengthening your inner power...

Peaceful Pause Notes



Day: _____ **Time:** _____

Body position: Sitting / Lying / Standing

What I noticed [inside of me]:

***Thoughts** - what I noticed about my thinking?

_____

_____

***Feelings** - what feelings were visiting?

_____

_____

***Body signals** - sensations I noticed in my body?

(Body map)

_____

_____

What I noticed [outside of me]:

Where I was: _____

What I was doing: _____

What others were doing: _____

What I noticed with my senses (see / hear / feel / smell / taste):

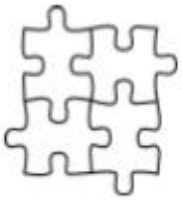
_____

_____

_____

Piecing it all together!

Well done on completing the Peace by Piece program!



You have learnt many new skills during the group, and we hope you will continue to practice, practice, practice!!

Imagine life as a Superhero.

What superhero powers would you want?

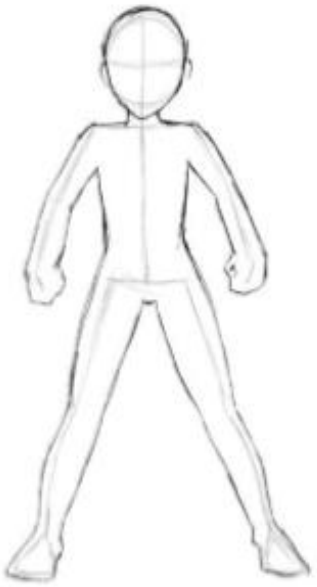
What would you do with them?

What would your costume look like?

What would your superhero name be?

What is your superhero weakness?

What makes you strong again?



WE ALL HAVE AN
INNER POWER.

THIS INNER POWER IS SOMETIMES KNOWN AS
- RESILIENCE -

WHICH IS THE INNER POWER WE HAVE
TO GET THROUGH TOUGH TIMES,
AND "BOUNCE BACK" FROM STRESS.

WE CAN BOOST OUR INNER POWER IN MANY WAYS!

A Peaceful Pause is like a super power-up!

Peace by Piece - Week Ten

Power boost - Self-compassion skills

- Peaceful Pause
- Self-care
- Talk to yourself kindly
- Knowing we all have hard times
- Mindfulness of our thoughts and feelings
- Treat yourself like you would a close friend
- Be your own BFF

Power boost - Mindfulness skills

- Peaceful pause
- Practice mindful breathing (belly breathing)
- Body maps
- Mindful sensing
- Practice mindful moving
- Mini meditators

Your friends and family can all strengthen their inner power with these Power Boost's too!!

How can you share your special superhero knowledge with them?!!

Hold a STRONG power pose.

ACTIVATE YOUR SUPER SENSES!

Sit down with a partner and each choose a place on your body that activates your super power senses. This is your chance to channel your inner super hero!

Every time you tap your activation site (an ear, your nose, a freckle, a birth mark), you can suddenly hear, smell, taste, touch and see with super-human perception!

...

Breathing. It's something we do every moment of our lives, without even having to think about it. We learnt that our breath is actually something we can use when ever we may be feeling stressed out, upset with anger, worry, anxious, feeling sad or down, or even over-excited!

...

Being a kid can be stressful and hard! We can't always change what is happening to us, but we learnt many ways to be less stressed, happier and more at peace.

...

We can be peaceful when we take a pause to slow down, breathe, and check in and be mindful of what's happening inside of us and outside of us.

...

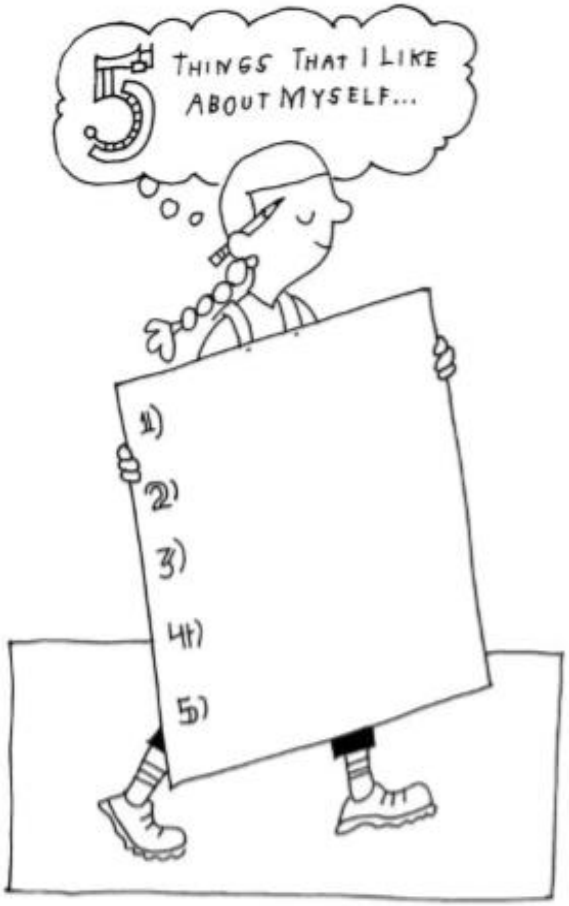
We learnt about our minds and our bodies, how they are connected, and how we can better balance all of our thoughts, feelings, body sensations, and actions. We practiced being able to notice our thoughts and feelings, so we can be calmer and have more choice in how we act.

...

We learnt that when we be friendly and kind to ourselves and to other people, we can be happier and more at peace too!

...

Brains are pretty cool. They are awesome actually! We learnt a lot about how our brains work and also practiced doing simple, fun things to help "work out" our brain to help it grow and work better! We also learnt more about how to "pay attention", and with practice, paying attention (even in fun ways) can help our brains work better.



Peace by Piece - Week Ten

Self-compassion break:

- **This is a hard time for me.**
- **Hard times will happen, and they happen to everyone.**
- **Let me be kind and gentle with myself.**
- **Let me give myself the love and strength that I need to get through this hard time.**

Peace by Piece - Week Ten

Everyone has bad days. What counts, is how you deal with those downer days. Will you pick yourself back up again? Will you use your skills to boost your inner power – your inner strength?

Answer the questions on the next page, so that when you are having a hard time you can come back to read them.

1. *List 5 things you are grateful for in life.*

2. *Describe the perfect day of your dreams.*

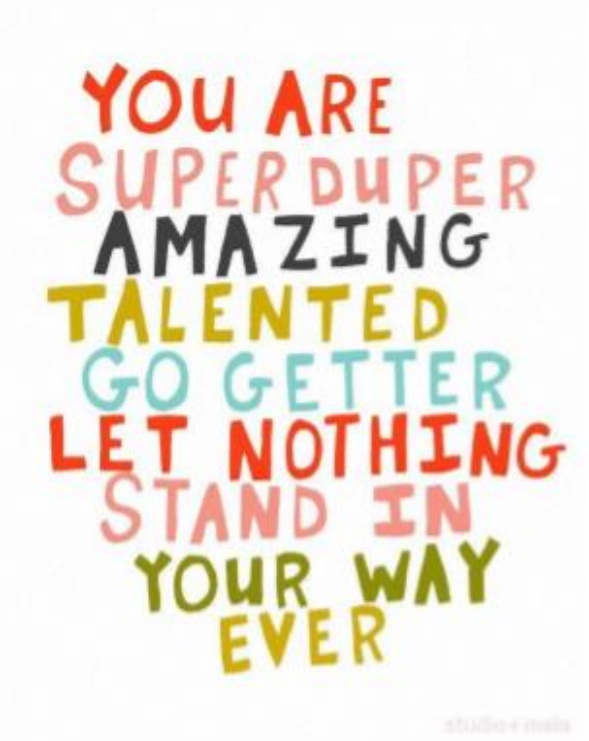
3. *What has someone said to you that has made you smile or feel good about being you?*

4. *What's your greatest achievement (best thing you've done)?*

5. *What are some of your favourite things to do?*

Mini Meditators

'Strengthening your inner light' meditation



APPENDIX D - *Peace by Piece* Flier for Parents

PEACE by Piece

A 10-session psychological group program for children and parents, promoting resilience and well-being.

The lives of children are increasingly busy and ever stressful. Whether there is stress in their home or school environments, within parent, peer or sibling relationships, or even within themselves, without ways to cope, our precious children risk suffering in many ways – including depression, anxiety, anger, attention deficits, trouble focusing on school work, or issues with sleep (to name a few).

The Peace by Piece program is a psychological group therapy program for children aged 5-12 years, which aims to promote resilience and well-being in participants (for children and parents) by supporting them to learn and practice fundamental skills to experience themselves, each other, and their world in more peaceful and positive ways.

These important psychological skills for life are introduced in practical, meaningful and fun ways (for both kids and parents) and are designed to support self-awareness, self-understanding, and self-regulation, as well as relationship skills and social awareness.

From breathing and calming techniques; skills to focus attention like mindfulness; psycho-education about the brain and body; how to take a 'Peaceful Pause' and tune into thoughts, feelings and body sensations; self-exploration of strengths, struggles, and what's important; to kindness, compassion (for self and others), optimism and gratitude. All are key pieces of social and emotional learning, resilience, well-being and thriving in relationships. In each session, we take the time to learn and practice together with fun games and sensory activities, mindful movement, self-compassion (being your own BFF), space for quiet inner awareness practice, journaling, time-in with parents, reflection and sharing in group discussions. Parents participate, play and practice too!

peace.

It does not mean to be in a place where there is no noise, trouble, or hard work. It means to be in the midst of all of those things and still be calm in your mind and heart.

The details...

The program will be starting in early 2016, and will be available to children aged 5-9 years and 9-12 years, who may have (or be at risk of) mental health concerns such as depression, anxiety, anger, attention deficits, sleep difficulties, and more. Contact us for more info on eligibility.

The program involves 10x sessions run for 60-90 minutes in duration. Dates and times to be advised.

Register interest for 2016 by contacting us today!

Email us at:

peacebypieceprogram@outlook.com.au

Free Parent Information Session

(to be held prior to the Program commencing)

**contact us for more details*

Prior to the program commencing, parents will be invited to attend a free information session, to meet the facilitating psychologists, to cover a further overview of the program, and for informed consent to be provided (for child and parent to participate in the group). Information shared aims to give an 'adult' understanding about what's behind the program, which might seem like fun and games, but there's lots of research and evidence that shows the benefits of these seemingly simple activities and ongoing practice for children and adults alike. This session will hopefully also inspire and encourage parents too, to find ways to incorporate new skills and practices into their lives, including in their roles as parents. We also talk mindful parenting and self-compassion for parents, as well as a presentation on the brains of developing children, and why this can be helpful to know and make a difference in day-to-day parenting. There will also be some valuable tips shared as to how parents can support their children's participation in psychological therapy.

APPENDIX E - *Peace by Piece* Flyer for Children

Hey There!

Our names are Khara and Vicki, and we are psychologists at Toowoomba Psychological Services - 222 James St (which we call '222').

We are so happy that you may be joining the group, 'Peace by Piece' for kids.

We thought you might like to know a little more about our group, so here are 10 pieces of info for you!

Hope to see you soon :)

Khara & Vicki

breathe

1

Breathing. It's something we do every moment of our lives, without even having to think about it. But did you know your breath is actually something you can use when ever you are feeling stressed out, or upset with anger, worry, feeling sad or even over-excited!

2

Being a kid can be stressful and hard! We can't always change what is happening to us, but we can learn ways to be less stressed, happier and more at peace.

3

The group runs for 10 weeks, for an hour each week, and is for kids your age. And also... parents participate, play and practice too!

balance

4

We learn more about our minds and our bodies, and how we can better balance all of our thoughts, feelings, body sensations, and actions. We practice being able to notice what we are thinking and feeling, so we can be calmer and have more choice in how we act.

5

We can be peaceful when we take a pause to slow down, breathe, and check in (be mindful) of whats happening inside us (our thoughts and feelings) and outside of us.

6

Did you know, that when we be friendly and kind to ourselves and to other people, we can be happier and more at peace too!

brain

7

Brains are pretty cool. They are awesome actually! Your brain is involved in everything you do, so it can help to know more about how your own and others' brains work. We also practice doing simple, fun things to help "work out" our brain to help it grow and work better!

8

Mum/dad/teacher always saying "pay attention"?! We learn how to actually do that. And with practice, paying attention (even in fun ways) can help our brains work better.

9

If you are thinking, 'oh this sounds boring', well I promise you it's not! Each week we play cool activities together that are heaps of fun!

10

The stuff we learn about and practice in the group can help you in heaps of ways - like being able to focus at school, make friends, get along better with your family, have more fun, be calmer, be less worried, angry or sad, and overall just be happier, "Peace by Piece".

PEACE by Piece FOR KIDS

APPENDIX F - *Peace by Piece* Information Sheet

Participant Information for the group therapy program "*Peace by Piece*"

Program Details

Peace by Piece: A 10-session group therapy program for children and their parents promoting resilience and wellbeing.

Facilitating Psychologist Details	

Victoria Barclay-Timmis (Clinical Psychologist)	Khara Saunders (Psychologist)
vicki@twmbapsych.com.au	khara@twmbapsych.com.au
0409 585 408	0410 450 488

Description

The *Peace by Piece* program is a psychological group therapy program for children which aims to promote resilience and well-being in participants (for children and parents) by supporting them to learn and practice fundamental skills to experience themselves, each other, and their world in more peaceful and positive ways.

These important psychological skills for life are introduced in practical, meaningful and fun ways (for both kids and parents) and are designed to support self-awareness, self-understanding, and self-regulation, as well as relationship skills and social awareness.

From breathing and calming techniques; skills to focus attention like mindfulness; psychoeducation about the brain and body; how to take a 'Peaceful Pause' and tune into thoughts, feelings and body sensations; self-exploration of strengths, struggles, and what's important; to kindness and compassion for self. All are key pieces of social and emotional learning, resilience, well-being and thriving in relationships. In each session, we take the time to learn and practice together with fun games and sensory activities, mindful movement, self-compassion (being your own BFF), space for quiet inner awareness practice, journaling, time-in with parents, reflection and sharing in group discussions. Parents participate, play and practice too!

In summary, *Peace by Piece* will provide a supportive and fun group environment with activities and games where mindfulness and compassion skills can be practiced and reinforced. We also expect that these skills will continue to be practiced outside the group.

Participation

The *Peace by Piece* program will be delivered face-to-face by a clinically endorsed psychologist and a generally registered psychologist. Each group will consist of between six and ten children, and each child is to be accompanied by one of their parents/caregivers.

Each of the 10 sessions last between an hour to an hour and a half, and are run on concurrent weeks (with a possible break coinciding with school holidays). Each session is structured to incorporate the teaching and practicing of self-compassion and mindfulness skills. Children will also be given journaling activities to complete with the aim of consolidating the skills and concepts taught each week.

Expected Benefits

Your participation in the group itself is expected to directly benefit you and your child. The *Peace by Piece* program has been designed from an evidence-based framework to support the development of self-awareness, self-understanding, self-regulation as well as improve relationship skills and social awareness in children. It is further envisaged that you (the parent) will benefit from learning and practicing skills taught in the group, as well as through spending "time-in" with your child.

Risks

Physical risk: The group therapy program will involve a low level of physical activity, such as mindful movement, simple yoga poses, mindful walking, mindful eating. Please inform the facilitating psychologists of any physical ailments and dietary requirements (particularly allergies). Please note all physical activities are optional.

Psychological risk: Engagement in psychological therapeutic interventions inevitably involves some level of emotional/psychological risk. Please notify one of the facilitating psychologists immediately if you or your child and experiencing a high level of distress. Both psychologists will be available for de-briefing after every session. If necessary, a referral to another professional can be made via your GP.

Privacy and Confidentiality

All of your comments and responses during the group therapy program will be treated confidentially unless required by law.

Progress notes will be kept on the child's individual confidential files.

As you will be participating in a group environment, we expect participants to respect each other's privacy and keep any information that may be disclosed during the group confidential (i.e. not to be discussed with any person outside of the group)

Consent to Participate

We would like to ask you to sign a written consent form (enclosed) to confirm your agreement for you and your child's participate in the group. Please return your signed consent form prior to the first session.

Questions or Further Information about the Program

Please contact the facilitating psychologists to have any questions answered or to request further information about this program.

Concerns or Complaints Regarding the Conduct of the Project

If you have any concerns or complaints about the program of any kind, we kindly ask that you come to speak to one of the facilitating psychologists individually and confidentially after the session. We welcome any feedback, positive or negative.

APPENDIX G - *Peace by Piece* Informed Consent and Assent Form

Consent Form for group therapy program "*Peace by Piece*"

Program Details
Peace by Piece: A 10-session group therapy program for children and their parents promoting resilience and wellbeing.

Facilitating Psychologist Details	
Victoria Barclay-Timmis (Clinical Psychologist)	Khara Saunders (Psychologist)
vicki@twmbapsych.com.au	khara@twmbapsych.com.au
0409 585 408	0410 450 488

Statement of Consent

By signing below, you are indicating that you:

- Have read and understood the Participant Information document regarding your child's participation in this project.
- You and your child have had any questions answered to your satisfaction.
- Understand that if you have any additional questions you can contact the facilitating psychologists.
- Understand that participation in the group is completely voluntary and a decision not to participate will in no way affect your relationship with the facilitating psychologists or any other person/organisation
- Understand that you or your child are free to withdraw at any time, without comment or penalty.
- Understand that you can contact either of the facilitating psychologists confidentially if you do have any concern or complaint about the ethical conduct of this project.
- Have provided details of any of your child's dietary requirements/food allergies to the facilitating psychologists, and/or physical ailments or medical conditions.
- Will agree to keep any personal information shared by any member of the group confidential (i.e. will not discuss the information with another person outside of the group)
- Are the legal guardian of the child that will participate in this project.
- Agree for your child to participate in the project.

Child or Young Person's (under 18 years) Agreement to Participate

Name	
Signature	
Date	

Parent's (or Legal Guardian's) Consent for a Child or Young Person to Participate

Name	
Signature	
Date	

Please return this sheet to either of the facilitating psychologists prior to the first session.

APPENDIX H - *Peace by Piece* Feedback Forms

Final Feedback Form

The *Peace by Piece* Program works in partnership with parents, and we value your input! We've now completed the group, so please take a few moments to give us some feedback about you and your child's experience in the group overall ☺

	Strongly Disagree	Disagree	Neither Agree / Disagree	Agree	Strongly Agree	Comments?
I am satisfied with the program overall						
As a parent, I have understood the information presented in the group						
My child enjoyed coming to the group						
My child participated well in the group						
My child understood the information presented in the group						
I felt supported and encouraged to implement the learnings from the program, outside of the group						
I feel confident to implement the learnings from the program, outside of the group						

	Strongly Disagree	Disagree	Neither Agree / Disagree	Agree	Strongly Agree	Comments?
The facilitators communicated well and were engaging						
I would recommend the *Peace by Piece* program to others						
The group was beneficial to myself and my child						
I have seen progress in my child since finishing the group						
I have seen progress in myself since finishing the group						
My child used the home journals and found them useful and fun						

Please rate the following in terms of how positive / beneficial you have found these elements of the program:

	Not at all beneficial	Some-what beneficial	Average	Mostly beneficial	Extremely beneficial	Comments?
Peaceful Pause						
Mindful Moving						
Bits about Brains						
Being your own BFF						

	Not at all beneficial	Some-what beneficial	Average	Mostly beneficial	Extremely beneficial	Comments?
Mini Meditators						
In-session Journaling time						
Home activity journaling						
Parent resources						
The overall format of group						
The use of themes and linked activities						
Parent information evening						
Length / Duration of sessions						
Location of the group						

What were the best features of the group?

What didn't you like or how might the group be changed?

Do you think that the group could have been condensed into 6 weekly sessions instead of 10, and still been as useful?

How could the group facilitators improve?

Do you have any other comments about the group experience for yourself or your child?

Would you be interested in a further parent information session in the future? *If so, what information would you be interested in knowing more about? (Please circle)*

- ❖ Mindful parenting
- ❖ Self-compassion
- ❖ Implementing mindfulness into daily routine
- ❖ Child attachment (such as Circle of Security parenting)
- ❖ Brain development
- ❖ How to support my child in psychological therapy
- ❖ Other _____

APPENDIX I - Education Queensland Approval

Department of
Education and Training

2 June 2017

Dear Colleague,

Ms Victoria Barclay-Timms of The University of Southern Queensland has the Department's approval to approach your school inviting participation in the research project titled *The Self-Compassionate Child: Exploring how Self-Compassion and Mindfulness enhance Children's Resilience and Psychological Wellbeing*.

The acceptance of the invitation to participate is entirely voluntary and at your discretion.

This letter provides you with information about the Department's terms and conditions for research conducted on state school sites to inform your decision as to whether or not your school will participate in this research. The Department supports the conduct of quality research in State schools and values the potential contribution of good research in informing educational policy and professional practice. Participation in research, however, may impact on the daily operations of schools, and it is therefore imperative that discretion is used when deciding whether to agree to research involving your school.

As a minimum, the researcher should provide you with the following documentation to inform your decision regarding school research participation:

- an information statement which describes the research, identifies who will be involved (e.g. students, teachers, parents/caregivers) and explains what will be required of these participants;
- the informed consent form for you to sign to indicate your agreement that school staff, students and/or parents/caregivers can be invited to participate in the research;
- a copy of the approval to approach letter from central office or a regional office (where applicable);
- a copy of the final ethical clearance from their institution's Human Research Ethics Committee;
- full copies of any data collection instruments such as surveys, questionnaires, and interview schedules to be used in the study;
- a copy of all current Blue Cards and/or exemption notices from Blue Card Services at www.bluecard.qld.gov.au for any researcher(s) seeking access to children on school sites.

Education House
30 Mary Street Brisbane 4000
PO Box 15033 City East
Queensland 4002 Australia
Telephone 07 3034 5925
Website www.[illegible].qld.gov.au
ABN 76 337 613 647

Most importantly, participation in any research is voluntary, and you have the right to decline your school's participation in a research project, even if approval to approach your school has been granted at central office or regional level. It is also recommended that you monitor any research activities conducted in your school and you may, if you wish, withdraw your support for the research study at any time without penalty.

At the conclusion of research involving your school, the researchers are required to provide you and participants with a written report summarising the main findings of the study.

Should you require further information on the research application process, please feel free to contact Senior Research Officer, Tanya Murray, Strategic Policy and Intergovernmental Relations on (07) 3034 5945. Please quote the file number 550/27/1873 in future correspondence.

Yours sincerely

Dr Angela Ferguson
Director
Research Services
Strategic Policy and Intergovernmental Relations

APPENDIX J - Catholic Diocese Approval

Diocese of Toowoomba
Catholic Schools

30 October 2017

Ms Victoria Barclay-Timmins
243 MacKenzie Street
Toowoomba Q 4350

EMAIL: Victoria.barclay-timmins@usq.edu.au

Dear Victoria

Re: Research Project – The Self Compassionate Child

Thank you for your application received at this Office on 29 August 2017 requesting permission to contact primary schools in the Diocese of Toowoomba for this research.

I give in principle approval for you to contact Principals once the following conditions are met:

- including in the information to Principals the request for them to provide the information packs to parents of Year 5 and 6 students – under Privacy legislation, the school cannot provide you as a researcher with the contact details for parents.

I wish you well for your research.

Yours sincerely

Dr Patrick Coughlan
Executive Director: Catholic Schools
Diocese of Toowoomba

ADDRESS PO Box 813, Toowoomba Qld 4350 PHONE 07 4637 0400 FAX 07 4637 0499
EMAIL enquiries@tsvls.catholic.edu.au WEB www.tsvls.catholic.edu.au ABN 89 934 444 648

APPENDIX K - Principal Information Sheet

INFORMATION LETTER TO PRINCIPAL

TITLE OF PROJECT: The Self-Compassionate Child: Exploring how Self-Compassion and Mindfulness enhance Children's Resilience and Psychological Wellbeing

PRINCIPAL SUPERVISOR: Lorelle Burton, lorelle.burton@usq.edu.au

STUDENT RESEARCHER: Victoria Barclay-Timmis, victoria.barclay-timmis@usq.edu.au

Dear Principal,

We are inviting your Year 5 and 6 students, along with a consenting parent, to participate in a research project which is looking at the relationship between mindfulness, self-compassion, resilience and wellbeing in primary-aged children.

Why is this research being done?

The overarching aim of this research is to establish whether interventions based on self-compassion (one's ability to direct compassion inwards) and mindfulness (paying attention to the present moment, on purpose and without judgement) offer an effective therapeutic avenue for improving primary-aged children's resilience and psychological wellbeing. An important part of this project is aimed at validating a new measure of self-compassion for children under 12, as currently no such measure exists.

Are there any benefits/ risks involved in this research?

In exchange for participation, I would be willing to offer a free seminar for the Year 5 and 6 parents, along with interested staff of your school, on the benefits of mindfulness and self-compassion for children. I am also willing to discuss the option of running a 6 to 10 week group therapy program called "Piece by Peace" for groups of up to 10 students in Years 5 and 6 nominated by your school (more information about the program is available on request).

Ethical approval for this project has already been granted by the Human Research Ethics Committee of University of Southern Queensland. Minimal risks have been identified, as participation simply involves completion of five short self-report questionnaires by each child and a participating parent.

What would your school / children have to do?

To participate, you would be required to grant permission for the researcher to contact the parents of your students from Years 5 and 6. These parents would be contacted via a letter and information pack sent home with each child (or via mail-out, depending on your preference), which contains and Information Sheet and Informed Consent paperwork for the parent and child to complete.

For those parents and children who agree to participate, five short, self-report questionnaires, designed to measure current levels of mindfulness, self-compassion, resilience and wellbeing, will require completion (one copy by the child, another by the parent). It is estimated that the time imposition for each participant will not exceed 20

minutes. Completed questionnaires then need to be returned to the researcher. Completion of questionnaires can be done on paper, or if preferred, online. Alternatively, the questionnaires could be completed by students during school time (with or without support from myself, or their teacher if appropriate), and the parents could complete their questionnaires during their attendance at the free seminar. I am willing to discuss other options with you dependent on your school's preference.

What would you have to do?

Grant permission for parents of Year 5 and 6 students to be contacted to ascertain their interest in participating.

What are the benefits of the research to you/ your school/ your child/ school community?

The free seminar will be of benefit to the parents and school staff. While there are no direct benefits for the children participating, contributing to the psychological knowledge in this field will undoubtedly assist the community in years to come. In addition (and if desired), I can present the findings from this PhD project to the school on completion of the research.

How will your confidentiality be protected?

Completed questionnaires will be coded so that the parent and child copy can be matched. Once coded, identifying information will be deleted. No identifying information will be stored.

Your consent

By signing the consent form you are indicating your willingness for your school to participate in the research project as it is explained in this letter. Participation is completely voluntary, and you are free to refuse consent altogether without having to justify that decision, or to withdraw your consent after first giving it and discontinue participation in the study at any time without giving a reason.

More questions?

Any questions regarding this project should be directed to Victoria Barclay-Timmis, 0409 585 408, victoria.barclay-timmis@usq.edu.au

Ethics

This study has been approved by the Human Research Ethics Committee of University of Southern Queensland.

Complaints about the research

If you have a complaint or concern about the conduct of this research, or if you have any query that the investigator has not been able to satisfy, you may write to, or contact the Chair of the Human Research Ethics Committee at: University of Southern Queensland on (07) 4631 2690 or email ethics@usq.edu.au. Any complaint or concern will be treated in confidence and fully investigated.

What do you have to do?

Please read this Information Statement and be sure you understand it. If you would like to participate, please complete the attached consent form and return to the researcher. Keep the Information Statement for your records.

Thank you for considering this invitation and we look forward to hearing from you.

Signatures

Principal Researcher: .....

Student Researcher: .....

Please keep this document for your records

APPENDIX L - Participant Information Sheet

University of Southern Queensland

Participant Information Sheet
Child Version

Project Details

Title of Project:	The Self-Compassionate Child: Exploring how Self-Compassion and Mindfulness enhance Children's Resilience and Psychological Wellbeing.
Human Research Ethics Approval Number:	H17REA022

Research Team Contact Details

Principal Investigator Details
Victoria Barclay-Timmis
Email: victoria.barclay-timmis@usq.edu.au
Mobile: 0409 585 408

Other Investigator Details
Prof Lorelle Burton
Email: Lorelle.burton@usq.edu.au
Telephone: (07) 4631 2853

A/Prof Gavin Beccaria
Gavin.beccaria@usq.edu.au
(07) 4631 2382
Mobile: 0414 580 531

Description

You and your parent are being invited to be included in a research project. This project is looking at self-compassion (how kind you are to yourself), mindfulness (how aware you are of what's going on inside and outside of you), resilience (how well you cope) and wellbeing (how good you feel) in children aged between 9 and 11.

We may use the information you give us in other projects, and it could even be published in a journal or book. Don't worry – we will make sure that your personal information (such as your name) is not included in any way.

Participation

Being a part of this project is really straight forward. All we need is for you to fill in a quiz about some different topics. Don't worry, there are no right or wrong answers! The quizzes will simply ask you about you! It should only take about 15 minutes to fill these questionnaires in. We will also need to get one of your parents to fill in some similar quizzes (don't worry – they don't have to see your answers!)

If you decide (now, or later) that you don't want to be part of this project then that is fine! Just let one of the researchers (or your teacher, mum or dad) know. If you are worried about anything, or have any questions, we are more than happy have a chat with you.

Expected Benefits

By being a part of this project you will be helping us contribute to scientific knowledge within the field of psychology! We are hoping that the results from this project will help us better understand children and how to help them cope with life's ups and downs. They may even help your school in the future!

Risks

Whilst we hope that you will find filling in the quizzes easy and straight forward, should you become upset for any reason please let your parent or teacher know. You could ask to see your school guidance officer or Chaplain. The number for Kids Help line is 1800 55 1800. You can call any time of the night or day for free.

Privacy and Confidentiality

We will make sure that we store the information that you give us safely and securely. We will make sure that your name and any other identifying information (such as your address or date of birth) is removed before we store the information. This is to protect your privacy.

If you have any more questions about this, please contact one of us (details are at the top of the form), or ask your teacher to contact us.

Consent to Participate

If you would like to be part of this project, and don't mind letting us have the results from the quizzes you fill in, please sign the Consent Form (attached).

Questions or Further Information about the Project

Please contact us if you would like to know anything else! Our details are at the top of this form.

Concerns or Complaints Regarding the Conduct of the Project

If you have any concerns or complaints, please come and talk to us, or let your teacher or parent know. If this isn't helpful, you can ask your teacher or parent to contact the University of Southern Queensland Ethics Coordinator on (07) 4631 2690 or email ethics@usq.edu.au.

Thank you for taking the time to help with this research project!
Please keep this sheet for your information.

University of Southern Queensland

Participant Information for USQ Research Project – Questionnaire Adult Version

Project Details

Title of Project:	The Self-Compassionate Child: Exploring how Self-Compassion and Mindfulness enhance Children's Resilience and Psychological Wellbeing
Human Research Ethics Approval Number:	**H17REA022**

Research Team Contact Details

Principal Investigator Details	Other Investigator Details	
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Description

You and your child are being invited to participate in research aimed to examine the relationships between self-compassion, mindfulness and resilience and wellbeing in primary-aged children.

If you agree, there is the potential that the data collected will be used for future research projects (Honours, Masters or PhD projects) conducted by the University of Southern Queensland. Should this occur, please note that the data will be de-identified to ensure confidentiality prior to analysis. If you consent to participate, the results may appear in academic publications, however no information will be published that could identify you in any manner.

Participation

Your and your child's participation will involve completion of a number of questionnaires that will take approximately 30 minutes of your time. Questionnaires will include measures of mindfulness, compassion, wellbeing, and resilience.

Your and your child's participation in this project is entirely voluntary. If you do not wish to take part you are not obliged to do so. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage. If you do wish to withdraw from this project, please contact the Principal Researcher (contact details at the top of this form).

Your decision whether you take part, do not take part, or to take part and then withdraw, will in no way impact your current or future relationship with the University of Southern Queensland.

Expected Benefits

While there are no specific benefits of participating in this research (i.e. completion of questionnaires), the identifiable risks are minimal (see below). By agreeing to participate, you and your child will be contributing to the scientific knowledge within this field. It is envisaged that the results from this project will have the potential to aid in the future development of programs designed to aid the successful development of resilience and wellbeing in children.

Risks

There are minimal risks associated with your participation in the research project (i.e. completion of questionnaires). Sometimes thinking about the sorts of issues raised in the questionnaire can create some uncomfortable or distressing feelings. If you need to talk to someone about this immediately please contact Lifeline on 13 11 14. You may also wish to consider consulting your General Practitioner (GP) for additional support. Your child may wish to access the school's Guidance Officer or Chaplain, or they can call The Kids Helpline on 1800 55 1800

Privacy and Confidentiality

All comments and responses will be treated confidentially unless required by law.

- All data will be stored securely as per University of Southern Queensland's Research Data Management policy.
- With your permission, data will be placed on a database called the school specific talk bank housed on a password protected computer. This data may used in future psychology research projects conducted by students or researchers for honours, masters or Phd projects. You can choose not to have your data stored in the school specific talk bank. Please indicate your preference on the Consent Form. Ethics approval from the University of Southern Queensland will be required before access to these recordings is permitted by future researchers. In all future publications, information will be presented in such a way so that you cannot be identified. Please note you can still participate in the current project if you decline to have your data stored in the school specific talk bank.

A summary of the results of the study can be made available at the conclusion of the study upon request. Please contact the Principal Investigator should you wish to make this request.

Consent to Participate

We would like to ask you to sign a written consent form (enclosed) to confirm your agreement for you and your child to participate in this project, and whether or not you are agreeable to having your data stored on the school specific talk bank. Please return your signed consent form to a member of the Research Team prior to participating in your interview.

Questions or Further Information about the Project

Please refer to the Research Team Contact Details at the top of the form to have any questions answered or to request further information about this project.

Concerns or Complaints Regarding the Conduct of the Project

If you have any concerns or complaints about the ethical conduct of the project you may contact the University of Southern Queensland Ethics Coordinator on (07) 4631 2690 or email ethics@usq.edu.au. The Ethics Coordinator is not connected with the research project and can facilitate a resolution to your concern in an unbiased manner.

Thank you for taking the time to help with this research project. Please keep this sheet for your information.

APPENDIX M - Survey Instruments - Child Version

Hello!

Thank you for agreeing to complete this survey. Please read each question carefully and remember to answer every question as honestly as possible.

First, please tell us a little bit about yourself.

What are the initials of your first and last name?_____

What is your date of birth?__/_____/_____

What school do you attend? _____

What grade are you in this year? Year 5 □ Year 6 □

Are you a boy or a girl? Boy □ Girl □

Which cultural group/s do you identify as? _____

(e.g. Australian, Aboriginal, Maori, Indian)

POSITIVE AND NEGATIVE AFFECT SCALE

This scale consists of a number of words that describe different feelings and emotions. Read each item and then circle the appropriate answer next to that word. Indicate to what extent you have felt this way during the **past few weeks**.

	Very Slightly	A Little	Moderately	Quite a Bit	Extremely
Joyful	1	2	3	4	5
Cheerful	1	2	3	4	5
Happy	1	2	3	4	5
Lively	1	2	3	4	5
Proud	1	2	3	4	5
Miserable	1	2	3	4	5
Mad	1	2	3	4	5
Afraid	1	2	3	4	5
Scared	1	2	3	4	5
Sad	1	2	3	4	5

SELF-COMPASSION MEASURE

We want to know more about how you act towards yourself in difficult times. *An example of a difficult time could be whenever something upsetting happens at home or school; for example, failing a test, arguing between your parents, fighting with your friends, a pet dying, having no one to play with, or being bullied.* Read each sentence. Then, circle the number that tells **how often** each sentence is true for you.

	Always True	Often True	Sometimes True	Rarely True	Never True
1. I am hard on myself when I'm not good at something.	1	2	3	4	5
2. When I'm feeling sad, I can't stop thinking about everything that's wrong.	1	2	3	4	5
3. When I have problems, I remind myself that everybody has problems from time to time.	1	2	3	4	5
4. My weaknesses make me feel very different from everyone else.	1	2	3	4	5
5. When I fail at something important to me, I feel like I'm not good enough.	1	2	3	4	5
6. When I feel sad, I remind myself that I am not the only person in the world feeling like this.	1	2	3	4	5
7. When things go wrong, I am really hard on myself.	1	2	3	4	5
8. When something upsets me I try to stay calm.	1	2	3	4	5
9. When I feel like I'm not good enough, I remind myself that everyone feels that way sometimes.	1	2	3	4	5
10. I get frustrated or upset about parts of my personality that I don't like.	1	2	3	4	5
11. When I' m going through a very hard time, I' m nice to myself.	1	2	3	4	5
12. When I' m feeling sad, I feel like most kids are happier than I am.	1	2	3	4	5
13. When something bad happens, I try to focus on the good things as well.	1	2	3	4	5
14. When I fail at something, I remind myself that everybody fails sometimes too.	1	2	3	4	5
15. I get down on myself when I see things about me that I don't like.	1	2	3	4	5
16. When I fail at something really important, I remind myself that it is not the end of the world.	1	2	3	4	5
17. When things are going bad, it feels like everyone else has it easier.	1	2	3	4	5
18. I am kind to myself when I feel unhappy.	1	2	3	4	5
19. When something upsets me I get carried away with my feelings.	1	2	3	4	5
20. When I am upset, I am hard on myself.	1	2	3	4	5
21. When I am feeling down, I can still think about positive things.	1	2	3	4	5
22. When I make a mistake, I remind myself that it's ok to make mistakes.	1	2	3	4	5
23. I over-react when things go wrong.	1	2	3	4	5
24. When I fail at something import ant to me, I feel like I' m all alone.	1	2	3	4	5
25. I am kind towards those things about myself I don't like.	1	2	3	4	5

CHILD AND ADOLESCENT MINDFULNESS MEASURE

We want to know more about how you think, how you feel and what you do.
Read each sentence. Then, circle the number that tells **how often** each sentence is true for you.

	Never True	Rarely True	Sometimes True	Often True	Always True
1. I get upset with myself for having feelings that don't make sense.	1	2	3	4	5
2. At school, I walk from class to class without noticing what I am doing.	1	2	3	4	5
3. I keep myself busy so I don't notice my thoughts or feelings.	1	2	3	4	5
4. I tell myself that I should not feel the way I am feeling.	1	2	3	4	5
5. I push away thoughts that I don't like.	1	2	3	4	5
6. It is hard for me to pay attention to only one thing at a time.	1	2	3	4	5
7. I get upset with myself for having certain thoughts.	1	2	3	4	5
8. I think about things that have happened in the past instead of things that are happening right now.	1	2	3	4	5
9. I think that some of my feelings are bad and that I shouldn't have them.	1	2	3	4	5
10. I stop myself from having feelings that I don't like.	1	2	3	4	5

SATISFACTION WITH LIFE SCALE

Please read the following statements, please circle the number that describes you the best. Please read each sentence carefully and answer honestly. Thank you.

	Disagree a Lot	Disagree a Little	Don't Agree or Disagree	Agree a Little	Agree a Lot
In most ways my life is close to the way I would want it to be.	1	2	3	4	5
The things in my life are excellent.	1	2	3	4	5
I am happy with my life.	1	2	3	4	5
So far, I have gotten the important things that I want in life	1	2	3	4	5
If I could live my life over, I would have It the same way.	1	2	3	4	5

CHILD AND YOUTH RESILIENCE MEASURE

To what extent do the sentences below describe you? Circle one answer for each statement.

	Not at All	A Little	Somewhat	Quite a Bit	A Lot
I have people I look up to.	1	2	3	4	5
Getting an education is important to me.	1	2	3	4	5
My parents/caregivers know a lot about me.	1	2	3	4	5
I try to finish what I start.	1	2	3	4	5
I am able to solve problems without harming myself or others (for example, by using violence and/or drugs).	1	2	3	4	5
I know where to go in my community to get help.	1	2	3	4	5
I feel I belong at school	1	2	3	4	5
My family stands by me in difficult times.	1	2	3	4	5
My friends stand by me in difficult times.	1	2	3	4	5
I am treated fairly in my community.	1	2	3	4	5
I have opportunities to develop skills that will be useful in later life (like job skills and skills to care for others).	1	2	3	4	5
I enjoy my community's traditions.	1	2	3	4	5

STRENGTHS AND DIFFICULTIES MEASURE

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. Please give your answers on the basis of how things have been for you over the last six months.

	Not True	Somewhat True	Certainly True
I try to be nice to other people. I care about their feelings.	1	2	3
I am restless, I cannot stay still for long.	1	2	3
I get a lot of headaches, stomach-aches or sickness.	1	2	3
I usually share with others, for example games, food, music	1	2	3
I get very angry and often lose my temper.	1	2	3
I would rather be alone than with other people my age.	1	2	3
I usually do as I am told.	1	2	3
I worry a lot.	1	2	3
I am helpful if someone is hurt, upset or feeling ill.	1	2	3
I am constantly fidgeting or squirming.	1	2	3
I have one good friend or more.	1	2	3
I fight a lot. I can make other people do what I want.	1	2	3
I am often unhappy, depressed or tearful	1	2	3
Other people my age generally like me.	1	2	3
I am easily distracted, I find it difficult to concentrate.	1	2	3
I am nervous in new situations, I easily lose confidence.	1	2	3
I am kind to younger children.	1	2	3
I am often accused of lying or cheating.	1	2	3
Other children or young people pick on me or bully me.	1	2	3
I often volunteer to help others (parents, teachers, children).	1	2	3
I think things out before I do things.	1	2	3

I take things that are not mine from home, school or elsewhere.	1	2	3
I get along better with adults than with people my own age.	1	2	3
I have many fears, I am easily scared.	1	2	3
I finish the work I'm doing. My attention is good.	1	2	3

Thank you for completing this survey

APPENDIX N- Survey Instruments - Parent Version

Thank you for agreeing to complete this survey. Please read each question carefully and remember to answer every question as honestly as possible.

First, please tell us a little bit about yourself and your child*

If you have more than one child, please **only tell us about the child who is in Year 5 or 6*

What are the initials of your child's first and last name?__

What is your child's date of birth?_____/_____/_____

What school does your child attend? _____

What is your relationship to the child:

□ Mother□ Father□ Carer□ Other (please specify): _____

Which cultural group/s do you identify as? *e.g. Australian, Aboriginal, Maori, Indian*

_____

POSITIVE AND NEGATIVE AFFECT SCALE

This scale consists of a number of words that describe different feelings and emotions. Read each item and then circle the appropriate answer next to that word. Indicate to what extent **your child** has felt this way during the past few weeks.

	Very Slightly	A Little	Moderately	Quite a Bit	Extremely
Joyful	1	2	3	4	5
Cheerful	1	2	3	4	5
Happy	1	2	3	4	5
Lively	1	2	3	4	5
Proud	1	2	3	4	5
Miserable	1	2	3	4	5
Mad	1	2	3	4	5
Afraid	1	2	3	4	5
Scared	1	2	3	4	5
Sad	1	2	3	4	5

SELF-COMPASSION SCALE

We want to know more about how your child acts towards themselves in difficult times. Please read each statement. Then, circle the number that tells **how often** each statement is true for your child.

	Almost Always True	Often True	Sometimes True	Rarely True	Almost Never True
1. They are hard on themselves when they are not good at something.	1	2	3	4	5
2. When they are feeling sad, they fixate on everything that's wrong.	1	2	3	4	5
3. When they have problems, they are able to see that everybody has problems from time to time.	1	2	3	4	5
4. Their weaknesses make them feel like they are very different from everyone else.	1	2	3	4	5
5. When they fail at something important to them, they feel as if they are not good enough.	1	2	3	4	5
6. When they feel sad, they remind themselves that they are not the only person in the world feeling that way.	1	2	3	4	5
7. When things go wrong, they are really hard on themselves.	1	2	3	4	5
8. When something upsets them, they try to stay calm.	1	2	3	4	5
9. When they feel like they are not good enough, they remind themselves that everyone feels that way sometimes.	1	2	3	4	5
10. They get frustrated or upset about parts of their personality that they don't like.	1	2	3	4	5
11. When they are going through a very hard time, they are nice to themselves.	1	2	3	4	5
12. When they are feeling sad, they feel most kids are happier than they are.	1	2	3	4	5
13. When something bad happens, they try to focus on the good things as well.	1	2	3	4	5
14. When they fail at something, they remember that everybody fails sometimes too.	1	2	3	4	5
15. They get down on themselves when they see things about themselves that they don't like.	1	2	3	4	5
16. When they fail at something really important, they remind themselves that it is not the end of the world.	1	2	3	4	5
17. When things are going bad, they feel like everyone else has it easier.	1	2	3	4	5
18. They are kind to themselves when they feel unhappy.	1	2	3	4	5

	Almost Always True	Often True	Sometimes True	Rarely True	Almost Never True
19. When something upsets them, they get carried away with their feelings.	1	2	3	4	5
20. When they are upset, they are hard on themselves.	1	2	3	4	5
21. When they are feeling down, they can still think about positive things.	1	2	3	4	5
22. When they make a mistake, they remind themselves that it's ok to make mistakes.	1	2	3	4	5
23. They over-react when things go wrong.	1	2	3	4	5
24. When they fail at something that's important to them, they feel like they are all alone.	1	2	3	4	5
25. They are kind towards those things about themselves they don't like.	1	2	3	4	5

CHILD AND YOUTH RESILIENCE MEASURE

To what extent do the sentences below describe your child? Circle one answer for each statement.

	Not at All	A Little	Somewhat	Quite a Bit	A Lot
My child has people he/she looks up to	1	2	3	4	5
Getting an education is important to my Child	1	2	3	4	5
My child has caregivers who know a lot about him/her	1	2	3	4	5
My child aims to finish what he/she starts	1	2	3	4	5
My child is able to solve problems without harming him/herself (for example, without using drugs and/or being violent)	1	2	3	4	5
My child knows where to go in his/her community to get help	1	2	3	4	5
My child feels that he/she belongs at his/her school	1	2	3	4	5
My child has caregivers who will stand by him/her in difficult times	1	2	3	4	5
My child's friends stand by him/her during difficult times	1	2	3	4	5
My child is treated fairly in his/her community	1	2	3	4	5
My child has opportunities to develop skills that will be useful in later life (like job skills and skills to care for others)	1	2	3	4	5
My child enjoys his/her community's Traditions	1	2	3	4	5

STRENGTHS AND DIFFICULTIES QUESTIONNAIRE

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.

Please give your answers on the basis of your child's behaviour over the last six months or this school year.

	Not True	Somewhat True	Certainly True
Considerate of other people's feelings	1	2	3
Restless, overactive, cannot stay still for long	1	2	3
Often complains of headaches, stomach-aches or sickness	1	2	3
Shares readily with other youth, for example books, games, food	1	2	3
Often loses temper	1	2	3
Would rather be alone than with other youth	1	2	3
Generally well behaved, usually does what adults request	1	2	3
Many worries or often seems worried	1	2	3
Helpful if someone is hurt, upset or feeling ill	1	2	3
Constantly fidgeting or squirming	1	2	3
Has at least one good friend	1	2	3
Often fights with other youth or bullies them	1	2	3
Often unhappy, depressed or tearful	1	2	3
Generally liked by other young people	1	2	3
Easily distracted, concentration wanders	1	2	3
Nervous in new situations, easily loses confidence	1	2	3
Kind to younger children	1	2	3
Often lies or cheats	1	2	3
Picked on or bullied by other young people	1	2	3
Often volunteers to help others (parents, teachers, children)	1	2	3
Thinks things out before acting	1	2	3
Steals from home, school or elsewhere	1	2	3
Gets along better with adults than with other young people	1	2	3
Many fears, easily scared	1	2	3
Good attention span, sees tasks through to the end	1	2	3

Thank you for completing this survey

APPENDIX O - Informed Consent Form

University of Southern Queensland

Consent Form for USQ Research Project Questionnaire – Child

Project Details

Title of Project:	The Self-Compassionate Child: Exploring how Self-Compassion and Mindfulness enhance Children's Resilience and Psychological Wellbeing.
Human Research Ethics Approval Number:	H17REA022

Research Team Contact Details

Principal Investigator Details

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A/Prof Gavin Beccaria
Gavin.beccaria@usq.edu.au
(07) 4631 2382
0414 580 531

Statement of Consent

By signing below, you are indicating that you:

- Have read and understood the information document regarding participation in this project.
- Have had any questions answered to your satisfaction.
- Understand that if you have any additional questions you can contact the research team (details above).
- Understand that data will be collected from you by means of questionnaires.
- Agree for your data to be stored on the school specific talk bank (If you DO NOT agree, please indicate this clearly here:_____)
- Understand that you are free to withdraw at any time, without comment or penalty.
- Understand that you can contact the University of Southern Queensland Ethics Coordinator on (07) 4631 2690 or email ethics@usq.edu.au if you do have any concern or complaint about the ethical conduct of this project.
- Agree to participate in the project.

Child's Agreement to Participate

Name	
Signature	
Date	

Parent's Consent for Child to Participate

Name	
Signature	
Date	

Please return this sheet to a Research Team member prior to participation=

University of Southern Queensland

Consent Form for USQ Research Project Adult Questionnaire

Project Details

Title of Project:	The Self-Compassionate Child: Exploring how Self-Compassion and Mindfulness enhance Children's Resilience and Psychological Wellbeing.
Human Research Ethics Approval Number:	**H17REA022**

Research Team Contact Details

Principal Investigator Details
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Gavin.beccaria@usq.edu.au
(07) 4631 2382
0414 580 531

Statement of Consent

By signing below, you are indicating that you:

- Have read and understood the information document regarding this project.
- Have had any questions answered to your satisfaction.
- Understand that if you have any additional questions you can contact the research team.
- Understand that data will be collected from you by means of questionnaires.
- Agree for your data to be stored on the school specific talk bank (If you DO NOT agree, please indicate this clearly here:_____
- Understand that you are free to withdraw at any time, without comment or penalty.
- Understand that you can contact the University of Southern Queensland Ethics Coordinator on (07) 4631 2690 or email ethics@usq.edu.au if you do have any concern or complaint about the ethical conduct of this project.
- Are over 18 years of age.
- Agree to participate in the project.

Participant Name	
Participant Signature	
Date	

Please return this sheet to a Research Team member prior to participation