

RUNNING HEAD: WHAT WORKS: SCHOOL BASED, UNIVERSAL
EMOTIONAL REGULATION FOR ADOLESCENTS



**What Works: Exploring the Impact of a Modified, Universal,
Emotional Regulation Module for Transition Year Students
in an Irish Post-Primary School**

Charlotte Anne Carey

Supervisor: Dr. Michele Dunleavy

Doctoral Thesis submitted in partial fulfilment of the requirements for the award of
Doctorate in Education and Child Psychology.

Mary Immaculate College

August 2019

RUNNING HEAD: WHAT WORKS: SCHOOL BASED, UNIVERSAL
EMOTIONAL REGULATION FOR ADOLESCENTS

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

Declaration

I, Charlotte Carey confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Charlotte Carey

Word Count: 42,200

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Abstract

Aims: The aim of this research was to explore the impact of a modified, emotional regulation module for a universal group of adolescents (Mean Age=15.49), in an Irish post-primary school. The study sought to examine ‘what works’ for cognitive and dialectical behavioural, therapeutic interventions in this setting. The emotional regulation module of the ‘DBT Skills in School: Skills Training for Emotional Problem Solving for Adolescents (DBT-Steps A)’ programme was modified based on previous research on the programme and existing educational and developmental literature. The modifications included delivery by a Trainee Educational Psychologist, increased time, multimedia support and active and co-operative learning approaches. The research sought to answer two broad questions:

- 1) What is the effect of a modified emotional regulation module on reports of student emotional regulation?
- 2) How do students and facilitators perceive the experience of taking part in the intervention?

Method: This study was underpinned by pragmatic theory and adopted a mixed methods approach with the collection of both qualitative and quantitative data. The intervention was delivered by a Trainee Educational Psychologist to an intervention ($n=12$) and delayed intervention group ($n=11$). Quantitative data was collected using the Difficulties with Emotional Regulation Scale-Short Form from students and parents at three time points (Baseline, Time 1 and Time 2). Qualitative data was collected through field notes and semi-structured interviews with a sub-sample of participants ($n=7$) and the co-facilitating teacher.

Results: Quantitative data suggested a significant within-group reduction in self-reported difficulties with emotional regulation for the intervention group, however, between groups outcomes were non-significant. Parent reports showed a significant decline in difficulties with emotional regulation, although return of questionnaires was low. Qualitative findings identified several positive aspects of the intervention, including practical resources, a small group format and active and co-operative learning approaches. Areas for improvement and barriers to implementation were also identified. Furthermore, the relevance of the intervention to this age group was outlined.

Conclusions: Outcomes from the quantitative measure suggested both the emotional regulation intervention group and regular school provision group displayed a reduction in self-reported difficulties with emotional regulation. Improvements were greater for the intervention group, although overall differences between the groups was statistically non-significant. Qualitative data suggests that preventative, universal interventions, with a dialectical behavioural approach can be beneficial. This research provides further information regarding the development, feasibility and implementation of universal, school-based, therapeutic interventions by Educational Psychologists in the post-primary school setting. It appears that the use of active and co-operative learning approaches can enhance participant experience and engagement with the programme, leading to increased understanding of emotions and ability to regulate emotions. The relevance of such interventions to this age group is certain and generalisation of skills to other environments is evident. Such intervention could be run in schools, with positive effects, but may need some element of adaptation and increased system wide support.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Acknowledgements

Foremost, I would like to thank the students, teachers and parents who took part in this study. I would also like to thank the school setting for their support in running the intervention. Without you this study would not have been possible, thank you.

I would like to express my sincere gratitude to my research supervisor, Dr Michele Dunleavy for the continuous support, patience, motivation and words of encouragement over the past three years. I could not have imagined a better advisor.

I would like to thank the rest of the DECPSY team for their encouragement and support over the past three years.

I would like to thank my peers for their advice and for all the fun we have had over the past few years. Thanks especially to Elaine, Billy, Allison and Maura for your support over the year.

To my cousin Sadbh, thank you for listening to me, our talks often helped keep me going.

To Bláthnaid, thank you for all your encouragement. Thank you for being such a good friend to me and for all our chats.

I would like to thank Eric and the O'Connor family for all your help with the boys.

To my parents, Madeline and Patrick, thank you for your continuing support for me and my goals. I would not have been able to undertake this venture without your support.

Finally, I wish to acknowledge my boys, Liam and Conor, the lights of my life. Your unconditional love has kept me going. Coming home to hugs and smiles was invaluable. I promise to make up for all the time we have missed together.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

Table of Contents

Declaration	ii
Abstract	iii
Acknowledgements	iv
Tables	x
Figures	xi
Appendices	xii
List of Acronyms and Abbreviations	xiii
Chapter One: Introduction	2
1.1 Overview of the Chapter	2
1.2 Context of the Study	2
1.3 Emotional Regulation and Well-being.....	2
1.4 Universal Well-being Interventions and Educational Psychologists	4
1.5 Cognitive Behaviour Therapy and Dialectical Behaviour Therapy.....	5
1.6 Focus of the Study.....	6
1.7 Overview of the Research	7
Chapter Two: Literature Review	9
2.1 Overview of the Chapter	9
2.2 Emotional Regulation: What the Research Says	9
2.3 Development of Emotional Regulation.....	11
2.3.1 Early Development.....	11
2.3.2 Emotional Regulation and Adolescence.	12
2.4 National Context and Policy	13
2.5 Theoretical Underpinnings of Cognitive Behavioural Therapy.....	15
2.6 Cognitive Behavioural Therapy	16
2.7 Dialectical Behavioural Therapy.....	17
2.8 Rationale for the Literature Review	18

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

2.9 Review Questions	20
2.10 Part One: Participant and Facilitator Experience.....	20
2.11 Part Two: The Effect of School Based Cognitive and Dialectical Behavioural Interventions.....	23
2.12 Phase One: Search Strategy, School Based, Universal CBT and DBT Interventions	24
2.13 Quality and Relevance of the Selected Studies.....	28
2.14 Review of Research: Effect of Universal, School-Based CBT for Adolescents	30
2.14.1 Participants.....	30
2.14.2 Design.	32
2.14.3 Replicability and Fidelity.....	33
2.14.4 Measures.	34
2.14.5 Results.....	35
2.15 Phase Two: Review of Research: Effect of Universal School Based DBT for Adolescents	39
2.15.1 Participants.....	39
2.15.2 Design.	39
2.15.3 Integrity and Fidelity.....	40
2.15.4 Intervention	40
2.15.5 Measures.	41
2.15.6 Results.....	41
2.16 Synthesis of Findings	42
2.17 Rationale and Aims of the Current Study	46
2.17.1 Study Rationale:.....	48
Chapter Three: Methodology	50
3.1 Overview of the Chapter.....	50
3.2 Aim of the Study.....	51

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

3.3 Epistemological and Ontological Perspective.....	51
3.4 Research Design.....	52
3.5 Participants.....	54
3.6 Setting	55
3.7 Overview of the Intervention	55
3.8 Data Collection.....	63
3.9 Quantitative Data	63
3.9.1 Difficulty with Emotional Regulation Scale.	63
3.10 Qualitative Data	65
3.10.1 Semi-Structured Interview with Participants.	65
3.10.2 Trainee Educational Psychologist (TEP) Facilitator Diary and Observations.	66
3.11 Data Analysis	66
3.12 Procedure, Logistics and Timeline.....	69
3.13 Ethical Issues.....	70
3.14 Reliability and Validity	71
3.16 Conclusion	73
Chapter Four: Results	74
4.1 Overview of the Chapter	74
4.2 Quantitative Analyses	74
4.2.1 Descriptive Statistic: Student Participant Data.	75
4.2.2 Initial Analysis: Student Participant Data.	75
4.2.3 Data Analysis: Student Participant Questionnaire.	76
4.2.4 Parent Questionnaires.....	78
4.3 Qualitative Data Analysis	78
4.4 Themes Emerging From Student Interviews.....	78
4.4.1 Theme One: Benefits of the Intervention.....	81

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

4.4.2 Theme Two: Effect on Emotional Regulation	83
4.4.3 Theme Three: Relevance of the Intervention.....	87
4.4.4 Theme Four: Changes and Differences.....	90
4.5 Themes Emerging from Facilitator an Co-facilitator Reflections	93
4.5.1 Theme One: Benefits of the Intervention.....	95
4.5.2 Theme Two: Effects of the Intervention.....	97
4.5.3 Theme Three: Perceived Barriers to the Implementation	99
4.5.4 Theme Four: Perceived Feasibility	101
4.5.5 Summary of Facilitator Reflections	103
4.6 Summary of Findings.....	103
4.6.1 Quantitative Findings.....	103
4.6.2 Qualitative Findings.....	104
Chapter 5: Discussion	106
5.1 Overview of the Chapter	106
5.2 Aim of the Research.....	106
5.3 Key Findings: Student Quantitative Data	106
5.4 Parent Questionnaires.....	108
5.5 Perceptions of the Intervention	109
5.6 Student Interviews: Perceived Benefits of the Intervention.....	109
5.7 Student Interviews: Effect on Emotional Regulation.....	111
5.8 Student Interviews: Relevance of the Intervention	112
5.9 Student Interviews: Changes and Differences	114
5.10 Summary of Student Perceptions	114
5.11 Facilitator Reflections: Benefits of the Intervention.....	115
5.12 Facilitator Reflections: Effects of the Intervention	116
5.13 Facilitator Reflections: Barriers to Implementation.....	117
5.14 Facilitator Reflections: Overall Feasibility	117

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

5.15 Strengths of the Study	118
5.16 Measures	119
5.17 Findings in Light of the Concept of Emotional Regulation.....	119
5.18 Limitations, Reflections and Challenges.....	120
5.19 Dissemination of Findings	121
5.20 Conclusion	122
Chapter Six: Conclusion	124
6.1 Overview of the Chapter	124
6.2 Summary	124
6.3 Conclusions	125
6.4 Recommendations	126
6.5 Recommendations for Future Research	129
6.6 Implications for Educational Psychology Knowledge and Practice	130
6.7 Concluding Statement	132
References.....	135

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

Tables

Table 1: Search Terms Used for the Literature Search.....	24
Table 2: Inclusion and Exclusion Criteria and Rationale.....	26
Table 3: Summary of Weight of Evidence Judgements.....	29
Table 4: Key Characteristics of the Studies.....	31
Table 5: Outcomes of the Included Studies.....	38
Table 6: Key Characteristics of the Studies.....	39
Table 7: Outcomes of the Included Studies.....	42
Table 8: Data Collection Timeline.....	53
Table 9: Emotional Regulation Module of the DBT Steps-A Programme.....	57
Table 10: Modifications made to the Intervention Programme.....	59
Table 11: Sessions and Modifications.....	61
Table 12: Ethical Considerations.....	70
Table 13: Group Scores and Standard Deviations at Baseline, Time 1 and Time 2...	75
Table 14: Skewness and Kurtosis.....	75

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

Figures

Figure 1: Process Model of Emotional Regulation.....	11
Figure 2: Flowchart of Included Studies.....	27
Figure 3: Convergent Parallel Design.....	54
Figure 4: Data Collection Procedure.....	63
Figure 5: Braun and Clarke (2006) Six Step Model for Thematic Analysis...68	
Figure 6: Triangulation of Data.....	69
Figure 7: Changes in Student Participant Scores over Time.....	77
Figure 8: Thematic Map, Student Interviews.....	80
Figure 9: Theme One and Subthemes: Benefits of the Intervention.....	81
Figure 10: Theme Two and Subthemes: Effect on Emotional Regulation.....	84
Figure 11: Theme Three and Subthemes: Relevance of the Intervention.....	87
Figure 12: Theme Four and Subthemes: Changes and Differences.....	90
Figure 13: Thematic Map, Facilitator and Co-Facilitator Reflections.....	94
Figure 14: Theme One and Subthemes: Benefits of the Intervention.....	95
Figure 15: Theme Two and Subthemes: Effects of the Intervention.....	97
Figure 16: Theme Three and Subthemes: Barriers to Implementation.....	99
Figure 17: Theme Four and Subthemes: Overall Feasibility	101

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

Appendices

Appendix A: References of Included Studies	165
Appendix B: Weight of Evidence Ratings	167
Appendix C: Student Questionnaire	174
Appendix D: Parent Questionnaire.....	176
Appendix E: Student Interview Questions	178
Appendix F: Post Intervention Interview (Co-facilitator)	179
Appendix G: Letter/Email to the Principal.....	180
Appendix H: Co-facilitator Information Sheet	182
Appendix I: Teacher Consent Form	185
Appendix J: Letter to the Board of Management	186
Appendix K: Parent Consent Form for Student Interview	187
Appendix L: Parent/Guardian Information Sheet.....	188
Appendix M: Adolescent Assent Form.....	191
Appendix N: Parent Consent Form.....	192
Appendix O: Teacher Co-Facilitator Information Sheet.....	193
Appendix P: Initial Codes Emerging from Student Interviews.....	196
Appendix Q: Sample Student Interview.....	198
Appendix R: Student Interviews, Themes, Subthemes and Quotes	199
Appendix S: Ethical Approval Form	207
Appendix T: Sample Lesson Plan	208
Appendix U: Sample Teacher Interview	212
Appendix V: Sample Extract from Field Note Diary and Observations.....	213
Appendix W: Initial Codes Emerging from Teacher Interview and Research Reflections and Observations	214
Appendix X: Themes, Subthemes and Quotes from Co-facilitator Interview and Research Diary Field Notes and Observations	215
Appendix Y: Sample Article.....	219
Appendix Y: Sample Article.....	219

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

List of Acronyms and Abbreviations

BMA: British Medical Association

BOBF: Better Outcomes Brighter Futures

CAMHS: Child and Adolescent Mental Health Service

CBT: Cognitive Behavioural Therapy

DBT: Dialectical Behavioural Therapy

DERS-SF: Difficulties with Emotional Regulation Scale- Short Form

DES: Department of Education and Skills

DCYA: Department of Child and Youth Affairs

EP: Educational Psychologist

NCCA: National Council for Curriculum Assessment

RCS: Royal College of Surgeons

SD: Standard Deviation

TEP: Trainee Educational Psychologist

WHO: World Health Organisation

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Chapter One: Introduction

This study is focused on the concept of emotional regulation and the use of interventions in the school setting to increase the capabilities of youth to understand and cope with their emotions, in turn increasing their well-being, resilience and ability to manage situations in their lives. This study arose from an increased national focus on well-being, particularly in schools, and the researcher's personal interest in emotional regulation and well-being. This research aims to contribute to the evidence base on universal, school based interventions which focus on emotions by exploring 'what works' for such interventions with adolescents. Based on previous research and educational and developmental literature, the emotional regulation module of the school based dialectical behavioural therapy intervention 'DBT Skills in School: Skills Training for Emotional Problem Solving for Adolescents (DBT-Steps A)' (Mazza, Dexter-Mazza, Miller, Rathus, & Murphy, 2016) was systematically modified to include increased time, multimedia, active learning and co-operative approaches delivered by a Trainee Educational Psychologist (TEP). The programme was delivered to a small group ($n=13$) of adolescents in an Irish post-primary school. To summarise, this study evaluated a modified emotional regulation module of a universal intervention programme, in terms of its effects on student reported difficulties with emotional regulation and aimed to establish important and advantageous components of school-based interventions which aim to promote emotional regulation abilities.

1.1 Overview of the Chapter

The aim of this chapter is to introduce and outline the context of the current study. This chapter will outline the concept of emotional regulation and well-being. The role of the Educational Psychologist (EP) and universal school-based intervention for promotion of emotional well-being will be examined. The focus and scope of the current research will be defined and its relevance and importance outlined. Finally, the overview of the structure of the thesis will be provided.

1.2 Context of the Study

Youth mental health difficulties appear to emerge during adolescence and can continue into adulthood (Dooley & Fitzgerald, 2012; Kim-Cohen et al., 2003). One factor

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

which influences mental health during this period is coping ability, with those who have negative coping styles more likely to experience negative outcomes (Dooley & Fitzgerald, 2012). In recent times there has been an increased focus both nationally and internationally on youth mental health (Funk, 2010; World Health Organisation, 2014). In Ireland there has been greater attention on youth mental health and well-being in terms of governmental legislation and increased acknowledgement of emotional regulation as a core component of well-being (DES, 2015). Recent educational policy also highlights the importance of the promotion of well-being for youth by encouraging resiliency and positive coping strategies (Government of Ireland, 2018b; NCCA, 2017). These policies have also outlined the need for the development and execution of evidence-based emotional learning programmes in the Irish context (Government of Ireland, 2018a). With this increased focus on youth mental health and well-being, there is an increased need for schools to have curricula and intervention programmes, which include a focus on ability to regulate emotions (Government of Ireland, 2018; NCCA, 2018).

1.3 Emotional Regulation and Well-being

Emotional regulation refers to the “process by which we influence the emotions we have, when we have them and how we experience and express these emotions” (Lewis, Haviland-Jones, & Barrett, 2010, p. 500). Emotional regulation can include “any coping strategy (problematic or adaptive) that the individual uses when confronted with an unwanted intensity of emotion” (Leahy, Tirsch, & Napolitano, 2011, p. 3). More positive, adaptive emotional regulation strategies include cognitive reappraisal, problem solving, assertiveness and behavioural activation (Kring & Sloan, 2009; Leahy et al., 2011). Maladaptive emotional regulation strategies include emotional suppression, situational avoidance, catastrophizing and rumination (Aldao, Nolen-Hoeksema, & Schweizer, 2010; Gross, 2002).

Emotions play a functional role in our lives, influencing our behaviours, cognitions and communications with others (Grecucci, Job, & Frederickson, 2017). Those who experience dysregulation of emotions have more difficulty coping with the experience of their emotions, which can lead to difficulty with behavioural, cognitive and interpersonal functioning (Leahy et al., 2011). Research suggests that individuals with higher emotional intelligence; a greater understanding of their emotions and a belief in their ability to control their emotions, tend to have a greater ability to use adaptive

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

strategies to regulate their emotional responses and thus have increased well-being, positive affect and higher self-esteem (Nyklíček, Vingerhoets, & Zeelenberg, 2010).

From an evolutionary perspective, emotions have been identified as adaptive for existence, encouraging reproduction, action in situations of danger and thus increasing chances of survival (Cosmides & Tooby, 2000). From a cognitive perspective, emotions can be understood in terms of cognitive processing, through cognitions individuals interpret events triggering emotions. Cognitive behavioural interventions are primarily focused on the cognitive perspective, aiming to alter maladaptive processes with the focus on attention and thoughts (Tasman, Kay, Lieberman, First, & Riba, 2015). Cognitive Behavioural Therapy (CBT) approaches aim to encourage more adaptive processing of emotions with the emphasis on understanding, perceptions and appraisals of emotions, which in turn influence individual feelings and behaviours (Roberts, 2018). Overall, this approach aims to encourage emotional regulation abilities and more positive coping mechanisms.

Emotional regulation is a core feature of well-being, with regulation abilities impacting on an individual's adaptive functioning and lack of regulation abilities resulting in poorer outcomes and poorer mental health (Gross & Muñoz, 1995). Emotional regulation plays a major role in many psychopathologies, including; depression, anxiety, eating disorders, alcohol abuse and self-harm (Ciarrochi, Deane, & Anderson, 2002; Ehring, Fischer, Schnülle, Bösterling, & Tuschen-Caffier, 2008; Garnefski, Kraaij, & Spinhoven, 2001; Harrison, Sullivan, Tchanturia, & Treasure, 2010). It is suggested that individuals who experience difficulties with regulating their emotions are more likely to experience greater negative responses in their day to day lives, leading to clinical conditions and in turn reinforcing negative coping strategies (Clyne, Latner, Gleaves, & Blampied, 2010; Mennin, Holaway, Fresco, Moore, & Heimberg, 2007; Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008; Sher & Grekin, 2007). Furthermore, treatment for these conditions of depression, anxiety, eating disorders, self-harm and suicidality have regularly used targeted emotional regulation abilities with positive results (Berking & Lukas, 2015; Campbell-Sills & Barlow, 2007; Clyne et al., 2010; Mennin, Heimberg, Turk, & Fresco, 2002). It is clear that better emotional regulation abilities lead to improved health and well-being (Nelis et al., 2011). This is more positive for the individual and for society in general, leading to increased productivity, cognition, social functioning and self-esteem (Funk, 2010; Lyubomirsky, King, & Diener, 2005).

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

1.4 Universal Well-being Interventions and Educational Psychologists

Universal interventions are those delivered to all or the majority of pupils in a school, with the aim of reaching as many students as possible and encouraging skills development across the whole school population (O'Reilly, Svirydzenka, Adams, & Dogra, 2018). With universal interventions students are not targeted based on a specific diagnosis or presentations. Universal well-being interventions have been used in schools with positive results, including improvements in academic attainment and reduced mental health difficulties (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). Schools are in a position to adopt such well-being and mental health promotion strategies and programmes at a universal level, with the implementation of such interventions benefitting a greater number of individuals at a lower cost (Chisholm et al., 2016; Patel, Flisher, Nikapota, & Malhotra, 2008). Youth mental health services have long waiting lists and stringent criteria, seeing only those with moderate to severe mental health difficulties (Bonnar, 2010). By providing intervention in the school setting it can be delivered in a preventative manner, before such difficulties reach this level (Battistich, Solomon, Watson, & Schaps, 1997). The provision of such intervention programmes in a universal way can also reduce the stigma relating to emotional difficulties and mental health, lead to more discussion around emotions and promote help seeking behaviour (Dooley & Fitzgerald, 2012; Gulliver, Griffiths, & Christensen, 2010; Rait, Monsen, & Squires, 2010).

Educational Psychologists (EPs) can promote well-being by supporting preventative interventions in schools (Squires, 2010). EPs spend a limited amount of time on individual child intervention and due to the limited time available to EPs it is unlikely that they would be able to provide individual therapy to students in their schools (Rait et al., 2010). However, during their training EPs gain knowledge of child development and therapeutic approaches and so are in positions to support schools by delivering or supporting teachers to deliver school based preventative intervention (Squires, 2010). They are also in a position to help schools by supporting them to identify evidence based interventions for pupils, support staff well-being, and to aid with programme evaluation (Lee, Partt, Weidberg, & Davis, 2018). As EPs assume a scientist-practitioner and practitioner-researcher role it is important that EPs base their practice on the research evidence-base, but also that they continue to research during their practice (Eodanable & Lauchlan, 2009; Lane & Corrie, 2007). In this role EPs need to be aware of school-based

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

well-being interventions and evaluate them in terms of their effect on student experiences and skills and their feasibility in the real life, school setting. This research aims to modify such an intervention, based on previous research and to evaluate its effect.

1.5 Cognitive Behaviour Therapy and Dialectical Behaviour Therapy

Cognitive behavioural therapy (CBT) is a therapeutic approach that is built on elements of behaviourism and cognitive psychology and posits a link between thoughts, feelings and behaviours. It is built on the assumption that an individual's perceptions and interpretations of events give rise to emotions and consequent behaviours (Simmons & Griffiths, 2017). This psychotherapeutic approach aims to encourage individuals to develop an understanding of these perceptions, leading to changes in thoughts, feelings and behaviours (Pachana & Laidlaw, 2014). CBT programs typically include psycho-education, identification of emotions, understanding cognitions, problem solving and positive coping strategies (Kendall & Hedtke, 2006). Research into the effectiveness of CBT has found it to be beneficial in relation to a wide array of psychological difficulties, including anxiety disorders, depression, mood disorders, self-harming behaviours, eating disorders, suicidality and substance misuse (Colby et al., 1998; Fairburn et al., 2009; Gratz & Roemer, 2004; Liddle, Dakof, Turner, Henderson, & Greenbaum, 2008; March et al., 2007; Otto, Smits, & Reese, 2004; Rupke, Blecke, & Renfrow, 2006; Slee, Garnefski, van der Leeden, Arensman, & Spinhoven, 2008). Research on the effect of CBT in the school setting has shown some positive effects (Spence, Sheffield & Donovan, 2003; Durlak et al., 2011).

Dialectical Behavioural Therapy (DBT) is one form of third wave CBT and builds on the CBT approach. It is built on biopsychosocial theory which suggests that difficulty with emotional regulation arises from biological, social and environmental factors (Lynch, Chapman, Rosenthal, Kuo, & Linehan, 2006; Wagner, Rathus, & Miller, 2006). DBT is dialectical, with a focus on both acceptance strategies and change strategies (Lau & McMain, 2005). Skills of mindfulness and distress tolerance focus on acceptance, and the emotional regulation and interpersonal relationship skills focus more on skills development for change (Lau & McMain, 2005). Several studies have been undertaken to examine its effectiveness as a treatment format for adolescents with self-harming or suicidal behaviours, borderline personality disorders and eating disorders with positive results (Fleischhaker et al., 2011; James, Taylor, Winmill, & Alfoadari, 2008; Miller,

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

1999; Safer, Couturier, & Lock, 2007; Wisniewski & Kelly, 2003). In more recent times, initial exploratory and pilot studies have explored DBT as a school-based intervention (Flynn et al., 2018; (Mazza et al., 2016). This study further seeks to investigate this concept.

1.6 Focus of the Study

With the surge of interest in youth mental health it is important that there is information on ‘what works’ in terms of real world implementation of well-being interventions, furthermore, there is the need for the identification of ‘what works for whom’, in terms of what works for differing populations (Roth & Fonagy, 2006). Research suggests that universal well-being and mental health interventions can be run in schools with positive results and that EPs have the skills to support schools to deliver such well-being interventions (Durlak et al., 2011; Squires, 2010). Emotional regulation is a core component of well-being and it is important that emotional regulation strategies and evidence-based emotional learning programmes are an area of focus to promote student well-being in Irish schools (Government of Ireland, 2018; Gross & Muñoz, 1995). Nevertheless, Irish adolescents continue to experience high levels of mental health difficulties with adverse coping strategies and reduced help-seeking behaviour impacting on the emergence of such problems (Dooley & Fitzgerald, 2012). Therefore, universal, school-based interventions aiming to promote student well-being should have some focus on emotional regulation abilities.

This study is based on previous research into school based cognitive and dialectical behavioural therapeutic interventions delivered universally in post-primary schools. Results of a systematic review of such interventions suggest that they lack active learning approaches, impacting on student participation, engagement, learning and enjoyment. In terms of feasibility, reviewed research outlined many barriers to implementation of such interventions in schools, including timing, resources, intervention specific problems; prioritisation of student well-being and staff supports (Garvey et al., 2015, Taylor et al., 2014). Reviewed research indicated a dearth of research on school-based interventions with a dialectical behavioural therapy approach. This study aimed to modify and investigate the DBT Steps-A emotional problem-solving intervention and build on the limited, but positive, previous research conducted on this programme (Mazza et al., 2016). Previous research into this intervention identified a positive impact,

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

however, participants were critical of the intervention's lack of active and co-operative learning experiences and various difficulties with implementation (Flynn, Joyce, Weihrauch, & Corcoran, 2018; Flynn, Joyce, Weihrauch, & Corcoran, 2017). The emotional regulation module of this programme was selected due to its relevance to the adolescent population and the importance of emotional coping strategies for mental health (Dooley & Fitzgerald, 2012; Sabatier, Restrepo Cervantes, Torres, De los Rios, & Palacio Sañudo, 2017). As far as the author knows, this is the second study to review this intervention and the first to systematically modify and deliver the emotional regulation module. This study is also one of the first qualitative studies on school-based, emotional regulation interventions, for post-primary school students, in the Irish context. The module was modified to include more active learning strategies based on developmental and educational research, using visuals, multimedia, games, art and other evidence based strategies (Boctor, 2013; Eison, 2010).

Twenty three adolescents in transition year in an Irish post primary school completed the intervention. These participants took part in the universal delivery of the intervention and were not specifically targeted based on specific traits or diagnoses. The importance of emotional regulation abilities for overall well-being is a core reason for the selection of this topic. The aim of the research is to examine the effect of the intervention on participant reported difficulties with emotional regulation, their experience of the intervention programme, its feasibility as an intervention and students' overall enjoyment and use of the programme skills. Having undertaken the intervention, the aim is to research its effect on self-reported emotional regulation abilities

1.7 Overview of the Research

The title of this research is: What works: exploring the impact of a modified, universal, emotional regulation module for transition year students in an Irish post-primary school. In order to address this concept the following research questions emerged:

- 1) What is the effect of a modified, emotional regulation module on reports of student emotional regulation?
- 2) How do students and facilitators perceive the experience of taking part in the intervention?

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

These questions were broken down into more focused aims to investigate ‘what works’ for such school-based interventions:

- What works for students in terms of school-based emotional learning programmes and what is their experience of taking part in such an intervention programme?
- What is the feasibility of running such a programme in an Irish post-primary school?
- What is the effect of the intervention on student self-reported difficulties with emotional regulation?
- What is the effect of the intervention on parent report of their child’s difficulties with emotional regulation?

In order to outline further the rationale and purpose of this research the format of the thesis will follow the outline presented here:

- Chapter Two: This chapter will provide an overview of the reviewed literature. It will systematically outline and critically evaluate research on the use of universal, school-based interventions which take a cognitive or dialectical behavioural approach and the effect of these interventions on student emotional well-being. Student and teacher experience of such intervention will also be investigated culminating in a thorough rationale for the current study.
- Chapter Three: This chapter outlines the research methodology of the current study. It describes the empirical and ontological perspective of the research and justifies the quantitative and qualitative data collection methods. The setting, sampling procedure, intervention, data analysis and ethical issues are also delineated.
- Chapter Four: This chapter presents the findings of the intervention and outlines the quantitative and qualitative results of the study.
- Chapter Five: This chapter discusses the results of the study in light of previous research outlined in the introduction and literature review.
- Chapter Six: This chapter presents a summary of the research and the conclusions reached. Recommendations from the current research along with recommendations for future research are suggested.

Chapter Two: Literature Review

2.1 Overview of the Chapter

This chapter begins by providing a definition of emotional regulation and outlining the development of emotional regulation abilities across early life. It outlines the literature related to universal, school based, cognitive behavioural therapeutic (CBT) or dialectical behavioural therapeutic (DBT) approaches for student emotional well-being or emotional regulation. Emotional well-being in this case is taken as absence of psychopathology, such as anxiety or depression. This review outlines the psychological theory behind CBT and DBT along with their research base. Attention is given to the student experience and feasibility of such school-based interventions. Current research on school-based CBT and DBT for adolescent emotions and emotional regulation are observed and critically analysed. The gap that exists is outlined and the contribution of the current study is identified.

2.2 Emotional Regulation: What the Research Says

There is no unilaterally agreed definition of emotional regulation with various conceptualisations emerging from the research. Emotional regulation has been studied from a relational, functionalist and social constructivist perspective (Campos, Mumme, Kermoian, & Campos, 1994; Lazarus, 1991; Saarni, 1999). From the relational perspective, Lazarus (1991) suggests that emotions are judged as beneficial or harmful to self-identity and the achievement of personal goals. They are then appraised by the individual as positive or negative based on these judgements (Lazarus, 1991). Similarly, functionalists suggest that emotional responses are based on an interaction between an individual's goals and their environment, with their emotional behaviours reflecting their inner feelings which aim to then manipulate the external environment for their own gain (Campos et al., 1994). Social constructivists hold a similar view but place more emphasis on the effect of cognitive development and social experiences in the development of emotional regulation (Saarni, 1999). These conceptualisations of emotional regulation have outlined various factors related to emotional regulation that impact on its development and expression in the individual. A review of literature on emotional regulation suggests that the best conceptual definition incorporates a wide array of factors and outlines it as a process that involves;

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

‘... (a) an awareness and understanding of emotions (b) acceptance of emotions, (c) ability to control impulsive behaviours and behave in accordance with desired goals when experiencing negative emotions, and (d) the ability to situationally appropriate emotional regulation strategies flexibly to modulate emotional responses as desired to meet individual goals’ (Gratz & Roemer, 2004, p. 42).

It is suggested that the key to developing appropriate emotional regulation abilities is to find the balance for individuals to understand, experience and express emotions whilst also maintaining an awareness of their current context and socially acceptable behaviours (Posner & Rothbart, 2000).

The main cognitive model of emotional regulation processes was developed by Gross (1998) (Figure 1, p.11) and outlines strategies used at different stages of the process. It identifies two broad types of emotional regulation strategies; antecedent focused and response focused. Antecedent focused strategies occur before the entire activation of an emotion, before the psychological and behavioural results and response focused strategies occur following the psychological and behavioural effects of an emotion (Gross, Richards, & John, 2006). Antecedent focused strategies include situation modification, attention control or cognitive change and response focused strategies include the modulation or suppression of the expression of the emotion or its resulting behaviour (Gross & John, 2003). Two main practices of emotional regulation have been identified by Gross et al. (2006); cognitive reappraisal and expressive suppression. Cognitive reappraisal is antecedent focused and appraises the stimulus before the emotional response, changing the expression and experience of the emotion (Gross et al., 2006). Expressive suppression is response focused, occurring later in the process, not changing the emotional experience but changing the outward display of the emotion (Gross et al., 2006). Research into emotional regulation strategies have found that psychopathologies were more likely when response focused strategies are used and when more negative emotional coping strategies such as rumination were used over more positive strategies such as problem solving or acceptance (Haga, Kraft, & Corby, 2009). These more negative strategies of emotional regulation have also been found to impact negatively on affect, social functioning, self-esteem and overall well-being (Aldao et al., 2010; Gross & John, 2003).

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

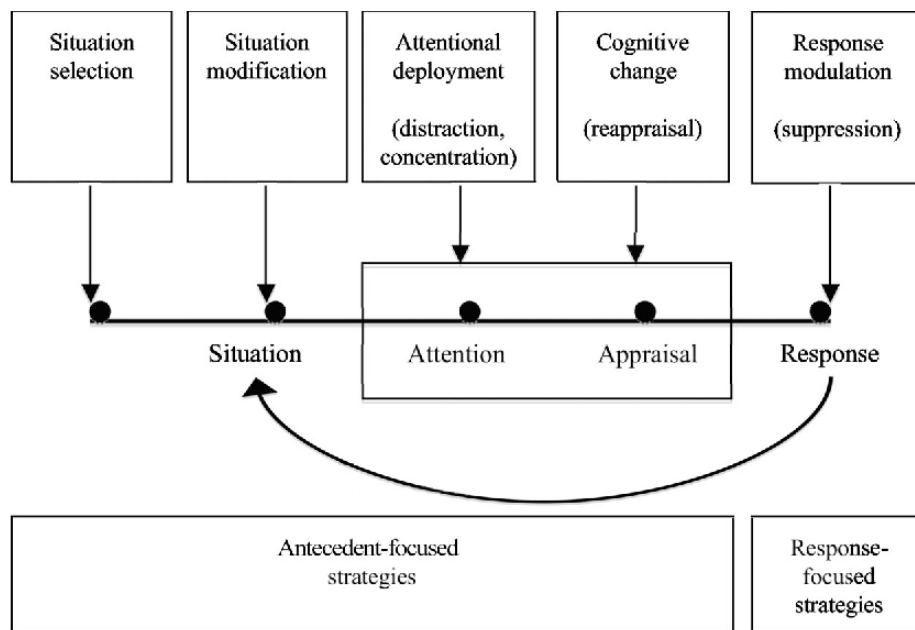


Figure 1. Process Model of Emotional Regulation (Gross & Feldman Barrett, 2011, p. 12)

2.3 Development of Emotional Regulation

2.3.1 Early Development. The development of emotional regulation skills across the life span begin at birth and continue throughout the course of the individual's life. In infancy, regulation strategies begin to develop based on interactions and observations with caregivers and can be influenced by attachment style, individual temperament and the social and environmental context (Kim, Stifter, Philbrook, & Teti, 2014; Morris, Silk, Steinberg, Myers, & Robinson, 2007). During toddlerhood rapid neurological changes mean emotional regulation abilities continue to develop with the emergence of attention control and language skills, leading to greater response to parental guidance (Posner & Rothbart, 2000; Rothbart, Posner, & Boylan, 1990). During their time in preschool and early primary school, children begin to internalise social and contextual rules, developing Theory of Mind; "an ability to understand the thoughts, beliefs, desires and intentions of other people around them to make sense of their behaviour and predict what they are going to do next" (Attwood, 2007, p. 112), and become more independent at regulating their own emotions (Wellman, Cross, & Watson, 2001). During this period they become more capable of inhibiting responses, show a better understanding of emotion and begin to show early signs of cognitive reappraisal; the ability to reinterpret an emotional response (Carlson, 2005; Cole, Hall, & Hajal, 2008; Pons, Harris, & de Rosnay, 2004;

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Silvers et al., 2012). As they continue to develop cognitively, their ability to self-control increases and their emotional regulation abilities become less externally or behaviourally regulated, with older children relying more on cognitive and internal mechanisms of emotional regulation (Posner & Rothbart, 2000).

2.3.2 Emotional Regulation and Adolescence. During the period of adolescence, individuals begin to behave more autonomously in order to reach their own long-term goals and regulate their own emotions independently with less guidance from parents or caregivers (Steinberg & Avenevoli, 2000). Simultaneously, adolescents are undergoing significant physical changes. In this period changes occur hormonally; with the onset of puberty, as well as cognitively, socially and neurologically (Blakemore, Burnett, & Dahl, 2010; Casey et al., 2010). Social changes in adolescents lead to new experiences and social interactions, resulting in more social independence and increased social referencing in relation to peers as opposed to parents, which can influence emotional regulation abilities (Morris et al., 2007). Brain changes occurring during adolescence include changes to the prefrontal cortex, changes in grey and white matter volume, increased myelination of fibres and increased synaptic pruning (Giedd et al., 1999; Pfefferbaum et al., 1994; Spear, 2000; Thompson & Nelson, 2001). These alterations in the brain have a wider impact on the individual's ability to respond to risk and reward, control their impulses, plan, reason and process information and their overall executive functioning ability (Cicchetti & Rogosch, 2002; Spear, 2000; Steinberg, 2005).

It has been supposed that disconnect in timing between development in different domains can influence emotional regulation abilities. For example, compared to adults, adolescent brains experience differences in levels of arousal and motivation, however the ability to regulate arousal and motivation may occur later in their development, impacting on their ability to self-regulate (Steinberg, 2005). Similarly, the individual is at a stage of increased level of risk and vulnerability as the timing of variations in each domain; social, physical, cognitive, may be disconnected, meaning the individual may not have developed sufficiently to negotiate these changes, impacting on the emergence of psychopathology (Steinberg, 2005)

The period of adolescence is considered a health paradox, as what should be a period of optimum health and development, is, compared to childhood, a period of raised mortality and risks (Gore et al., 2011; Resnick et al., 1997). Based on developmental changes the adolescent should be capable of identifying their emotions and should have

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

the skills to cope with them in a positive and proactive way, changing their coping strategies to deal with their emotions where necessary (Riediger & Klipker, 2014). However, adolescents can often be unable to effectively regulate their emotions, which can result in them using inappropriate coping mechanisms on encountering negative events. For some individuals, appropriate coping strategies may never develop and for others their skills may regress (Auerbach, Claro, Abela, Zhu, & Yao, 2010; Zimmer-Gembeck & Skinner, 2011). Maladaptive emotional regulation skills can then persist due to their reinforcement and the individual can be unaware of other strategies and skills which can be used for self-regulation (Aldao et al., 2010). Adolescence is a period during which there is an increased prevalence of substance abuse, self-harm, depression, aggression, eating disorders, anxiety, accidents, suicide and high risk behaviours, and it is possible that these outcomes are impacted by factors related to the development of emotional regulation (Aldao et al., 2010; Cicchetti & Rogosch, 2002; Forbes & Dahl, 2005; Garnefski et al., 2001; Hankin & Abela, 2011; Kessler et al., 2005; Kuppens et al., 2012).

2.4 National Context and Policy

About one third of Irish youth have experienced a mental health difficulty, with the suggestion that this equates to around 86,000 Irish youths experiencing moderate to severe problems with their mental health (Cannon, Coughlan, Clarke, Harley, & Kelleher, 2013). Irish youths also have the fourth highest level of suicide in the European Union (EU) and around 12% of Irish adolescents engage in self-harming behaviours (Dooley & Fitzgerald, 2012). The 'My World' survey of youth mental health, which was a national survey conducted in Ireland, found that youth mental health difficulties tend to emerge and continue throughout adolescence and early adulthood (Dooley & Fitzgerald, 2012; Kim-Cohen et al., 2003). This survey also identified coping strategies as one protective factor linked to mental health during this life transition, highlighting the importance of emotional coping strategies for adolescents' well-being and life trajectory (Dooley & Fitzgerald, 2012). Individuals who utilise negative coping behaviours are more likely to experience other negative outcomes including anxiety, substance abuse, persecution, mental health decline or aggressive behaviours, leading to recurrent cycles of declining mental health, further deteriorated by adverse coping strategies (Björkenstam, Björkenstam, Vinnerljung, Hallqvist, & Ljung, 2011; Boden, Fergusson, & Horwood,

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

2012; Buri, von Bonin, Strik, & Moggi, 2009; Dooley & Fitzgerald, 2012; McNiel, Binder, & Robinson, 2005).

Increased research on well-being has identified mental health difficulties as the number one cause of disability in youth (Gore et al., 2011). The importance of promoting mental health for youth has been recognised in terms of both individual factors, such as psychological, social or academic functioning, but also in terms of factors that impact on other systems, such as the family or society, with increased positive mental health leading to better outcomes for academic achievement, earning ability, parenting, relationships with others and overall quality of life (Funk, 2010).

In the Irish context there has been an increased focus on policy development and promotion of mental health and emotional well-being. With regards to policy and legislation, the school settings aim to promote the well-being of the students in their care (DES, 2015). The DES outlines the importance of emotions and coping abilities in their definition of well-being;

‘...the presence of a culture, ethos and environment which promotes dynamic, optimal development and flourishing for all in the school community. It encompasses the domains of relationship, meaning, emotion, motivation, purpose, and achievement. It includes quality teaching and learning for the development of all elements related to healthy living whether cultural, academic, social, emotional, physical or technological with particular focus on resilience and coping’ (DES, 2015, p. 9)

The Healthy Ireland Framework also identifies the importance of well-being in terms of its impact on individual potential, with this document outlining a governmental framework to promote well-being (Department of Health (DH), 2013). The publication of the Better Outcomes, Brighter Futures (BOBF) document by the government of Ireland also outlined the aim to improve overall youth well-being, including emotional well-being as a core component in the development of overall well-being (DCYA, 2015). These government policies suggest that the emotional development of students should be a focus of the education system and acknowledges the core role of emotional regulation and coping strategies in overall well-being (DCYA, 2015).

In relation to adolescence, the policies recognize the potential psychological and emotional difficulties faced during this period and the possible emergence of mental health difficulties during this time (Dooley & Fitzgerald, 2012; Government of Ireland, 2018a). Promotion of well-being is evident for this population with the inclusion of Social, Personal and Health Education (SPHE) in the Junior Cycle with an aim of this

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

curriculum being to promote emotional health and well-being and also to highlight the importance of the development of self-regulation skills (Government of Ireland, 2018a). This curriculum aims to promote student resiliency and well-being by fostering their understanding of health concepts and self-efficacy, along with increased coping strategies including problem-solving and decision-making abilities (NCCA, 2017.).

The ‘Wellbeing in Post Primary Schools Guidelines’ (DES, HSE & DH, 2015) promote emotional coping strategies and outlines supports for schools to encourage youth well-being and mental health. Recommendations from the DES Well-being Guidelines suggest that interventions should take a social competence approach, where students are taught self-management, problem solving and communication skills, interventions are reviewed regularly and social supports are provided to students (DES, 2015). In 2018 the Government of Ireland published the ‘Well-being Policy Statement and Framework for Practice’ (Government of Ireland, 2018). In this document they summarize the core role of schools in developing youth well-being and encouraging students to learn about well-being, including emotional well-being. It outlines the school as a setting for emotional learning and a setting for the development of self-awareness and self-management skills. It outlines the importance of providing opportunities for students to develop their problem-solving and coping skills, in terms of emotional learning. This document includes a focus on the importance of the promotion of the emotional competence of children and youth to enhance overall well-being and outlines the need for the development of evidence-based emotional learning programmes at both a universal and targeted level, based on sound theoretical and psychological concepts

It is clear that governmental policy is focusing more on the holistic development of youth, with increased focus on well-being, emotions and coping abilities, it is important that schools are equipped with curriculum and class material to promote such skills for the betterment of the students in their care and the realisation of the aims of the Irish education system (Government of Ireland, 2018; NCCA, 2018).

2.5 Theoretical Underpinnings of Cognitive Behavioural Therapy

Therapeutic behaviour therapies, such as CBT or DBT, are built on the interaction between cognitions, emotions and behaviours and theorize the link between irrational thinking styles, lack of coping, regulation abilities and dysfunctional behaviours (Felgoise, Nezu, Nezu, & Reinecke, 2006). These therapies are based on various

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

psychological theories, including biopsychosocial theory, behaviour theory, cognitive therapy and social learning theory (Gabbard & Publishing, 2009; Linehan, 1993; Zeig, 2014). First wave CBT emerged from behavioural theory which originated from principles of operant and classical conditioning with the aim to modify behaviour based on response (McSweeney & Murphy, 2014). It is also based on cognitive therapy, which is built on the assumption that maladaptive behaviours emerge from maladaptive thinking patterns (Plotnik & Kouyoumdjian, 2010). Cognitive therapy aims to address these maladaptive, negative, automatic thoughts. It is also based on elements of social learning theory which includes observational learning from peers and others and person-stimulus reciprocity; the interaction between the individual and their environment (Simmons & Griffiths, 2017). Over the years these theories influenced the emergence of CBT which focuses on thoughts and behaviours, with the goal of promoting more rational patterns of thinking, solution finding abilities and appropriate coping skills (Wilding, 2012). From this came the third wave of CBT, including many cognitive based therapies such as rational emotive therapy, acceptance and commitment therapy or dialectical behavioural therapy (Simmons & Griffiths, 2017).

Third wave cognitive behavioural approaches, such as DBT, give more focus to less pleasant experiences as a part of life, validating them, and acknowledging the functional aspects of all emotions encouraging individuals to understand and respond to their emotional experiences (Clen, Mennin, & Fresco, 2013). DBT also takes a more bio psychosocial approach to therapy, considering the biological vulnerability, psychological factors and social experiences of the individual (Carrión & Rettger, 2019). These approaches relate to the process model of emotional regulation as outlined by Gross (2002), focusing on more positive antecedent response mechanisms. Individuals are encouraged to decrease their vulnerability to emotions, increase their understanding of them and develop the ability to appraise and problem solve around their emotions, as opposed to suppressing or using more maladaptive strategies to cope with their feelings in particular situations (Arthur Freeman & Sharon Morgillo Freeman, 2004).

2.6 Cognitive Behavioural Therapy

The Royal College of Psychiatrists defines CBT as:

‘A way of talking about: how you think about yourself, the world and other people and how what you do affects your thoughts and feelings. CBT can help you to change how

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

you think (cognitive) and what you do (behaviour). These changes help you to feel better.’
(Royal College of Psychiatrists., 2015)

The CBT model assumes that there is a link between thoughts, feelings and behaviours and it accepts that it is the individuals’ perception of the triggering event which leads to the difficulty (Simmons & Griffiths, 2017). CBT is a psychotherapeutic technique which aims to develop people’s understanding of the link between cognitions, feelings and behaviours (BMA, 2016). CBT takes a collaborative approach and attempts to promote problem solving of current situations (Kazantzis, Dattilio, Dobson, & Beck, 2017). CBT is built on elements of behaviourism, with participants taking part in behaviour experiments to promote cognitive restructuring (Pachana & Laidlaw, 2014). The elements of CBT include psycho-education, emotion identification, understanding cognitions, self-talk, emotion management, problem solving, positive coping strategies, exposure, self-monitoring, social skills, cognitive restructuring, behavioural activation and relapse prevention (Kendall & Hedtke, 2006).

Research into the effectiveness of CBT has found it to be beneficial in relation to a wide array of psychological difficulties, including anxiety, depression, self-harm, eating disorders, suicidality and alcohol abuse (Colby et al., 1998; Fairburn et al., 2009; Gratz & Roemer, 2004; Liddle, Dakof, Turner, Henderson, & Greenbaum, 2008; March et al., 2007; Otto, Smits, & Reese, 2004; Rupke, Blecke, & Renfrow, 2006; Slee, Garnefski, van der Leeden, Arensman, & Spinhoven, 2008).

2.7 Dialectical Behavioural Therapy

Dialectical Behavioural Therapy (DBT) is a therapy method which builds on CBT and was developed as a treatment method for adults with suicidality and Borderline Personality Disorder (BPD) (Linehan, 1993; Linehan, 1987). This treatment method is based on biosocial theory, with some individuals having difficulty with the system that regulates their emotions, due to various factors including life experiences, genetics, biology and environment (Lynch, Chapman, Rosenthal, Kuo, & Linehan, 2006; Wagner, Rathus, & Miller, 2006). DBT focuses on four areas for development: mindfulness, interpersonal effectiveness skills, emotional regulation skills and distress tolerance skills (Linehan, 1993; Mazza et al., 2016). DBT is dialectical, with a focus on both acceptance strategies and change strategies, with mindfulness and distress tolerance skills focusing

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

on acceptance and the emotional regulation and interpersonal relationship modules focusing more on skills development for change (Lau & McMain, 2005).

The interpersonal effectiveness module of DBT aims to enable participants to form healthy relationships by developing empathy, conflict resolution, communication skills and assertiveness (McKay & Wood, 2011). The mindfulness skills encourage participants to accept and be mindful of their emotions whilst also being aware of their thoughts, feelings and behavioural urges (McKay & Wood, 2011; Van Dijk, 2013). In the distress tolerance module participants develop physical strategies to cope with intense emotions, including relaxation strategies, tolerating negative emotions, self-soothing, accepting when things cannot be changed and problem solving (McKay & Wood, 2011; Van Dijk, 2013). Through the emotional regulation module participants are encouraged to develop an understanding of their emotions, decrease vulnerability to emotions through physical well-being, planning for upcoming experiences and enjoying positive activities (Spradlin, 2003). Participants are encouraged to examine whether emotions fit the facts of situations, examining their thoughts and interpretations and changing their behaviours if appropriate (Mazza et al., 2016).

DBT has been used with adult populations as a therapeutic intervention for a range of presenting issues including post-traumatic stress disorder, bipolar disorder, suicidal ideation, borderline personality disorder and self-harm (Becker & Zayfert, 2001; Stanley, Brodsky, Nelson, & Dulit, 2007). DBT was first adapted for use with adolescent populations by Miller et al. (1997) and included group, individual and parent components (Miller, Rathus, DuBose, Dexter-Mazza, & Goldklang, 2007). Several studies have been undertaken to examine its effectiveness as a treatment format for adolescents with self-harming or suicidal behaviours, borderline personality disorders and eating disorders with positive results (Fleischhaker et al., 2011; James, Taylor, Winmill, & Alfoadari, 2008; Miller, 1999; Safer, Couturier, & Lock, 2007; Wisniewski & Kelly, 2003).

2.8 Rationale for the Literature Review

There is growing concern and interest, both nationally and internationally, in the prevalence of mental health difficulties among children and young people, with approximately a quarter of adolescents experiencing serious personal, emotional, behavioural or mental health problems (Kutcher & McLuckie, 2009; McMahan et al., 2010). Recent policy has moved with this trend, with the Irish government and DES

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

outlining policy and curriculum which aim to promote student well-being, with the inclusion of emotional regulation abilities (DCYA, 2015; Government of Ireland, 2018).

Currently, mental health based interventions are provided by Child and Adolescent Mental Health Services (CAMHS), with long waiting lists and an overall reactive approach (Squires, 2010). EPs can help promote mental health and well-being support and interventions in schools (Squires, 2010). The use of a preventative approach to well-being, through the implementation of universal emotional learning interventions, can lead to more positive outcomes for individuals in terms of their academic attainment, as well as their behaviour and emotional regulation abilities, and can also promote the development of skills in a greater population, at a reduced cost and with reduced stigma regarding emotions (Durlak et al., 2011; McDaid et al., 2008; Sklad, Diekstra, Ritter, Ben, & Gravestijn, 2012).

Adolescence is a period where difficulty with emotional regulation and maladaptive coping mechanisms commonly emerge (Auerbach et al., 2010). It is also a period of increased stress during which many changes and transitions occur, which also impact on the ability to regulate emotions more independently and in new challenging situations (Riediger & Klipker, 2014). As such adolescence is a developmental period of high risk in relation to the emergence of disorders related to emotions such as anxiety, depression, eating disorders and aggression (Aldao et al., 2010; Forbes & Dahl, 2005; Garnefski et al., 2001; Kuppens et al., 2012). Without support and the development of adaptive strategies for coping with emotions, adolescents may not be able to use appropriate skills in their everyday experiences and inappropriate emotional coping strategies may emerge and persist (Aldao et al., 2010).

Therefore, in order to promote youth well-being and mental health, adaptive emotional regulation and coping mechanisms should be encouraged, which in turn can lead to more positive outcomes (Garnefski et al., 2001). The Irish Government and DES seek to establish and promote evidence-based interventions as part of school promotion of student well-being (Government of Ireland, 2018b). It is important that such interventions are applied in real life settings to establish their effectiveness and feasibility. This systematic review aims to establish the evidence base for universal CBT interventions and universal, school-based DBT interventions to promote emotional functioning in adolescents, along with the feasibility and outcomes of such interventions in post-primary schools.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

2.9 Review Questions

This review aimed to answer two questions:

- 1) What are the experiences of students and facilitators of cognitive and dialectical behavioural universal, school-based interventions for adolescents?
- 2) What is the effect of school based cognitive and dialectical behavioural, universal school-based interventions on adolescent emotional functioning?

2.10 Part One: Participant and Facilitator Experience

The first part of this literature review aims to identify and synthesise qualitative research of student and facilitator experience of universal, school-based, cognitive or dialectical behavioural interventions for adolescents. The following data bases were searched: Academic Search Complete, PsycInfo and Google scholar, using a range of terms: (school based OR school OR classroom) AND (Adolescen* OR youth) AND (CBT OR DBT OR cognitive therapy OR cognitive behave* OR mental health) AND (qualitative OR experience OR interviews) AND (teachers OR facilitators). There was a dearth of research available on student and facilitator experience of such interventions and only three studies were identified for inclusion in the review. Two were included in peer reviewed journals, and one study emerged from a non-peer reviewed source. In total 203 student participants are included in this review.

Three studies were outlined for review (Flynn, Joyce, Weihrauch & O'Malley, 2017; Garmy, Jakobsson, Carlsson, Berg, & Clausson, 2015; Taylor et al., 2014). The studies took place in Sweden, Ireland and the UK. One study utilised a mixed methods approach and the others were purely qualitative in nature (Garmy et al., 2015; Taylor et al., 2014). The studies included students between the age of 13 and 15 years with the study by Taylor et al. (2014) including students in early adolescence. Two studies made use of a school based CBT intervention (Garmy et al., 2015; Taylor et al., 2014) and one study by Flynn et al. (2017) made use of a universal, school-based DBT intervention. A critical analysis of the studies outlined their strengths and limitations, along with their findings and influence on the current study.

The study by Taylor et al. (2014) and Garmy et al. (2015) examined the experience of adolescent students and teachers or facilitators of school-based CBT interventions which targeted depression and stress. The study by Taylor et al. (2014) evaluated participant experience of the Resourceful Adolescent Programme which focused on stress

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

management, self-esteem, cognitive restructuring and problem solving and the study by Garmy et al. (2015) focused on the Depression in Swedish Adolescent intervention. Both studies used focus groups to collect data from participants. Although focus groups allow participants to provide more in-depth responses than using other methods, such as questionnaires, they have limitations, particularly for adolescents who tend to be aware of judgement from peers which may lead to a uniformity of views (Morgan, 2018). In contrast to these studies, this research will make use of individual interviews with participants to gain more in-depth information from student participants and to gather the student voice in relation to their experience of the intervention.

Participants in the Taylor et al (2014) study identified the use of visuals and hands-on activities, along with the content of the intervention as beneficial. Similar to the current study, the intervention was delivered by facilitators who were accompanied by class teachers. In contrast to this, the study by Garmy et al. (2015) included an intervention delivered by school staff and, like the current study, this programme delivered the intervention using a small group approach. Data from the Taylor et al. (2014) study was mainly collected from facilitators and teachers with the study by Garmy et al. (2015) collecting more in -depth data from student participants. The significance of this study is that it provides a more in-depth account of student experience of school-based CBT interventions.

Participants in the Taylor et al. (2014) study reported the need for a more hands on approach to the intervention, likewise the students in the study by Garmy et al. (2015) outlined areas for improvements including more practical exercises, games and group work. Students in the studies reported positive effects of the intervention, including acquired knowledge, increased ability to understand feelings and greater awareness and perceptions of situations (Taylor et al., 2014; Garmy et al., 2015). They reported an increase in positive thinking, an understanding of the link between thoughts and behaviours, increased self-confidence and an ability to use acquired skills in their daily lives. Students reported an increase in their abilities to manage stress and suggested how they could use skills in future experiences in their lives, such as sports or exams (Taylor et al., 2014; Garmy et al., 2015). Participants reported focusing on and engaging in more positive activities as a result of the intervention (Garmy et al., 2015). The group format was identified as a benefit of the programme with participants learning from others, developing trust in the group and becoming more considerate and understanding of others

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

(Garmy et al., 2015). Teachers reported feeling frustrated by the lack of flexibility around delivering this intervention (Taylor et al., 2014). Time and budget constraints were also identified as barriers to implementation of the intervention in schools, along with the lack of value placed on PSHE and the competing demands of time and resources in the school setting (Taylor et al, 2014).

A key strength of both studies included a larger number of participants and the relevance of the population (eliciting the voice of the child and school facilitators or teachers). However, the study by Taylor et al. (2014) collected the majority of reported data from teachers and provided less information on student reflections of their experience of the intervention. Limitations of the study by Garmy et al. (2015) include a lack of gender diversity, with the intervention delivered in single sex groups, mainly to females, which led to some participants feeling that this policy implied more negative feelings in females. The current study attempts to build on the limitations of these studies by gathering in-depth student interviews. It also aims to gather data on both student and teacher experiences of the intervention. However, the current study focuses mainly on collecting data from the student voice adding to the literature on adolescent experiences of school-based interventions (Taylor et al., 2014; Garmy et al., 2015).

The qualitative data collected in the Flynn et al (2017) research was part of a report and initiative completed by the DES and Health Service Executive (HSE). As part of this mixed methods study participants completed a satisfaction questionnaire. This study employed a DBT intervention programme with a group of adolescents (aged 15 years). A lack of information was provided on the analysis method used for this data which limits the replicability of the study (Mertens, 2014). Participants of the study identified that they enjoyed certain aspects of the intervention including the mindfulness, becoming more aware of emotions, learning skills to manage them and engaging with others in the class. Negative aspects of the intervention included its wordiness and difficulty with understanding. Students identified that the programme could be improved by simplifying content and increasing interactive approaches, this was similar to the feedback from the Garmy et al. (2015) study. This study also collected feedback from teachers. Teachers found the programme positive, however, they too reported that the programme was too wordy and not suitable in its current format with the need for more varied material, multimedia and hands-on activities, which was similar to findings of previous studies (Taylor et al., 2014; Garmy et al., 2015). The significance of these studies is that they

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

identify the need for school-based interventions to include active and co-operative learning approaches to promote student learning and experience (Garmy et al., 2015; Flynn et al, 2017).

A strength of this study was its large sample size, triangulation of data from teachers, parents and students and the gender variance of the population (Mertens, 2014; Tashakkori, Teddlie, & Teddlie, 2003). However, a limitation of this research was lack of an appropriate analysis method for data and the use of survey questionnaires to collect data. Questionnaires are advantageous as they provide the opportunity to collect a large quantity of data from a large number of individuals and are quite easy to code and quantify (Miller & Brewer, 2003). However, questionnaires may lack validity as participants may misinterpret questions or may not be honest in their answers (Miller & Brewer, 2003). This study aims to build on the limitations of this and the other reviewed studies by conducting semi-structured interviews to gather rich data on participant experiences of the intervention in the Irish context. It also aims to modify a module of the intervention to include more active and co-operative learning components, based on the results of previous research, to both investigate the impact on participant experience and ‘what works’ for ER interventions with this population (Garmy et al., 2015; Taylor et al., 2014; Flynn et al., 2017).

2.11 Part Two: The Effect of School Based Cognitive and Dialectical Behavioural Interventions

The second part of the literature review aimed to identify the effects of school-based CBT or DBT on adolescent emotions. In order to complete the literature review it was important to outline a clear review question. This review aims to answer two questions:

1. What do we know about universal, school-based cognitive behavioural therapy (CBT) interventions for adolescents in terms of impact on emotions or emotional regulation?

The findings from this review will lead onto another review question:

2. What do we know about universal, school-based dialectical behavioural therapy (DBT) intervention for adolescents in terms of impact on emotions or emotional regulation?

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

In this section the search strategies used to answer these review questions are systematically described. The inclusion and exclusion criteria are outlined and the approach taken in evaluating the research is provided.

2.12 Phase One: Search Strategy, School Based, Universal CBT and DBT Interventions

In order to answer the first review question, on the 31st July 2018, the electronic databases ERIC, Psych articles and Academic search complete were used to search for the terms including ‘school’, ‘school based’, ‘classroom’ ‘cognitive behaviour* therapy’, ‘CBT’, ‘adolescent’, ‘youth’, ‘emotion’ and ‘emotional regulation’ (Table 1). A further search was conducted for school based DBT interventions (Table 1).

Table 1

Search Terms Used for the Literature Search

Databases	Search Terms
Academic Search Complete, ERIC, PsycArticles	<ul style="list-style-type: none"> • (CBT OR Cognitive Behavioural therapy OR cognitive behavior therapy) AND (School based OR School OR Classroom) AND (Universal OR Preventative) AND (Adolescen* OR youth OR teens OR student) • School based CBT or school cognitive behaviour* Therapy • (School OR Classroom) AND (CBT OR cognitive Beh* therapy) AND (Adolescen* OR youth) AND (Emotion*) • DBT OR Dialectical behavio* therapy AND school

Studies that included interventions which were not school-based, or which targeted specific populations of children, such as those with special educational needs or

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

psychological diagnoses were excluded. Studies were only included if they were written in English and were published in peer-reviewed academic journals. Studies were included if they provided CBT in a school setting. Studies were screened based on abstract and title, then full articles were reviewed and eliminated based on inclusion or exclusion criteria highlighted in Table 2. This left 8 articles for inclusion in the review. The retrieved studies were included in the review if they met the inclusion criteria outlined in Table 2, p.26. The rationale for each criterion is displayed in the table. There were no date restrictions used as all research is considered to be significant. Research articles were then screened based on title and abstract and finally by full text. The flow diagram (Figure 2, p.27) outlines the number of included studies. A full list of included studies is provided in Appendix A.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Table 2

Inclusion and Exclusion Criteria and Rationale

	Inclusion Criteria	Exclusion Criteria	Rationale
1. Type of Publication	Peer-Reviewed Journal.	Non-peer reviewed journal.	To ensure high methodological rigor.
2. Language	Article is written in English.	Article is written in language other than English.	To enable the reviewer to read the information.
3. Type of Study	Empirical study that involves the collection and analysis of primary data.	The study does not contain primary empirical data.	Allows the reviewer to examine the outcomes CBT intervention.
4. Focus of Intervention	Intervention must have changes in relation to emotional well-being or emotional regulation.	Intervention is not specifically targeting emotional well-being or emotional regulation.	Area of interest for this review is the effectiveness of interventions on emotional regulation.
5. Type of Intervention	Intervention is based in school and delivered as a universal intervention.	Intervention not based in a school and is not delivered as a universal intervention	Area of interest for this review is the effectiveness of universal school based CBT interventions
6. Participants	Adolescents aged 12-17	Children <12 years and adults.	Ensures appropriate age group is being targeted by review.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

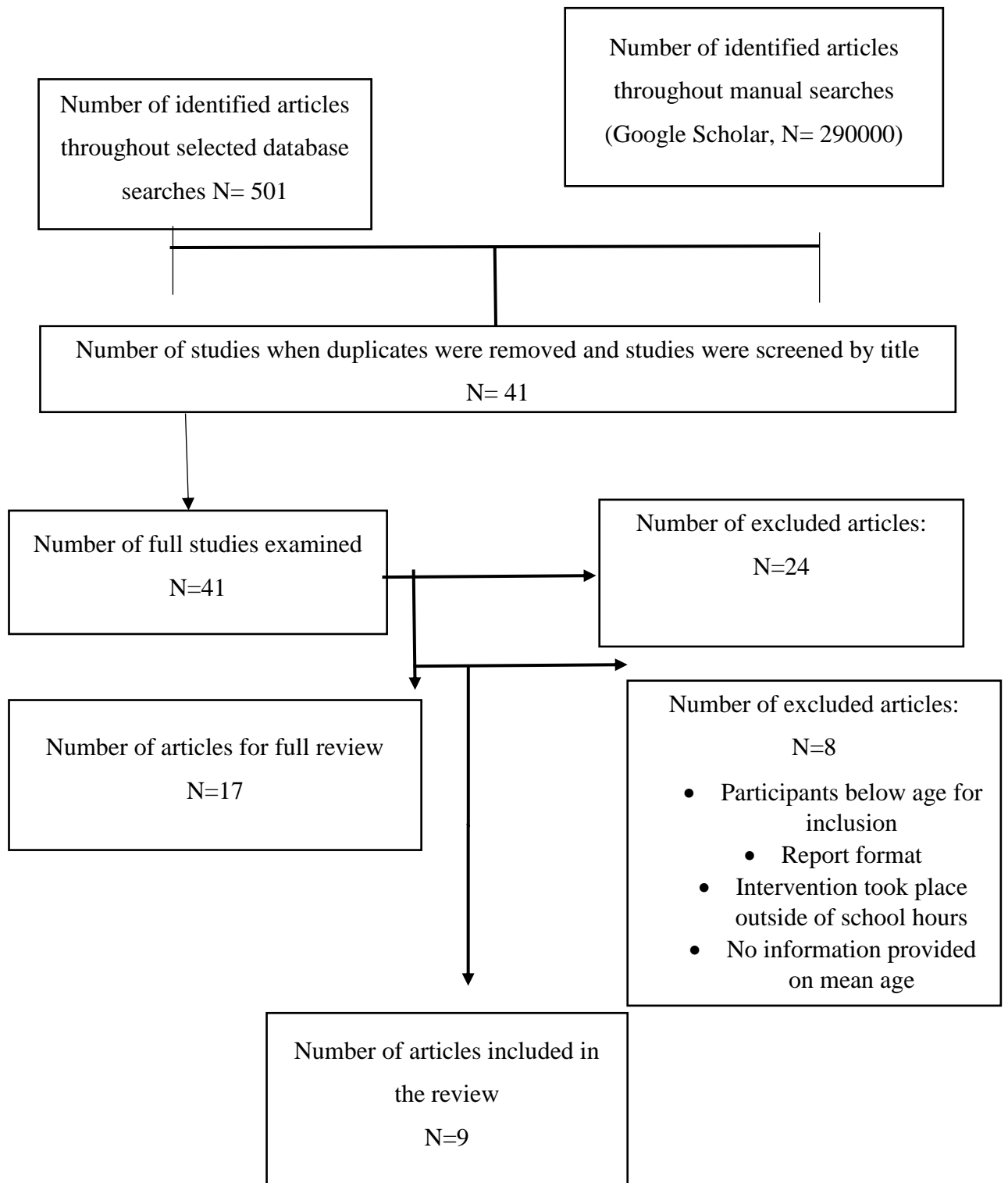


Figure 2: Flowchart of Included Studies

2.13 Quality and Relevance of the Selected Studies.

Before undertaking a review of the literature and synthesis of the research it is necessary to establish the quality and relevance of the included studies (Gough, 2007). The weight of evidence framework (WoE) as outlined by Gough (2007) was used to appraise the selected research based on methodological quality (WoE A), methodological relevance (WoE B) and more specifically to this review its relevance to the review question (WoE C). These scores were then combined to form an overall weighting (WoE D), based on the overall relevance and contribution of the research to answering the review questions. In order to establish methodological quality, studies were coded based on the coding protocol suggested by (Kratochwill & Shernoff, 2003) for evidence based interventions, which provided the protocol to assess the quality of the studies. Table 3, p.29 provides an overview of the WoE and numerical rating for each study. A detailed outline of the WoE ratings and rationales are provided in Appendix B.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

Table 3

Summary of WoE Judgements

Study	WOE A	WOEB	WOEC	WOED
Spence, Sheffield, and Donovan (2005)	2.6	2.3	2.4	2.4 High
Tomyn, Fuller-Tyszkiewicz, Richardson, and Colla (2016)	2	2.3	2	2.1 Medium
Gillham et al. (2007)	2.4	3	2	2.4 High
Rodgers and Dunsmuir (2015)	1,8	2	2.2	2 Medium
Sportel, de Hullu, de Jong, and Nauta (2013)	2.6	2.6	1.6	2.1 Medium
Stallard et al. (2012)	1.8	2.6	2	2.2 Medium
Horowitz, Garber, Ciesla, Young, and Mufson (2007)	2.6	3	2.4	2.6 High
Sawyer et al. (2010)	2	2.3	2.4	2.2 Medium
Pössel, Martin, Garber, and Hautzinger (2013)	2.4	2.3	2.4	2.2 Medium
Flynn et al. (2018)	2.4	2	2.6	2.3 Medium
Zapolski and Smith (2017)	1.4	1	2	1.4 Low

2.14 Review of Research: Effect of Universal, School-Based CBT for Adolescents

2.14.1 Participants. In total there were 14,194 participants included in this research review examining the effects of universal, school-based CBT on adolescent emotions. As outlined in the inclusion and exclusion criteria, all studies included adolescent participants aged between 12 and 17 years of age. The age of the participants in all but one study was less than 15 years (Pössel et al., 2013). The number of participants in each study ranged from 62 to 5634. In studies which outlined the gender of participants there was an overall equal representation of genders, with some studies reporting slightly more male (Gillham et al., 2007; Tomynt et al., 2016) or female participants (Horowitz et al., 2007; Pössel et al., 2013). Studies were located in the United States of America, Germany, Australia, the United Kingdom, the Netherlands and Ireland and were run in mainstream schools. Only one study was conducted in the Ireland, this effects the generalisability of the interventions with pupils within the Irish context (Rodgers & Dunsmuir, 2015). Students in the review were part of a whole class or group and were not targeted based on special educational needs or psychological diagnoses, although, universal samples likely contained individuals with these diagnoses. This is similar to the current study which delivers a DBT intervention to a universal population. Unlike the current study, two included research studies with a focus on students with higher than average levels of anxiety (Sportel et al., 2013; Stallard et al., 2012).

Participants were recruited through contact with schools or school boards, with participants recruited based on school interest or parental consent at the individual level. Studies which assessed and provided information on group equivalence or counterbalancing received a higher weighting (WoE A), only the study by Rodgers and Dunsmuir (2015) failed to provide information on equivalence. The majority of included studies did not provide information on participant attendance or external variables which could have impacted on intervention outcomes. Only two studies provided information on participant attendance as a confounding variable (Gillham et al., 2007; Stallard et al., 2012). The key characteristics of each of the studies are outlined in Table 4, p.31.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

Table 4

Key Characteristics of the Studies

Study	Location	Sample	Intervention	Duration
Spence et al. (2005)	Australia	N=1500	Problem Solving for Life	8 weeks
Tomyn et al. (2016)	Australia	N=252	Think Health and Well-being	6 weeks
Gillham et al. (2007)	USA	N=697	Penn Resiliency Programme	10 weeks
Rodgers and Dunsmuir (2015)	Ireland	N=62	Friends	10 weeks
Sportel et al. (2013)	Netherlands	N=240	PASTA CBT intervention developed by researchers	10 weeks
Stallard et al. (2012)	UK	N=5030	Resourceful adolescent programme	9 sessions and 2 booster sessions
Horowitz et al. (2007)	USA	N=380	Coping with stress	8 weeks
Sawyer et al. (2010)	Australia	N=5634	Beyond Blue	10 weeks
Pössel et al. (2013)	Germany	N=518	Lars & Lisa	10 weeks

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

2.14.2 Design. As outlined in the inclusion criteria, all studies employed a random control design. Five studies employed an alternative intervention control group and received a higher weighting (WoE A) as this provides comparison with other intervention approaches, increasing the legitimacy of the research by reducing the risk of placebo and maturational effects (Gillham et al., 2007; Horowitz et al., 2007; Pössel et al., 2013; Sportel et al., 2013; Stallard et al., 2012). An obvious strength of the included studies is the random control design, which provides the most effective method to tentatively establish causality in an unbiased way whilst also increasing internal validity (Crosby, Diclemente & Salazar, 2011) Studies which completely randomised participants received a higher weighting than those which block randomised schools or classes (Gillham et al., 2007; Horowitz et al., 2007; Rodgers & Dunsmuir, 2015). The approach taken for the current study is similar and randomly assigns participants to the intervention or the control group.

Similar to the current study, control groups generally received regular wellness, well-being or personal, social and health instruction (Spence et al., 2005). Active control groups received psychotherapy adolescent skills training (IPT-AST), which included a focus on interpersonal skill and coping with difficult situations (Horowitz et al., 2007), non-specific humanistic intervention (Pössel et al., 2013), an intervention for adolescent stress (Penn Enhancement Program) (Gillham et al., 2007), cognitive bias modification (Sportel et al., 2013) or attention control intervention (Stallard et al., 2012). The relevance of the use of an alternative intervention programme is that it reduces the impact of desirability effects and establishes the efficacy of one form of intervention in comparison to another (Horowitz et al., 2007).

Studies which collected follow-up information at periods following the intervention also received a higher weighting (WoE A) as provision of follow-up information provides evidence of endurance of intervention effects or delayed effects (Smith & Pellegrini, 2000). All nine studies provided follow-up data, with four studies rated highly with follow-up data collected at multiple time points following the intervention (Gillham et al., 2007; Pössel et al., 2013; Spence et al., 2005; Sportel et al., 2013).

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

2.14.3 Replicability and Fidelity. This review was concerned with identifying studies which contribute to the evidence-base for the effects of universal, school based CBT and so studies which outlined specific, replicable, manualised intervention programmes were weighted higher than those that did not. Studies which delivered the intervention on a universal level, without targeting students based on specific non-clinical factors, and provided information on the fidelity and integrity of the delivery of the intervention also received a higher weighting (WoE B).

Eight of the reviewed studies used established manualised intervention programmes. All programmes were CBT based and included ‘Think Health and Well-Being’ (Tomyn et al., 2016), ‘Friends for Life’ (Rodgers & Dunsmuir, 2015), ‘Lars & Lisa’ (Pössel et al., 2013), ‘Beyond Blue’ (Sawyer et al., 2010), ‘Coping with Stress’ (Horowitz et al., 2007), ‘The Resourceful Adolescent’ (Stallard et al., 2012) and the ‘Penn Resiliency Programme’ (Gillham et al., 2007). Only one study did not use an established manualised intervention programme, instead using a programme developed by the researchers and received a lower weighting, as this raises issues with replicability (Sportel et al., 2013). Intervention length also varied between six (Tomyn et al., 2016) and twelve sessions (Gillham et al., 2007), with most studies lasting ten sessions and varying from 45 to 90 minutes in length. The current study made use of a manualised intervention programme with a DBT approach, it took place over six sessions, similar to the study by Tomyn et al. (2016).

Each of the intervention programmes were based on CBT and psycho -education. They utilised different approaches in terms of small group, whole class and individual activities. All the interventions included core CBT skills; relaxation, thoughts, cognitive restructuring, emotional regulation, coping, problem-solving skills, linking thoughts, feelings and behaviour, challenging negative thoughts and mood monitoring. A range of pedagogical methods were also included such as cartoons, diaries, games, homework and workbooks. One study took place after the school day (Sportel et al. 2013). Facilitators of the programme varied from teachers to psychologists. Studies which included methods of ensuring fidelity and integrity, outlined the use of training manuals, facilitator training, evaluation sheets, audio and visual recordings, and supervision and integrity sessions received a higher weighting (WoE C). Four studies included sufficient information to receive a high weighting for fidelity (Gillham et al., 2007; Horowitz et al., 2007; Pössel

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

et al., 2013; Rodgers & Dunsmuir, 2015), with two studies receiving a lower weighting due to lack of information in this area (Tomyn et al., 2016).

2.14.4 Measures. As this review was concerned with changes in emotions, all studies measured changes in emotions or emotional processes. There was a dearth of information pertaining to particular emotional regulation processes such as problem-solving, cognitive restructuring or overall emotional regulation abilities. One study provided information on participant problem solving ability and so received a higher weighting (WoE C). Several studies measured changes in domains which were considered non-relevant and so information on these domains was not included for appraisal or discussed in the review. Included studies focused mainly on anxiety or depression. Measures used included the Revised Child and Anxiety and Depression Scale (Chorpita, Yim, Moffitt, Umemoto, & Francis, 2000), The Spielberg Test Anxiety Inventory (Spielberger, 1980), The Moods and Feelings Questionnaire (Wood, Kroll, Moore, & Harrington, 1995), The Resiliency Scale (Prince-Embury, 2007), The Spence Anxiety Scale (Spence, Barrett, & Turner, 2003), Children's Depression Inventory, Centre for Epidemiological Studies Depression Scale (Roberts, Andrews, Lewinsohn & Hops, 1990), the Beck Depression Inventory (Beck, Steer, & Brown, 1996), Youth Self-Report of the Child Behaviour Checklist (Achenbach & Ruffle, 2000), Cope Inventory (Litman, 2006) and the Optimistic Thinking Scale. Similar measures of depression were used by two studies (Gillham et al., 2007; Horowitz et al., 2007) and two studies made use of the mood and feelings questionnaire (Stallard et al., 2012; Tomyn et al., 2016). Due to the wide variety of measures used it was difficult to consolidate and compare the results of interventions.

Each study measured changes from baseline to a follow-up or a number of follow-up points. Studies in the review used other measures such as measures of self-esteem or body image, but these were excluded based on relevance to the review. The majority of the studies received a high weighting due to the use of highly reliable and valid measures. All studies, apart from one (Rodgers & Dunsmuir, 2015), relied solely on self-report measures. The relevance of this study is the use of more than one respondent which enables triangulation and adds to the reliability and validity of the results (Mertens, 2014). Although adolescents are considered to be reliable in terms of providing self-report, and self-report is the most appropriate way to measure changes in internal emotion or emotional regulation strategies, relying purely on self-report may reduce the external

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

validity of the intervention, with multiple sources providing more comprehensive information on intervention effects (Donaldson & Grant-Vallone, 2002). Similar to this study, the current study collects data from both student and parent participants to enable triangulation of findings and provide more comprehensive information on the impact of the intervention (Tashakkori, Teddlie, & Teddlie, 2003).

Studies which collected information with a reliable and valid measure and provided reliability co-efficient for measures received a higher weighting under WoE A. This resulted in four studies receiving a high weighting in this area (Horowitz et al., 2007; Pössel et al., 2013; Spence, Sheffield, & Donovan, 2003; Tomy et al., 2016), two studies receiving a medium weighting (Gillham et al., 2007; Sportel et al., 2013) and three studies receiving a low weighing due to lack of provided information on reliability of measures. The reviewed research studies focused mainly on the effect of the CBT interventions on symptoms of anxiety and depression. Studies did not collect information on overall changes in participant emotional regulation abilities (Gross, 1998). Positive emotional regulation and coping abilities have been outlined as an important skill for adolescent development (Auerbach et al., 2010). The current study will address this gap and investigate the effect of the intervention on overall participant emotional regulation (Auerbach et al., 2010; Gratz & Roemer, 2004).

2.14.5 Results. Several studies found a positive immediate effect of CBT intervention on problem-solving skills and reported anxiety and depression in adolescents (Horowitz et al., 2007; Rodgers & Dunsmuir, 2015; Spence et al., 2005; Sportel et al., 2013). The study by Horowitz et al. (2007) found a significant effect for ‘Group’ on depression symptoms following the intervention, with small effect sizes for both the active CBT group ($d=.37$) and for the IPT-AST group ($d=.26$), compared with the control group. For those with higher scores at baseline, effects were greater for both active intervention groups ($d=.89$, $d=.84$). A similar trend emerged in the study by Gillham et al. (2007), which found that the CBT intervention prevented elevated symptoms of depression compared to no intervention but not compared to the other active intervention. For this study, reduction in symptoms was non-significant when the sample was analysed by schools, with the CBT intervention having a significant effect on two out of three class groups (Gillham et al., 2007). Findings of the study by Sportel et al. (2013) suggest that participants in the CBT and alternative intervention conditions showed a larger reduction in symptoms of anxiety than the control, with small to moderate effects evident for this

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

intervention. Given that both groups in these studies showed a similar reduction in scores it cannot be concluded that the CBT intervention was more effective than the alternative intervention.

Likewise, in a further two studies ratings of depression and negative problem-solving strategies in the CBT intervention group were significantly reduced post-intervention, this was particularly significant for those with higher levels of depression at baseline (Spence, Sheffield, et al., 2003; Spence et al., 2005) The study by Rodgers and Dunsmuir (2015) found anxiety scores reduced significantly between pre-intervention and post-intervention for the intervention group but not for the control group, this trend continued to follow-up. Parent questionnaires followed a similar positive trend. At twelve months there was no difference between groups with a decrease in overall social and test anxiety for all participants from pre-test to two year follow up regardless of intervention group. For all conditions effect sizes were large.

In contrast to the aforementioned research which found positive and significant effects of the intervention, two studies found no significant differences between groups following the intervention (Sawyer et al., 2010; Tomy et al., 2016). The study by Stallard et al. (2012) found no significant differences between the intervention and the alternative intervention control group post-intervention and in fact found symptoms of depression were significantly worse in the intervention group at 12 month follow up. For two studies participants in the CBT intervention group displayed increased scores in terms of depression immediately following the intervention or at 12 month follow-up (Pössel et al., 2013; Stallard et al., 2012). However, in the study by Pössel et al. (2013) participants in the CBT group displayed significantly lower scores at four month follow up when compared to the alternative intervention group ($g=.29$). This suggests that there is a possibility that effects of the intervention may be delayed. Three studies found that initial improvements were not maintained over time (Horowitz et al., 2007; Pössel et al., 2013; Spence et al., 2005). This may suggest the need for ongoing intervention to support continued use and development of skills.

Studies which provided effect sizes for some measures received a higher weighting for WoE A, with four studies receiving a high weighting in this area (Horowitz et al., 2007; Sawyer et al., 2010; Spence et al., 2005; Sportel et al., 2013). In studies which compared low risk and high risk participants, effects were found to be greater for those with a higher risk of depression or anxiety (Horowitz et al., 2007; Stallard et al.,

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

2012; Tomy et al., 2016). The outcomes of each of the studies are outlined in Table 5, p.38.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Table 5

Outcomes of the Included Studies

Study	Method/Design	Measures	Outcome
Spence et al. (2005)	Pre/Post/Follow up control design	Beck Depression Inventory (BDI)	The intervention group showed a reduction in depression and improvement in problem solving following the intervention when compared to the control; this was not evident at follow-up. Those with higher levels at baseline showed the greatest reduction
Tomyn et al. (2016)	Pre/Post/Follow up control design	Mood and feelings questionnaire	The intervention group showed improvement in scores following the intervention, but a non-significant interaction was found
Gillham et al. (2007)	Pre/Post/Follow up control design with alternative intervention group	Children's depression inventory	In two of three schools the CBT based intervention was found to lead to lower scores of depression, which persisted over the follow --up period.
Rodgers and Dunsmuir (2015)	Pre/Post/Follow up control design	Spence Anxiety Scale (child and parent)	The intervention group showed a reduction in anxiety following the intervention which continued to four month follow up
Sportel et al. (2013)	Pre/Post/Follow up control design with alternative intervention group	Revised child anxiety scale Spielberg test anxiety inventory	An intervention effect was found for both active groups, this was insignificant by 6 month follow -up
Stallard et al. (2012)	Pre/Post/Follow up control design with alternative intervention group	Short mood and feelings questionnaire	No evidence of reduced depression in the intervention group and this group had higher depressions scores at follow-up
Horowitz et al. (2007)	Pre/Post/Follow up control design with alternative intervention group	Children's depression inventory & Coping orientation to problems experienced inventory	A small intervention effect was found for both active groups
Sawyer et al. (2010)	Pre/Post/Follow up random control design	Centre for Epidemiological Studies Depression Scale Coping actions Optimistic thinking	The intervention was found not to be effective in reducing depression scores in participating students.
Pössel et al. (2013)	Pre/Post/Follow up random control design	Children's depression inventory	The CBT intervention group showed a significant decrease in scores of depression sooner than the control or active intervention group. But effects did not persist at follow- up.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

2.15 Phase Two: Review of Research: Effect of Universal School Based DBT for Adolescents

Two studies which employed a DBT approach in schools were identified. The key characteristics of the studies are outlined in Table 6.

Table 6

Key Characteristics of the Studies

Study	Location	Participants	Intervention	Duration
Flynn et al. (2018)	Ireland	N=78	DBT-Steps A	22 weeks
Zapolski and Smith (2017)	USA	N=53	DBT intervention developed by researchers	9 weeks

2.15.1 Participants. Overall, 131 students were included in this review of school-based DBT. One study was undertaken in Ireland and the other was undertaken in the United States of America. The participants in the study by Zapolski and Smith (2017) were on average 12.7 years of age. Participants in the Flynn et al. (2018) study were 15 years of age. The study by Flynn et al. (2018) received a higher rating as it used a universal delivery of the DBT intervention programme. The study by Zapolski and Smith (2017) delivered the intervention to students identified by teachers as needing support. This study did not include an active comparison group, which resulted in a lower weighting (WoE A), as without an active comparison group it is difficult to ascertain if it was the programme that resulted in change or maturational effects or other variables. Groups were compared at baseline for differences between groups in terms of their genders, ages and socio-economic status and baseline scores which enabled the identification of group equivalence and receipt of a higher weighting (WoE A). Unlike the study by Zapolski and Smith (2017) and Flynn et al. (2018) the current study makes use of a random control design (RCT) and a control group which adds to the validity of the intervention effects and focuses more on a universal sample (Crosby, Diclemente & Salazar, 2011).

2.15.2 Design. The study by Flynn et al. (2018) employed a between-within subject, quasi-experimental design to investigate the change of scores over time for the participants. Schools were block randomised to intervention or control condition, which resulted in a medium weighting (WoE A). Only two matched schools were used for the analysis comprising of 78 all-female, participants and provided data pre- and post-

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

intervention. In contrast to this, the current study randomly assigned participants to groups as opposed to block randomisation which can result in selection bias (Mertens, 2014). It also includes a mixed gender grouping, with data collected at pre-intervention, post intervention and at follow up points, which provides further information as to the possible effect of the intervention and the endurance of such effects (Mertens, 2014). The study by Zapolski and Smith (2017) also employed a pre-post intervention design and so received a lower overall score due to lack of a random control group, however, the current study includes a random control group which adds to the reliability of the findings (Mertens, 2014) (WoE).

2.15.3 Integrity and Fidelity. In the Flynn et al. (2018) study, teachers were provided with training, support and feedback from trained professionals and the use of a manual. Only two schools delivered the whole intervention and lack of information was provided on the methods used to ensure integrity and fidelity of delivery. The current study makes use of a fidelity checklist and an outlined module with modifications to ensure fidelity and integrity of the programme (Breitenstein, Gross, Garvey, Hill, Fogg, & Resnick, 2010). Several schools also reported insufficient time provided for the sessions as class times were significantly shorter than the 50 minutes needed to deliver the sessions. Unlike this study the current research study will ensure that 55 minute time periods are available to deliver the intervention. The intervention in the study by Zapolski and Smith (2017) was delivered by trained clinical psychology students, similar to the current study which is delivered by a trainee educational psychologist. The programme was run during the school day with one 45 minute session delivered over nine weeks. Session topics corresponded with the DBT modules on mindfulness, emotion regulation, distress tolerance, and interpersonal-skills.

2.15.4 Intervention. The study by Flynn et al. (2018) made use of the DBT-STEPS-A manualised intervention programme, delivered over 22 sessions over the school year on the topics of distress tolerance, emotional regulation, interpersonal effectiveness and mindfulness. The study by Zapolski and Smith (2017) lasted nine weeks and did not use an established manualised intervention programme, but did include DBT Skills: describing emotions, taking care of your body, managing emotions, relaxation skills and problem-solving. This study received a lower weighting due to lack of a manualised intervention (WoE C).

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

2.15.5 Measures. Each of the studies in this review made use of different measures, The study by Flynn et al. (2018) made use of the DBT Ways of Coping Checklist (DBT-WCCL)(Neacsiu, Rizvi, Vitaliano, Lynch, & Linehan, 2010) ($\alpha = 0.8$). This study also made use of the Second Edition of the Behavioural Assessment System for Children (BASC-2) (Reynolds, 2004); which collects information on behavioural and emotional functioning. This study received a high weighting (WoE A) due to the use of two reliable measures; however, it received a lower weighting for sources of information as information relating to change was only collected from students themselves in the form of self-report. Likewise, the study by Zapolski and Smith (2017) made use of the EPPS-P-Child Version a Likert scale of self-report to measure impulsivity related traits using two scales, with moderate to high reliability($\alpha=.78$ and $\alpha=.92$). This study also made use of the Mood-Based Questionnaire (MBQ-C). This measure also assesses likelihood to engage in risky behaviours on a Likert scale, this tool showed good internal consistency (.85–.92). Data collected from both studies was through self-report from participating adolescents, although this is an appropriate means to collect data from this age group, self-report alone as a tool for gathering information can reduce the external validity of the data (Mertens, 2014). Neither of the measures used specifically focus on the concept of emotional regulation, this research will examine the impact of the intervention on participant emotional regulation by utilising a questionnaire which aligns with the concept of emotional regulation (Gratz and Roemer, 2004).

2.15.6 Results. For the O' Flynn (2018) study complete data sets were not obtained for each school as only two schools had completed the whole programme. There was also a 26% attrition rate for collection of data at time 4. Overall, there was a statistically significant change in Emotional Symptom Index Scores and Internalising Problem Scores on the BASC-2 (Flynn et al., 2018); changes in self-report on the Emotional Symptoms Index and the Internalising problem scores of the BASC-2 with a medium to large effect sizes ($d=.65$ and $d=.83$). The study by Zapolski and Smith (2017) found a significant decrease in intentions to engage in risky behaviours due to positive mood, and marginally significant changes for negative mood. The significance of these studies are that they suggest DBT as a school-based intervention may lead to positive effects for adolescent participants in terms of their emotional symptoms, internalising problems, risky behaviours and negative mood. The outcomes of the studies are summarised in Table 7, p.42.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Table 7

Outcomes of the Included Studies

Study	Design	Measure	Results
Flynn et al. (2018)	Quasi-experimental pre-post design	Behaviour assessment system for children- 2 nd edition	The intervention group showed a significant improvement on both the Emotional Symptom Index scores and Internalising Problem Scores
Zapolski and Smith (2017)	Pre-post design	EPPS-P-Child Version (UPPS-P-C) Mood-Based Questionnaire (MBQ-C).	Participants showed a significant decrease in intentions to engage in risky behaviours due to positive mood, and marginally significant changes for negative mood

2.16 Synthesis of Findings

The objective of this systematic review was to evaluate the efficacy of school-based CBT and DBT interventions on adolescent emotional regulation (ER) and the experience of students and teachers of such interventions. There was a dearth of qualitative data on student and teacher experiences of such interventions and three studies were identified for review. Eleven quantitative studies met the criteria for inclusion and were evaluated using Gough’s (2007) weight of evidence framework. This review found mixed evidence for the effect of school-based CBT and DBT on ER of adolescents. One included study received a low weighting (Zapolski & Smith, 2017), seven studies received a medium weighting and three studies received a high weighting (Spence et al., 2003; Gillham et al., 2007; Horowitz et al., 2007).

The study by Tomy et al. (2016) found an improvement in scores for the intervention group following the intervention, however this was non-significant and was most evident for those with already high levels of depression. This was similar to other studies suggesting that school-based CBT and DBT interventions may have a more significant impact on those with already high levels of depression or anxiety (Spence et al., 2003; Horowitz et al., 2007). Three studies received a high weighting and reported effect sizes in the small (Horowitz et al., 2007; Spence, Sheffield, et al., 2003) to moderate range (Gillham et al., 2007). The studies by Horowitz et al. (2007) found that the CBT intervention had a slightly greater effect on adolescent depression than an alternative intervention, likewise the study by Gillham et al. (2007) found a positive and significant effect of the CBT intervention on adolescent depression in two out of three schools. Similarly, the study by Spence et al., (2003, 2005) revealed that ratings of depression and

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

negative problem-solving strategies in the intervention group were significantly reduced. These studies received a high weighting on the WoE framework due to a variety of factors which increase the confidence behind the supposition that it was the CBT or DBT that led to the change in the reported change in emotions.

Strengths of these studies include a moderate to large sample size, use of an alternative intervention and the random allocation of participants (Spence et al., 2003; Gillham et al., 2007; Horowitz et al., 2007; Sportel et al., 2013). A further strength of the studies include the collection of data at follow-up. Similarly, the current study randomly assigned participants to the intervention or control group and collects data over three time points. Nonetheless, these studies are not without their limitations, which include inadequate fidelity checks for therapists delivering the programme and the collection of data solely through adolescent self-report (Horowitz et al., 2007; Sportel et al., 2013). Likewise, the study by Spence et al. (2003) and Gillham et al. (2007) collected data through self-report alone. The collection of data through one source or one method reduces the validity of the research (Mertens, 2004). In contrast, the current study collects data from parents, students and teachers in both qualitative and quantitative forms, leading to triangulation and adding to the validity of the results. It also makes use of fidelity checklists and a manualised intervention delivered by a therapist to promote the integrity of the intervention (Mertens, 2014; Horowitz et al., 2007). Further limitations of the studies by Spence et al. (2003) and Gillham et al. (2007) include a low recruitment rate and a high level of attrition of participants. Both studies collected data on report of adolescent depression, however, the current study also focuses on collection of data in relation to emotional regulation as opposed to symptoms of depression and adds to the research on the effect of such interventions on this concept (Spence et al., 2003, 2005).

Six other studies received an overall medium weighting on the WoE framework. Four studies found some improvement in scores for the CBT or DBT intervention group following the intervention (Sportel et al., 2013; Rodgers & Dunsmuir, 2015; Tomyne et al., 2016; Flynn et al., 2018). The significance of the study by Rodgers and Dunsmuir (2015) was that it collected data from both students and parents, the collection of information from multiple sources adds to the validity of the conclusions drawn from the data, this was the only study to collect data from multiple sources (Mertens, 2014). Several studies found that the CBT intervention resulted in a more positive outcome for students when compared with an alternative intervention (Pössel et al., 2013; Horowitz et

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

al., 2007), with one study finding a similar result for both active groups (Sportel et al., 2013). Two studies which received an overall medium weighting found there was no effect due to the CBT intervention (Sawyer et al., 2010; Stallard, 2009). The participants in the study by Sawyer et al. (2010) reported no change in reported depression scores following the intervention, however, the participants in the study by Stallard (2009) found the CBT intervention group to have higher scores of depression following the intervention. The significance of this study is that it suggests universal, school-based CBT or DBT may not always result in positive or neutral outcomes for participants and may in fact lead to worsening of symptoms.

The study by Flynn et al. (2018) found that the intervention group displayed an improvement in scores of emotional symptoms and internalising problems following the DBT intervention, the significance of this study is that it is one of the first studies to research school-based DBT and to suggest positive effects. Similar to this, the study by Zapolski and Smith (2017) also looked at the effect of school based DBT, this study used a pre-post design and received a low weighting overall due to lack of a control group, which means results must be interpreted with caution. However, outcomes of this study, like that by Flynn et al. (2018) suggest positive outcomes following the intervention including a reduction in risky behaviours, increased positive mood and changes in negative mood. Another limitation to this study and that of Sportel et al. (2013) was that they focused on participants referred by teachers for behaviours or anxiety and although participants were not selected based on diagnosis, they were not strictly universal, which reduces the generalisability of the findings to universal populations.

Studies which collected data at follow up received a higher weighting. Several studies found significant differences between groups immediately following the intervention (Spence et al., 2003; Horowitz et al, 2007; Rodgers & Dunsmuir, 2015; Sportel et al., 2013; Pössel et al., 2013), only two studies found positive outcomes continued at four month follow up (Sportel et al., 2013; Rodgers & Dunsmuir, 2015). This may suggest that the positive impact of school based CBT and DBT may not be enduring or there may be the need for continuous intervention as opposed to one off programmes (Government of Ireland, 2018).

When compared to other interventions it is possible that CBT may provide more rapid effects, but may not have a more significant effect than other approaches (Horowitz et al., 2007; Sportel et al., 2013). In terms of outcomes, much research has looked at

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

changes in symptoms of emotional conditions such as depression or anxiety, although this may mark an improvement in awareness of feelings. Less research has been undertaken to look at the effect of interventions on the general concept of emotional regulation, with only two studies examining skills such as problem-solving or coping strategies (Sawyer et al., 2010; Spence, Sheffield, et al., 2003). This suggests that there is a gap in the research in terms of the effect of such interventions on overall emotional regulation abilities which the current study seeks to address (Gratz & Roemer, 2004). The majority of CBT and DBT intervention studies focused on participants in early adolescence, with only two studies focusing on participants above the age of 15 years, with an identified lack of research as to the effect of universal school based CBT or DBT on students in middle to late adolescence (Flynn et al., 2018; Pössel et al., 2013).

The qualitative studies included in this review made use of focus groups (Taylor et al., 2014; Garmy et al., 2015), with one included study by Flynn et al. (2017) making use of questionnaires. Limitations of these data collection methods, particularly with adolescent populations, have been identified (Taylor et al., 2014). In contrast to these studies, this research will make use of individual interviews with participants to gain more in-depth information from student participants and gather the student voice in relation to their experience of the intervention. Unlike the study by Garmy et al. (2015) and Taylor et al. (2015) the current study employs a DBT intervention, however it will build on the data gathered from this research in order to modify an intervention to include more active and co-operative learning approaches, along with use of multimedia and visuals. Limitations of reviewed studies have been identified as reduced validity due to narrow sources or measures, lack of transparency on analysis, restrictions in data collection methods and limited samples.

This review has critically analysed the identified research reports relating to school-based, universal CBT and DBT interventions. There is a dearth of qualitative data in relation to this concept, there is a need for more in-depth exploration of what works for such interventions in terms of participant experience and learning and feasibility in schools, particularly in the Irish context (Taylor et al., 2014; Garmy et al., 2015; Flynn et al., 2017). Furthermore, evidence gathered from this review in relation to the effect of school based CBT and DBT cannot confidently support the effect of universal, school-based CBT or DBT interventions due to the inconsistency of results of the outlined studies

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

and the identified limitations, particularly in the Irish context due to an overall limited research pool.

2.17 Rationale and Aims of the Current Study

As outlined by the literature review, there is a dearth of qualitative data on CBT and DBT universal interventions, undertaken in the school setting. Reviewed qualitative studies had limitations in their data collection and analysis methods and also suggest that previously implemented interventions lacked active learning approaches (Taylor et al., 2014; Garmy et al., 2015; Flynn et al., 2017). There was a lack of research in terms of student experience of such interventions in the Irish context. In terms of quantitative data as well as a lack of research on the effects of such interventions on skills related to emotional regulation (Horowitz et al, 2007; Spence et al., 2003). This research aims to build on the previous research into outcomes of the DBT-Steps A programme by Flynn et al. (2018), by implementing outlined differentiation methods as suggested by Flynn et al. (2017); this will include the programme being run by a Trainee Educational Psychologist, running the recommended first module, using multimedia support, ensuring all components of the module can proceed and including more creative supports for students (visuals, games, group work etc.) These changes will be based on both the results of the previous study of the DBT Steps-A intervention programme (Flynn et al. 2018) and on the diverse way that children and young people learn through the use of visual, auditory and kinaesthetic channels (Wyman et al., 2010). This research aims to establish ‘What Works’ for such universal, school-based, interventions with older adolescents with the intention of providing information for future intervention developers, teachers or Educational Psychologists wishing to develop, deliver or modify school-based interventions.

The emotional regulation module was selected for this study as a review of the literature highlighted the importance of emotional regulation in this critical period and its longstanding impact on positive outcomes for youth. Difficulties with emotional regulation abilities have a significant impact on the emergence of psychological disorders and lead to more negative outcomes for individuals in relation to their mental health (Goldin et al., 2014; Gross & Muñoz, 1995). Adolescence is a period of time during which emotional regulation skills continue to develop and by instructing adolescents effectively in developing strategies to self-regulate and cope with their emotions, we are promoting

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

their current and future mental health (Auerbach et al., 2010). No reviewed research study investigated emotional regulation, or the effect of intervention programmes on overall emotional regulation. It is important to understand the efficacy of intervention components in order to put in place effective evidence-based school-wide interventions (Horowitz et al., 2007; Gratz & Roemer, 2004).

Overall, the current study aims to research the effect of a modified emotional regulation module, with a DBT approach on participants' emotional regulation development. There is some evidence that universal, school-based, cognitive or dialectical behavioural therapy can have a positive effect on individuals, in terms of emotional functioning, problem-solving or coping-abilities (Durlak et al., 2004; Flynn et al., 2007; Horowitz et al., 2007; Spence et al., 2005). Although there are many studies with a quantitative approach exploring the impact of school-based universal CBT and DBT, less research exists in the qualitative form and there is less information available on the experiences of adolescents and teachers taking part in such programmes and their perceptions of such curricula (Garmy et al., 2015; Taylor et al., 2014; Grover, 2004). This research also aims to fill the gap in the literature by collecting qualitative data on participant experience. Qualitative data has been deemed especially important for intervention research particularly, as in this research, when examining what works and for whom in what situations, research investigating new models of practice and those which modify interventions to fit particular populations (Gilgun & Sands, 2012). This programme will be undertaken in the Irish context, making use of semi-structured interviews to collect data on Irish pupils' and their class teacher's perceptions and experience of the intervention programme. It will elicit information from the participants concerning development and generalisation of skills and will aim look at both the experience and feasibility of a school-based emotional regulation programme.

Pursuing this study will offer further insight into aspects of universal, school-based DBT interventions; identifying aspects of interventions which are deemed appropriate, barriers to implementation, factors which may promote the effect and sustainability of such interventions along with their practical impact (Taylor et al., 2014; Garmy et al., 2015; Flynn et al, 2017; Zapolski & Smith, 2017; Flynn et al., 2018). It will potentially provide data on the impact of a modified module of the DBT-Steps A programme, paving the way for future research into other modules of this intervention programme and potentially outlining 'what works' for youth when running such

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

interventions (Taylor et al., 2014; Garmy et al., 2015). This could theoretically influence creation and application of future emotion-focused interventions. The use of a mixed methods approach and semi-structured interviews following the intervention will aid with the collection of such rich data (Mertens, 2014). It is important that such programmes are evaluated in both a quantitative and qualitative format to inform programme components and subsequent delivery.

2.17.1 Study Rationale:

- Results for universal, school based CBT and DBT are conflicting, with varying effects found among the reviewed studies. It is not possible to conclude that universal, school-based DBT or CBT interventions have a positive, negative or neutral effect on emotional regulation for adolescents (Spence et al., 2005; Sawyer et al., 2010; Stallard et al., 2012);
- There is a dearth of research into the effect of school based, universal intervention using a dialectical behavioural therapy approach. This study aims to build on previous research by examining the effect of a school based DBT interventions. This study focuses on the effect of the intervention on adolescent emotional regulation and builds on limitations of previous studies by using a mixed methods approach to collect data from multiple sources, leading to triangulation, and using semi-structured interviews to get an in-depth understanding of participant experiences of such interventions in the Irish context (Flynn et al., 2017; Zapolski & Smith, 2017; Creswell, 2014);
- All studies, apart from one, collected data through self-report alone (Rodgers & Dunsmuir, 2015). Although self-report measures are appropriate for adolescent populations the use of multiple sources of data can add to the validity of results. Collecting data and triangulation of such from other sources will provide information on generalisation of effects and add to the internal validity of the research (Mertens, 2014);
- Overall, there is a lack of research in the Irish context, particularly with older adolescents and particularly in relation to gathering qualitative data in terms of facilitators, teachers and data on the ‘student voice’ and the student experience of school-based, universal DBT interventions (Flynn et al., 2017; Grover, 2004; Rogers and Dunsmuir, 2015). Reviewed studies relied on focus groups and survey

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

questionnaires (Flynn et al., 2017; Garmy et al., 2015; Taylor et al., 2014). The use of the use of interviews will provide more in-depth reflections from participants gathering data from the student voice on the intervention and examining its feasibility and efficacy as a school based intervention in the Irish context;

- Though the research has focused on the effects of CBT and DBT on presenting anxiety and depression symptoms There was a lack of research on the impact of the interventions on participants overall emotional regulation abilities, which should be promoted in adolescents (Auerbach et al., 2010; Gross et al., 2006). This study will investigate the effect of the intervention on overall participant emotional regulation which has been outlined as an important skill for adolescent development (Auerbach et al., 2010; Gratz & Roemer, 2004);

This small scale study aims to answer two questions.

- 1) What is the effect of a modified, emotional regulation module on reports of student emotional regulation?
- 2) How do students and facilitators perceive the experience of taking part in the intervention?

Chapter Three: Methodology

3.1 Overview of the Chapter

The aim of all research is to build on knowledge, generate new information or solve a problem. In relation to the field of Educational Psychology, research aims to study aspects of teaching and learning and their implication for the individual, school and the wider society (Rubie-Davies, 2010). In intervention research the aim is to establish efficacy and effectiveness of particular programmes which may lead to influences on educational policy and educational psychology itself (Corno & Anderman, 2015). The purpose of this research was to assess the impact of a modified emotional regulation module of the DBT Steps-A, on student emotional regulation and examine the experience of students, and their teacher, of taking part in the programme. The literature has outlined some benefits of universal school-based emotion-focused, therapeutic programmes for adolescents and highlighted initial positive results from pilot studies of this intervention. However, in light of previous research, further research is necessary to establish the effectiveness of a modified module of the programme and ‘what works’ for such intervention programmes with adolescents. The programme was modified based on previous research into this specific intervention, but also based on qualitative evidence from studies of other emotion-focused, universal interventions which supported the use of active learning strategies and the inclusion of social-learning approaches with multimedia support (Flynn et al., 2018; Flynn et al., 2017a; Garmy et al., 2015; Taylor et al., 2014).

Chapter one and two of this thesis highlighted the focus of the research and following formulation of the research questions, the research methods which enabled these questions to be answered were identified. This chapter will outline and justify the choice of research methodology selected for this project and will also described:

- Aim of the Study
- Epistemological Stance and Study Design
- Participants
- Setting
- Measures
- Procedure
- Ethics
- Data Analysis Methods

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

- Reliability and Validity
- Researcher Reflexivity

3.2 Aim of the Study

This research took place in an urban, post-primary school with a group of Transition Year students. Transition Year is a one year programme which takes place between the Junior and Senior certificate exam cycles in Irish post-primary schools. The aim of this research was to establish the impact of a modified version of the emotional regulation module and to research the experiences of those taking part in the intervention, along with its feasibility as a school-based intervention for this population. This research was designed to identify evidence of changes which occurred following participation in this school-based intervention and to provide a voice for students and their teacher to detail their experience of taking part in this intervention. This study represents a unique contribution to school-based mental health programmes and particularly to the literature on the DBT STEPS A (Mazza et al., 2016) intervention. This research examines the effect of one component of the programme and will build on previous research which suggested differentiation strategies which could promote adolescents' experience of and engagement with the intervention. As the programme is quite long, delivering it in a modular manner over more than one academic year may promote its feasibility. This research systematically evaluated the modified emotional regulation module of the DBT-Steps A programme and researched student and teacher experiences of such a school-based intervention. This research potentially provides a differentiated module of this intervention and, adds to the evidence base for such interventions in schools. The use of active and social learning approaches and strategies and qualitative interviews will also provide information on 'what works' for such programmes.

3.3 Epistemological and Ontological Perspective

Research is influenced by its epistemological and ontological perspective; the way knowledge is generated and the reality of the world (Crotty, 1998). This influences the paradigm of the researcher. The research paradigm is a view of research with associated assumptions, principles and practices (Johnson & Christensen, 2010). There are four major paradigms; post-positivism, constructivism, transformatism and pragmatism. Post-positivist research asserts that the world is objective and it is possible to study the world through empirical means (Mertens, 2014). The transformative paradigm is concerned

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

with the lived experiences of individuals and communities who are marginalised and focuses on power relationships, aiming to effect change as a result of this research (Mertens, 2008). This paradigm assumes that there are multiple realities depending on power or privilege (Mertens, 2008). The social constructivist perspective acknowledges that there are multiple subjective realities and places less emphasis on objectivity (Rubin & Babbie, 2009). It assumes there is no one reality, and knowledge is socially constructed between the individual and the world and through collaboration of the researcher and participant (Mertens, 2014). The aim of this paradigm is to interpret and understand the lived experience of the individual and the studied phenomenon (Burr, 2015).

The epistemological stance and paradigm underlying this research is pragmatism. The pragmatic approach is less concerned with the reality of knowledge and is concerned with finding what works or taking a common sense approach to the presenting research problem (Biesta, 2010; Johnson & Onwuegbuzie, 2004). “Research is designed and conducted based on what will best help answer your research question...” (Johnson & Christensen, 2010, p. 32). Pragmatism avoids the binary dualism of other paradigms. It theorizes that emerging knowledge is from both reality and the social, historical and political lived-in world (Teddlie & Tashakkori, 2009). In educational research the pragmatic paradigm is focused on solving educational problems using any research method that accurately aids in describing or solving the presenting research problem (Lodico, Spaulding, & Voegtle, 2010). The aim of the study is to add to educational research for the adolescent population and so there is collaboration with participants to achieve this aim (Lodico et al., 2010). Overall, the pragmatic viewpoint aligns with the aim of this research, which is to establish the effect of the intervention. The use of mixed methods research ensures a holistic measure of the programme, which is necessary to respond to the research questions.

3.4 Research Design

A mixed methods design was used to evaluate the efficacy of the modified emotional regulation module on student emotional regulation and its feasibility as a school-based intervention. As such collection of both quantitative and qualitative data was deemed most appropriate to answer the presented research questions (Creswell, 2013; Dunning, Williams, Abonyi, & Crooks, 2008). The use of both methods of data collection can provide compensation for weaknesses in either one in isolation, and

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

therefore strengthen results and conclusions drawn from the emerging data (Creswell & Clark, 2011; Abbas Tashakkori & Teddlie, 2010). The use of both methods can provide greater knowledge in terms of investigating the research questions and identifying solutions. Quantitative data analysis can provide empirical evidence of intervention effect, and qualitative data provides individual perspectives to aid in evaluation of the intervention (Creswell, 2013; Mertens, 2014). The use of only one method would not adequately answer the presented research questions and may lead to erroneous conclusions or the unsubstantiated notion that a solution has been found (Robson, 2002).

Quantitative data was collected from student and parent self-report of difficulties with emotional regulation, across three time points: baseline, time one and time two. The use of questionnaires aligns with the post-positive paradigm, objectively measuring change (Mertens, 2014).

Table 8

Data Collection Timeline

	September 2018	October 2018	December 2018
Quantitative Data: Student and Parent Questionnaires	Baseline Collection	Time One Data Collection	Time 2 Data Collection
Qualitative Data			Collection and analysis of student, teacher and facilitator interview and diary

Qualitative data was collected and analysed at follow-up through semi-structured interviews with students and the co-facilitating teacher and through research observations. This was to gain insight of the participant experience of the programme and the facilitator views of its feasibility and effectiveness as a school-based intervention. The use of interviews aligns with the social constructivist paradigm, subjectively collecting data on participant experiences (Mertens, 2014).

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

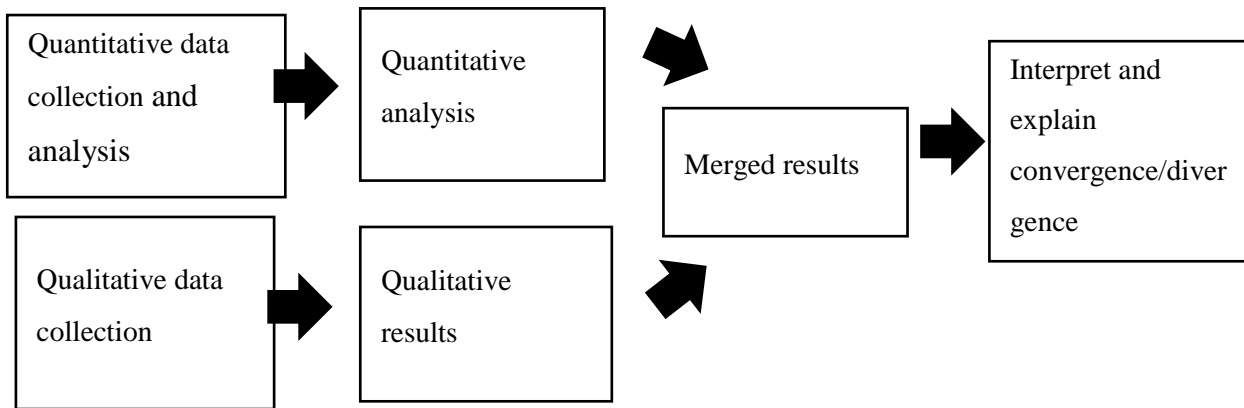


Figure 3. Convergent parallel design (Creswell, 2013)

The convergent parallel mixed methods design of this study ensures qualitative and quantitative data were collected in a concurrent and parallel manner, analysed separately and then compared (Creswell, 2013). In this study quantitative data was used to establish the intervention effect on participant and parent report of adolescent difficulty with emotional regulation, thus addressing question one of the research study. The qualitative data considered the experience of students and facilitators of the intervention, investigating its feasibility as a school-based intervention and to gain rich data in relation to the experience of those taking part in the intervention. Both methods were used to address the research questions and combined to provide an overall picture of the intervention programme. Both methods were given equal status in this study as both were necessary in order to answer each research question.

3.5 Participants

Sampling can be described as probability or non-probability. Probability sampling reduces threats to external validity and enables the generalisation of findings to a wider population (Daniel, 2011). Non-probability sampling is more beneficial in relation to exploratory research, targeting specific elements of a population or smaller more homogeneous samples (Daniel, 2011). This research took a non-probabilistic convenience approach to participant sampling as a specific population of transition year students that were available to the researcher were selected to take part. Twenty three

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

participants in Transition Year, aged 15 to 16 years old (Mean Age=15.49, SD=.531; 6 males and 17 females) participated in the research. In total 27 students were in the class, 26 consented to take part in the intervention, however, only 23 returned full data sets. Semi-structured interviews were conducted with a sample of participants ($n=7$) who had returned parental consent forms. The teacher co-facilitator and TEP observations and research diary also provided information on feasibility and aspects of the intervention.

One class of Transition Year students were randomly selected by the school counsellor to take part in the intervention. The sample included a mixed ability group from different social demographic backgrounds. The class was halved randomly, with half the group allocated to the intervention group ($n=13$) and the other half allocated to the waitlist control group ($n=13$). This was undertaken by randomly selecting student consent forms. Data was collected from both groups at three time points; at baseline, time one and time two. Following baseline collection of data the intervention group completed the intervention and the waitlist group completed their health class as usual. Time one data was then collected to establish changes from baseline and comparison between groups. The waitlist control group then completed the intervention, the use of a waitlist control group is more ethical as the group eventually receive any benefits of the intervention. The inclusion of a control group also provided more information on the causal effect of the programme and allows for the collection of data at multiple data points, including follow up data from the first intervention group (Brown & Lilford, 2006).

3.6 Setting

This research was undertaken in an urban co-educational post-primary school close to a city in the mid-west area. There are a total of around 600 pupils attending the school and about 60% of these are female. The school caters for a wide range of students from both urban and rural areas and differing socio-economic demographics.

3.7 Overview of the Intervention

The intervention used in this study was called ‘DBT Steps-A’ an emotional problem solving programme based on the principles of dialectical behavioural therapy and developed by Mazza et al. (2016). The intervention comprises of 36 lessons based on elements of mindfulness, distress tolerance, emotional regulation and interpersonal

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

effectiveness. It was not within the scope of this research study to modify and deliver all aspects of the intervention and so the emotional regulation module was chosen, due to the aforementioned importance of the development of these strategies for adolescents in relation to their well-being and mental health. This module comprises of seven sessions which encourage pupils:

...to label, identify and regulating emotions through decreasing their vulnerability factors and changing their behaviours. Students also learn how to be mindful of their emotions and how to tolerate their emotions.(Mazza et al., 2016, p. 185)

Participants are encouraged to develop an understanding of their emotions, their ability to identify them, use coping strategies such as fact checking, altering actions and problem solving and also to promote their own mental health by participating in positive experiences and looking after their physical well-being. Each session lasted approximately 55 minutes, with the class teacher attending each session. The sessions were delivered consistently on a Tuesday morning between 8.45am and 9.40am, with the exception of the final two sessions which were delivered as a double session due to constraints within the school timetable, meaning participants took part over six weeks as opposed to seven. As the intervention was manualised, all steps in each session were followed, with a fidelity sheet for each session to ensure each concept was covered sufficiently. An overview of the intervention is provided in Table 9, p.57.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Table 9.

Emotional Regulation Module (Mazza, Dexter-Mazza, Miller, Rathus, & Murphy, 2016, p.185-263)

Session	Main Points
1: Emotional Regulation: Goals of Emotional Regulation and Functions of Emotions	Aims to enable participants to understand emotions, decrease unwanted emotions, decrease emotional vulnerability and suffering. Teaches participants the function of emotion in terms of organising action, motivating, communicating to ourselves and communicating and influencing others. Explores myths about emotions and regulation of emotions.
2: Emotional Regulation: Describing Emotions	Participants are encouraged to identify emotional responses as a full system response occurring neurologically for a short period of time. Participants learn about the model of emotions, looking at triggers, biological changes, thoughts, expressions, behaviours and physiological changes.
3: Emotional Regulation: Checking the Facts and using Opposite Action	This session covers the checking the facts skill which aims to teach participants how beliefs and interpretations of events can influence emotions. Once participants have learned to appraise their thoughts in relation to emotions they then identify skills which can be used to cope with the situation. Participants learn about opposite action, how each emotion has a behaviour or urge to act in a certain way. Opposite action promotes use of an opposite behaviour or action to reverse or change the emotion.
4 Emotional Regulation: Problem Solving	In this session participants are encouraged to identify solutions for when they are experiencing an emotion that does not fit the facts. They are encouraged to identify the problem to be solved and work through the process of identifying multiple solutions, appraising and identifying the pros and cons of each solution before selecting one.
5 Emotional Regulation: The A of ABC PLEASE	This session covered the A in ABC PLEASE and encouraged participants to accumulate positive experiences. The aim of this is to reduce vulnerabilities to emotions by engaging in pleasant activities on a daily basis. Participants are also encouraged to identify values and long term goals, along with the steps necessary to achieve these goals.
6 Emotional Regulation: The BC of ABC PLEASE	Participants cover the building mastery skill which involves engagement with challenging activities to build confidence. They were also encouraged to develop skills for coping ahead, which included the identification of situations which may incur emotional responses and planning ahead for these situations, through checking the facts, visualisation and problem solving. Participants also cover the PLEASE skills which relate to treating physical illness, balanced eating, avoiding drugs and stimulants and getting exercise. The focus on this is promotion of physical well-being.
7 Emotional Regulation: The Wave Skill Being Mindful of Current Emotions	The last session includes revision of all the skills covered in the module. It also includes distraction from certain emotions at certain times but also highlights the importance of sitting and allowing ourselves to feel emotions.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Several changes were made to the intervention based on feedback from the study by Flynn et al. (2017) which suggested that students found the programme boring with too much talk and not enough activity. Modifications were made to the emotional regulation module of the intervention based on developmental and educational literature. Table 10, p.59 outlines changes made to the intervention along with rationale for these changes.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Table 10

Modifications made to the Intervention Programme

Modification	Rationale
Timing	Flynn et al. (2017a) study found that many schools had insufficient time for the intervention this study ensured 55 minutes per session
Multimedia: PowerPoint, video, music player, visuals.	This modification was highlighted by Flynn et al. (2017a) in their qualitative analysis of both student and teacher interviews, to make the sessions more engaging. Multimedia has been found to aid information retention and to reduce information learning time (Ng & Komiya, 2000). The use of multimedia has also been found to increase students awareness, learning and increase their understanding of content, whilst also being a teaching methodology they enjoy (Yueh, Lin, Jo-Yi, & Sheen, 2012). PowerPoint) have been found to increase students positive attitudes, motivation and self-efficacy (Susskind, 2005).
Video	The use of video in relation to education, has been found to reinforce material, aid in the development of knowledge acquisition, enhanced comprehension and discussion, provide accommodation for different student learning styles, whilst also increasing student motivation and enthusiasm (Brualdi, 1996; Cruse, 2006; Saltrick, Honey, & Pasnick, 2004).
Active Learning	Feedback from the qualitative interviews of the Flynn et al. (2017) study also suggested that students found the programme boring due to lack of student interaction and co-operation Active learning is an instructional tool that engages students in the process of learning by encouraging them to do meaningful activities and to think about what they are engaging in (Prince, 2004).
Questioning	Questioning, as a technique, can be used to stimulate thinking, encourage learning and promote classroom participation, as well as motivating students and advancing dialogue in the classroom (Buchanan Hill, 2016). Questioning encourages thinking skills and can deepen student understanding by requiring them to explain or elaborate on their response (Buchanan Hill, 2016) .
Collaborative Learning	Collaborative and co-operative learning relate to student's learning together, with and from each other. A large evidence base exists on the positive outcomes associated with collaborative and co-operative learning (Jolliffe, 2007). Collaborative learning can promote student motivation and achievement (Hattie & Anderman, 2013). Think pair share is one effective strategy to promote group and pair interaction (Foyle, 1995).
Discussion	Discussion is a commonly used methodological approach in many evidence based social and emotional learning curriculums and an example of best practice experiential, active learning (Bouffard, 2009; Welty, 1989). Students learn more by participating in discussions (Chickering & Gamson, 1987)
Problem Based Learning	Problem based learning can increase students self-confidence, motivation and development of learning knowledge and skills and increases overall student enjoyment (Cerezo, 2004; De Witte & Rogge, 2012).
Art, role play and Games	Games as a methodology provide an opportunity for students to develop problem solving skills (MacKenty, 2006). The inclusion of creative and artistic strategies, including art and role play, make learning more enjoyable for students, higher order thinking skills and overall help students develop a greater understanding of more abstract concepts (Crawford, 2014).

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Specific modifications made to the intervention programme included use of PowerPoint, multimedia, use of visuals, inclusion of games, art, role play, problem based learning, increased co-operative and active learning approaches. A word bank which provided vocabulary definitions was also provided to students to promote understanding. Table 11 highlights the changes made to each intervention session. A sample modified session is provided in Appendix T. The TEP delivered the intervention to the class and the class teacher acted as a co-facilitator, with a role similar to that outlined in the Taylor et al. (2014) study, providing support with classroom management, observation of students, discussion regarding the intervention and support for students during the various activities. From an ethical perspective, the class teacher was also available to students in lieu of the TEP throughout the school week (PSI, 2011).

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Table 11

Session Details and Modifications

Session	Module
1	<p>-PowerPoint: The ppt. was used to provide an overview of concepts and visual supports throughout the session</p> <p>-Visuals: Wave visual and thermometer was used to cover concepts of emotions</p> <p>-Video: The video from inside out was used to allow participants to view how we experience emotions and encourage them to identify the purposes of emotions.</p> <p>-Game: The feelings charades game provided a fun and interactive method for students to learn about how we use feelings and their physical influence</p> <p>-Pair work: Participants worked in pairs to use sticky notes to identify feelings this provided an interactive method for students to study deeper emotions</p> <p>-Collaborative and Problem Based Learning: Participants were encouraged to respond to problems more relevant to their own lives and identify when they have had anxiety that has been helpful or unhelpful. They each received a curve and identified where they were in relation to different scenarios this enabled students to see that they may have had certain feelings before which now have changes and that others experience feelings similar and different to them.</p> <p>-Time:55 minutes Provided Word bank: Word bank provided of vocabulary for students to aid comprehension</p>
2	<p>- PowerPoint: The ppt. was used to provide an overview of concepts and visual supports throughout the session</p> <p>-Pair Work: Collaborative learning was used to encourage students to discuss the myths around emotions and they worked together to decide on one they felt was most important, engaging in a joint art and collage activity to create this to be displayed in the classroom.</p> <p>-Video: To encourage think-pair-share for students to identify how long an emotion lasts</p> <p>-Visual: Visual of model of emotions, facilitator to model and discuss the process using their own relevant example, probe with questions along for students to identify other factors/situation</p> <p>-Time:55 minutes Provided Word bank: Word bank provided of vocabulary for students to aid comprehension</p>
3	<p>- PowerPoint: The ppt. was used to provide an overview of concepts and visual supports throughout the session</p> <p>-Video: This video demonstrated how our own perspective can influence our feelings, or how we interpret a situation can influence our feelings and is rated G and so is suitable for this audience</p> <p>-Pair work activity: Students in pairs identified situations where an emotion does not fit the facts using the sticky not activity. Use of problem solving encourages higher order thinking skills and active learning. It also encourages students to relate concepts to their own lives.</p> <p>-Visuals: Visuals were used to outline the check the facts and opposite action skill</p> <p>-Problem Based and Collaborative Learning: Students were provided with a situation which may have required opposite action. They worked in pairs to identify possible actions that could be taken. The use of pair work and active learning should promote student engagement and learning. This also allows students a practical way of applying the skill of opposite action.</p> <p>-Game: Small group game activity with situations and be encouraged to use the steps to use check the facts and opposite action.</p> <p>-Time:55 minutes Provided Word bank: Word bank provided of vocabulary for students to aid comprehension</p>
4	<p>- PowerPoint: The ppt. was used to provide an overview of concepts and visual supports throughout the session</p> <p>-Video: This video provided an example of problem solving, trying different solutions and the emotions that go along with trying to do this. This encouraged participants to reflect on situations where they may have experienced this and provide an introduction to the topic.</p> <p>-Think pair share to brainstorm together to see what are the steps to problem solving, this will be prompted with questioning</p> <p>-Questioning and discussion: This method was used throughout to encourage student participation and involvement e.g. how do you think you might feel in this situation? With prompting. Students will also be encouraged to use check the facts in a think pair share activity to encourage collaborative learning and peer learning</p> <p>-Group work and Problem Based Learning: The small group exercises encouraged students to think of their own problem in a larger group and solve it. Students were given problems and in pairs work</p>

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

-
- together to solve the problem. They presented this to the class. This allowed greater opportunity to monitor student learning, encourage peer learning and also allow students to see that others strategies and emotions to situations may be different to their own. Students then formed bigger groups and be encouraged to problem solve a solution to a relevant problem outlined by themselves.
- Time:55 minutes Provided Word bank: Word bank provided of vocabulary for students to aid comprehension
- 5
- PowerPoint: The ppt. was used to provide an overview of concepts and visual supports throughout the session
- Video: This video was selected as it shows the role of logical mind vs. emotional mind, about how both our emotion and logic mind can influence behaviour and actions and will be used to stimulate discussion of this and to enable participants to relate this concept to their own lives.
- Think Pair Share: Students were encouraged to discuss and reflect on paying attention in the moment and in pairs problem solved on how to increase positive experiences
- Art/Craft Activity: Students were provided with pictures and made a collage of what they enjoy or a positive activity menu which is personal to them. Some students presented these to the class
- Think Pair Share: Students engaged in think pair share and discuss what values are important to them and why
- Active Learning: Students filled in the empty ladder sheet using sticky notes and their values to put their priority value on top. They were encouraged to identify one goal based on this value.
- Game: Students will play the 'Value Snap' card game. Students will turn over a card to reveal a value and must identify a possible goal associated with this value.
- Time:55 minutes Provided Word bank: Word bank provided of vocabulary for students to aid comprehension
- 6
- PowerPoint ppt. was used to provide an overview of concepts and visual supports throughout the session -Think Pair Share: examples of mastery before sharing with the whole group
- Questioning and discussion: Used throughout section to encourage student engagement, higher order thinking skills, student problem solving strategies and to make the session more active. Sample of questions to be asked such as: What could happen your emotions when you're sick? What could affect your sleep? How could coffee effect your mood? Think pair share was also used for students to collaboratively answer questions
- Visuals: Look at handout 20.2 and this was displayed on the board. In pairs students answered the questions which were included to provide opportunity for students to link these factors to their own life and to encourage their thinking
- Group Work: Students identified in groups of three tips which they feel would be useful to promote their own sleeping habits and good sleep hygiene
- Active Learning: Students will create their own sleep plan by complete an art activity and present to the class
- Time:55 minutes Provided Word bank: Word bank provided of vocabulary for students to aid comprehension
- 7
- PowerPoint: The ppt. was used to provide an overview of concepts and visual supports throughout the session Video: Shows the reaction of a person in relation to an emotion. It also links in with the topic of emotions and behaviours and will be used as a prompt for questioning and discussion in relation to page 257.
- Questioning and Think pair share: in relation to what is the hardest part of an emotion to tolerate
- Active Learning/ Art Activity: receive an outline of a body they will be encouraged to record where on the body they feel an emotion in pairs. They will receive four copies of the body for each of the four emotions. This will then be completed as a whole class activity.
- In groups students created a life size collage of where they feel an emotion. Each group got a different emotion and present it to the class.
- Group Work and role play: students in groups used the model to problem solve. Each group were given the vignettes from the manual and used the model to demonstrate how they could use the skills to work through the presented issue. Each group presented one example to the class in a role play type activity
- Time:55 minutes Provided Word bank: Word bank provided of vocabulary for students to aid comprehension
-

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

3.8 Data Collection

As this was a mixed methods study, data was collected in both quantitative and qualitative formats to provide rich information on the phenomenon in question and address the outlined research questions. The approaches taken to collecting the data included researcher observations, student and parent questionnaires and student and teacher interviews.

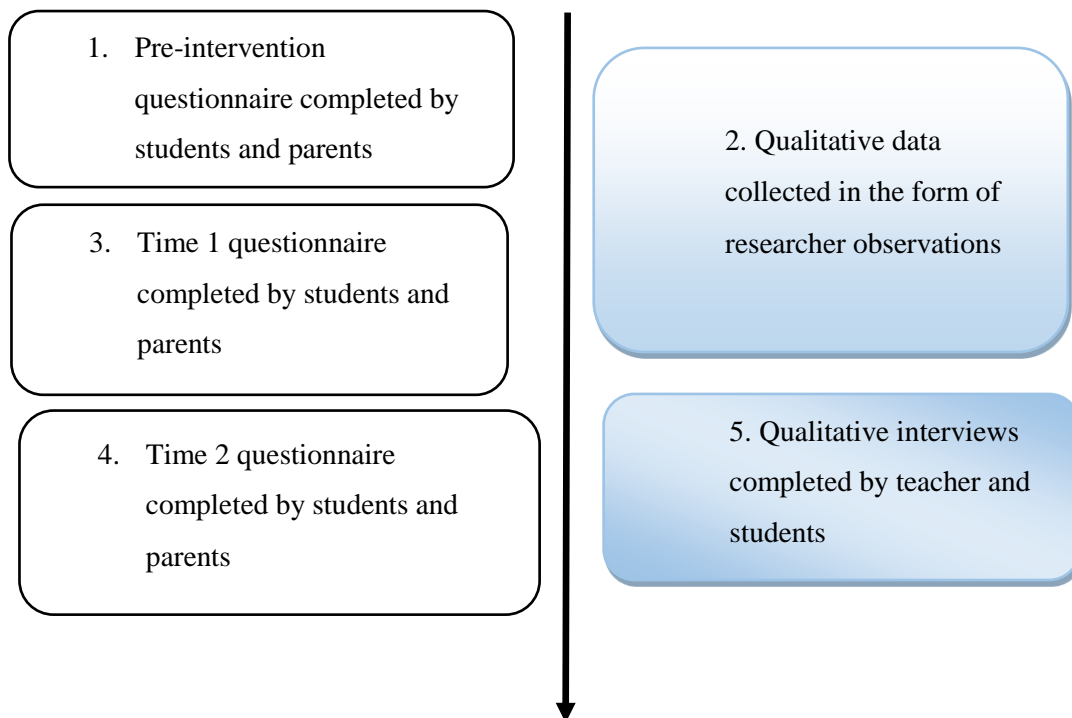


Figure 4: Data Collection Procedure

3.9 Quantitative Data

Quantitative measures were chosen to investigate changes in student reported emotional regulation and parent report of their child's emotional regulation. The data were analysed using the Statistical Package for the Social Sciences Version 25 (SPSS25). The chosen measures were suitable based on psychometric properties and were also appropriate for adolescents and parents. Measures were piloted before use with a small sample of parents ($n=3$) and students ($n=3$) to ensure understanding and clarity of questions.

3.9.1 Difficulty with Emotional Regulation Scale. In order to study the effect of the intervention on student emotional regulation abilities it was necessary to collect

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

quantitative data at baseline, time one and time two, from the control and active intervention group. The Difficulties with Emotional Regulation Scale (DERS) was identified as an appropriate measure (Kaufman et al., 2016). This measure is well validated and is a self-report measure which can be used to measure emotional regulation problems in adolescents. This instrument has good psychometric properties and has shown good reliability and validity with an adolescent population (Neumann, van Lier, Gratz, & Koot, 2010; Sarıtaş-Atalar, Gençöz, & Özen, 2015). The domains measured by the scale include; non-acceptance of emotional responses, difficulty engaging in goal-directed behaviours, impulse control, and lack of emotional awareness, limited access to emotional regulation abilities and the lack of emotional clarity subscale (Kaufman et al., 2016). These subscales examine various strategies for emotional regulation, including suppression, difficulty with concentration or executive functioning and social behaviours (Kaufman et al., 2016). The Difficulties with Emotional Regulation Scale short form (DERS-SF) is similar to the original DERS, however, it contains less items, meaning the questionnaire takes a shorter time to complete (Appendix C). This scale also has high internal consistency and test retest reliability ($\alpha > .93$, $\rho = .88$). This measure was selected over other measures due to its non-clinical nature, psychometric properties, appropriateness for adolescent populations, and as the concepts measured are most related to the concept of emotional regulation which underpins this research (Kaufman et al., 2016; Gratz & Roemer, 2004).

The DERS-SF was also adapted for this study to create a parent report of emotional regulation. Although self-reports are valuable, particularly in relation to changes in emotion, having more than one source increases the external validity of the results and offers further information on changes external to the participant. The DERS-SF parent version asked the parents identical questions to those asked of their children; however parents were asked to reflect on these observed behaviours in their children (Appendix D). Both measures were piloted with groups before being used. It is suggested that piloting should include 10% of the total sample and so three parent and adolescent pairs were approached to take part in the pilot study (Connelly, 2008). This pilot provided the opportunity to deliver the questionnaires and receive feedback on their construct.

The DERS-SF parent form was sent to parents via the school at three time points (baseline, time one and time two). The benefits and limitations of collecting data through self-report and parent questionnaires were considered. Self-report measures provide good

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

validity and enables quick and easy collection from large numbers. However, they can lead to social desirability bias or participants may lack the ability to be introspective (Spores, 2012). Self-report is best utilised with other data, collecting data from parents as well as participants can lead to more detailed evidence regarding the effect of the intervention and to increase validity (Samaras, 2010).

3.10 Qualitative Data

Data was collected from the student sub-sample ($n=7$) and transcribed. The transcribed data was analysed using thematic analysis (Braun and Clarke, 2006). The student interviews were analysed together as was the teacher interview and qualitative observations.

3.10.1 Semi-Structured Interview with Participants. After the intervention was delivered to both groups semi-structured interviews were conducted with a sample of participants from the groups along, with the guidance counsellor who had attended the intervention. This sample was selected as they had returned consent forms. The interview was designed to take a short amount of time and gather information on the participant's experience of taking part in the programme, along with their feedback on the programme as a school-based intervention for post- primary school students. Undertaking an interview with participants allows the opportunity for knowledge to be produced during the interaction between the interviewee and interviewer and is particularly valuable to research the individual's experience and perspectives (Kvale & Brinkmann, 2009). During the semi-structured interview the individual was able to provide information on a situation and convey their viewpoint by clarifying meanings (Altrichter, Feldman, Posch, & Somekh, 2013). There is no set number of interviewees as a requirement for qualitative research, merely the researcher should 'interview as many subjects as necessary to find out what you need to know' (Kvale & Brinkmann, 2009, p. 113). Interviews were undertaken with seven participants whose parents consented to their participation (Appendix E). A semi structured interview also took place with the co-facilitator to ascertain her perspective as to the intervention as a school based programme (Appendix F). Although questions and themes were pre-determined the researcher's use of semi-structured interviews provided more flexibility in relation to questions and prompts in order to investigate the topic more thoroughly. This enabled the researcher to deviate from the script and to investigate the intervention in a reduced time period

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

(Galletta & Cross, 2013). An structured interview provides less flexibility and an unstructured interview can make the focus too wide (Hersen, 2011; Klenke, 2008).

3.10.2 Trainee Educational Psychologist (TEP) Facilitator Diary and Observations. As the researcher was actively involved in the research and delivered the intervention, the use of both a research diary and observations, in the form of field notes, were selected as strategies for collecting information (Appendix U). Observations, reflections, thoughts and feelings of the researcher, in relation to the group, are some elements which can be studied as part of field notes, providing further information on qualitative and contextual aspects of the study. Collecting data in the form of field notes is a qualitative method, which provides insight into the phenomenon being studied and helps to document contextual information (Phillippi & Lauderdale, 2018). Although field notes may not be regarded as evidence, they aid in the understanding and contribute to discussion around a phenomenon forming a core part of qualitative research (Creswell, 2013). Field notes encourage the researcher to consider the environment and social interactions occurring, encourage the researcher to reflect on the experience and overall, provide valuable contextual information (Phillippi & Lauderdale, 2018).

3.11 Data Analysis

Quantitative data was analysed using the software 'IBM SPSS 25' in order to complete statistical analysis of the collected data. Data gathered from the student DERS-SF were analysed using factorial ANOVA to investigate changes in reports of difficulty with emotional regulation within and between groups across the time frame. Factorial ANOVAs can be used when there is one continuous variable and two or more independent variables (Fields, 2013). Other methods of data analysis were considered, including a multivariate analysis of variance (MANOVA) and T-test. These methods were not selected as the use of the T-test increases the likelihood of type-I errors. The MANOVA was not selected as the lack of return of parent data meant that only two independent variables could be used for repeated measures analysis. The outcome of the factorial ANOVA provides information on main effects of each variable and the interaction effect (Urdan, 2015). For the purpose of this study 'Time' was identified as the repeated measures factor and 'Group' was the identified between group factor. If there is a significant interaction for repeated measures factor and between group factor then the conclusion can be drawn that there is a difference between the groups based on the

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

between group factor. For the parent questionnaire a paired samples T test was used to compare the mean scores of the same group between time points, in this case pre and post intervention.

For qualitative data analysis, thematic analysis was chosen as the data analysis method over other forms of analysis. Thematic analysis is an inductive, accessible and flexible method of data analysis and aligns well with mixed methods research and the pragmatic approach of the study (Wood, Giles, & Percy, 2009) Other methods of data analysis, such as, interpretative phenomenological analysis, grounded theory or content analysis were also considered. Interpretative phenomenological analysis can be used to investigate cultural and social experiences with the researcher working with participants to interpret and make meaning of a particular phenomenon. This method was not utilised as the qualitative data collection was intended to appraise the intervention programme and its components for students as oppose to gathering information on a particular life experience (Smith, Flowers, & Larkin, 2009). Grounded theory uses data to generate a theory, however this research was small scale and so it was considered impractical to generate theory from the gathered data (Urquhart, 2012). Content analysis was also considered to analyse data, however, there is a greater requirement for experience and theoretical knowledge, along with increased focus on units of speech and so it was deemed an unsuitable method for this study (Krippendorff, 2004)

Thematic analysis follows six steps (Wood et al., 2009). Firstly, data are transcribed then read and re-read for broad themes relating to the research questions and participant data. The quotes related to these broad themes are read and re-read to ensure they fit the broad themes. These broad, major themes were divided into subthemes, which were revised through repeated reading and coding. Thematic maps were created for student and facilitator data sets. The six steps as outlined by Braun and Clarke (2006) were followed (Figure 5). Data was transcribed and read for accuracy and to promote familiarity with the data, Initial notes were made which lead on to the development of initial codes. All data in the data sets were coded and all codes were collated (Appendix P & Appendix V), leading to the generation of themes and sub-themes (Appendix R & Appendix w). These were compiled and represented in the form of thematic maps. The development of codes was guided by the research questions, with the focus on the effect of the intervention and its feasibility as a school-based intervention. It was decided not to use a software programme during this phase of analysis of qualitative data, to allow the

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

researcher the opportunity to read and code the data for emerging themes. Manual coding has been suggested for smaller scale qualitative studies (Basit, 2003).

Phase		Description of the process
1	Familiarising yourself with your data	Transcribing data (if necessary), reading and rereading the data, noting down initial ideas
2	Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code
3	Searching for themes	Collating codes into potential themes, gathering all data relevant to each potential theme
4	Reviewing themes	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis
5	Defining and naming themes	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme
6	Producing the report	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis

Figure 5. Braun and Clarke (2006) Six Step Model for Thematic Analysis (Anderson & Marshall-Lucette, 2013, p. 1300)

Once both sets of data were analysed, they were combined and contrasted using triangulation to facilitate validation of data by cross referencing the data collected across sources. Both methods of data were required to improve confidence in relation to the findings and to answer the research questions. By combining methodologies in the study of the same findings “there is the option to explore complimenting or conflicting results” (Denzin, 1978, p. 291). The use of different methods of data collection and the integration of this data increases the confidence in the results and conclusions of the research and enables a greater understanding of the studied phenomena, providing greater information to address the research questions (O’Cathain, Murphy, & Nicholl, 2010).

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

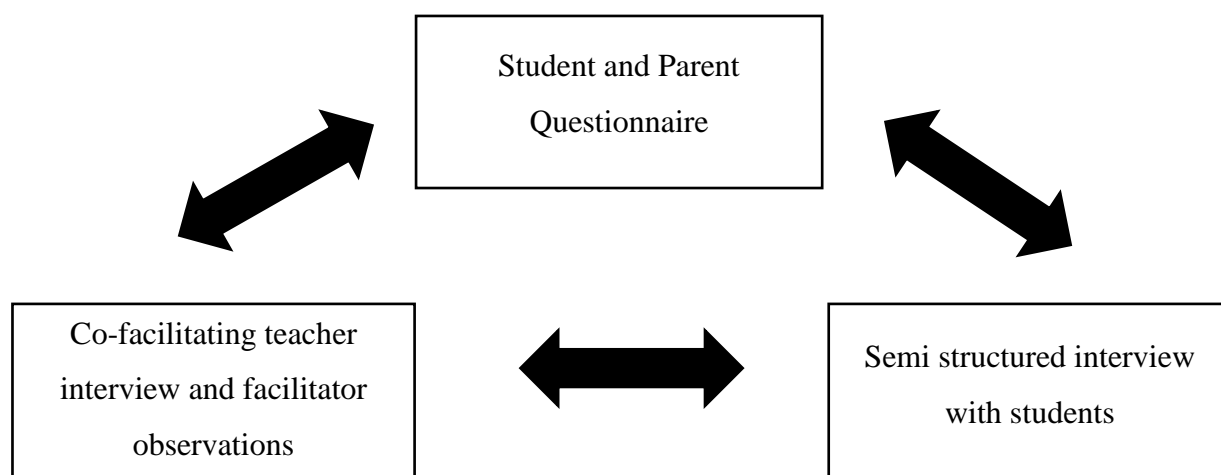


Figure 6. Triangulation of Data, (Clark & Creswell, 2008)

3.12 Procedure, Logistics and Timeline

In May 2018 ethical approval was granted by the ethics board at Mary Immaculate College (Appendix S). At the end of the month the researcher sent an email to the guidance counsellor of the school, providing details of the study and advising the school to make further contact if they were interested in participating in the research. In June 2018 the guidance counsellor was provided with an information sheet, she met with the principal of the school and they confirmed they would like to take part in the research (Appendix G & H). The guidance counsellor was provided with an overview of the study, an information sheet and a consent form (Appendix I). In August 2018 approval was granted by the board of management of the school (Appendix J). In September 2018 parents and students were provided with information sheets, assent and consent forms to take part in the intervention and interviews. They were advised of their right to opt-out should they wish (Appendix K, L & M). Parents and students were provided with the DERS-SF parent and student questionnaire in the first week in September and the intervention began with half the class following this. In October 2018 (the week before Halloween break) students were again asked to complete the DERS-SF and a copy was sent to parents. In November 2018 the delayed intervention group began the intervention. In December 2018 participants and parents were again asked to complete the DERS-SF and eight students and the class teacher took part in the semi-structured interviews. In December 2018 interviews were transcribed and analysed and research questionnaires were analysed.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

3.13 Ethical Issues

This research was designed and implemented carefully to ensure it followed ethical guidelines, as stipulated by the Psychological Society of Ireland (PSI). Additionally, ethical approval was granted by the ethics board of Mary Immaculate College in May 2018 (Appendix S). In order to obtain information for research and protect the participants of the research, this study abided by the Psychological Society of Ireland Ethical Guidelines (Psychological Society of Ireland., 2011). Table 12 outlines the ethical considerations of the research.

Table 12

Ethical Considerations

Ethical Concern	Summary of Actions
Informed Consent	<ul style="list-style-type: none"> • The principal and the board of management were provided with an information sheet and consent form for the study (Appendix G). The researcher provided information and met with the guidance counsellor to discuss the project and a consent form was signed by the guidance counsellor. The teacher was provided with a consent form for the study and interview (Appendix O). • The students met with the researcher and were provided with an information sheet and any questions were answered by the researcher. The students completed an assent form which outlined withdrawal, consent, safeguarding and confidentiality (Appendix M). • As participants were under 18, parents were provided with an information sheet and consent forms. Parents were provided with a separate consent form for their children to take part in the interviews (Appendix K and Appendix L and Appendix N).
Confidentiality	<ul style="list-style-type: none"> • A number was used to record student and parent data • Raw questionnaire data was not anonymised until the research was complete to provide information if there was concerns raised during the questionnaire • No identifying information was provided on the school
Risk of Harm	<ul style="list-style-type: none"> • Protocol was established should any data lead to concern. This involved contacting the designated liaison person in the school. • If any issues arose during the intervention or questionnaire participant involvement would be discussed and data destroyed if necessary • Information was provided to participants on relevant local and national support services

3.14 Reliability and Validity

The validity of a research study is related to the extent to which a study measures what it purports to and the truthfulness of the results obtained (Pellegrini & Bjorklund, 1998). In experimental research the internal validity relates to the control of extraneous variables and the extent to which the changes in the dependent variable can be recognized as a result of the treatment (Mertens, 2014). Similar to reviewed studies, this study made use of a random control trial (RCT) (Spence et al., 2003; Horowitz et al., 2004). Although the participant sample was convenient and selected due to their availability to take part in the study, participants were randomised to the intervention or control group on an individual level this reduces the bias between groups adding to the internal validity of the study (Mertens, 2014). From an ethical perspective, the control group took part in the intervention following time two data collection (Taylor et al., 2014). Internal validity was also promoted by experimental manipulation of an independent variable and the use of an intervention approach (Mertens, 2014). Both groups completed questionnaires together and received the same intervention through use of fidelity checklists and identical resources and activities. Diffusion must be considered as a threat to the internal validity of the study, as both groups were in the same school it was not possible to control for this and it is possible that treatment effects spread within the groups (Carter & Lubinsky, 2015). The external validity of a study is related to generalisability of results to other situations (Mertens, 2014). The current study took place, in the real-life context in which the intervention would be expected to occur and with a clearly defined population adding to the external validity of the research (Mertens, 2014). However, the use of a small sample size and convenience sampling limit the external validity of the study (Shi, 2007). This is also the case with the schools willingness to opt into the study which was an issue faced by previously reviewed research studies (Horowitz et al., 2007; Spence et al., 2003). The reliability refers to the replicability and consistency of results of the study (Scott & Morrison, 2006). The quantitative measures used were considered appropriate and reliable both in terms of their psychometric properties and their appropriateness for adolescents and parents and in terms of measuring difficulties with emotional regulation (Kaufman et al., 2016). The questionnaire showed a good level of internal consistency ($\alpha=.77$) and was validated with a similar population to the one used in this study (Kaufman et al., 2016).

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

In qualitative research it is important to establish its trustworthiness by examining its credibility, dependability, confirmability and transferability of the study. The credibility of this research was maintained through the triangulation of data using multiple methods and sources (Tashakkori, Teddlie, & Teddlie, 2003; Maxwell, 2012). The use of the mixed methods design of the study ensures that weaknesses in one method may be compensated by the other through triangulation of data (Tashakkori, Teddlie, & Teddlie, 2003). The dependability of the research was promoted by review of the research and findings by the research supervisor (Ary, Jacobs, Irvine, & Walker, 2018). The confirmability of the research was promoted through an audit trail and the use of researcher reflexivity (Cutcliffe & McKenna, 2004; Blaikie & Priest, 2019). Debriefing with the research supervisor and checking of coding also adds to the credibility of the research (Kumar, 2019). The transferability of the research was also considered and promoted through reduction of researcher bias by engaging in reflexivity through the use of a reflective journal and being aware of their own and participants' views and contexts to avoid contamination of data (Blaikie & Priest, 2019).

3.15 Researcher Reflexivity

It is important for researchers to consider their own role in research by acknowledging how they affect the process of undertaking research (Thyer, 2009). Reflexivity is the researcher's ability to be aware of their own role, biases, assumptions and position in the process of the research and awareness of the influence of this (Thyer, 2009; Finlay, 2002). During this study the researcher remained aware of their own views and beliefs and made use of a reflective research diary to record important material, decisions and contextual information during the process (Nadin & Cassell, 2006). This enabled the researcher to be aware of events going on in their own life or contextual factors which may have influenced participant responses (e.g. Halloween break, Christmas Holidays). Both the school and students were selected using convenience sampling and opted into the research study. Therefore, it is possible they had a previous research in promoting student wellbeing or emotional regulation which may have influenced the validity of the study. Discussions and reviews were regularly undertaken with the research supervisor and consultation with previous research in order to select measures and to plan and design the interview schedule (Morrow, 2005). Through discussion, research and problem solving the research supervisor worked with the

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

researcher to make the modifications to the intervention programme. These choices were also influenced by engagement with and critical analysis of previous literature in order to reduce bias.

The researcher's own experience was considered throughout the process. The researcher had experience of working with both primary and secondary school students on wellbeing programmes and so has a personal interest in promoting wellbeing and emotional regulation abilities. The researcher delivered the intervention and formed a relationship with the students in the class, however the researcher was careful to remain objective during the research process. When conducting sole research subjective biases can occur, although the researcher took opportunity to ensure that the probability of subjectivity biases contaminating the data were reduced and acknowledged any factors which may have influenced the result of the study (Berger, 2015).

3.16 Conclusion

This chapter described the setting and sampling method for the research and its justification. It outlined the rationale for the mixed methods methodology and the underlying pragmatic paradigm. The data collection methods, including both quantitative and qualitative data collection were outlined; the research diary and observations, interviews and questionnaires. Methods of data analysis including thematic analysis and statistical analysis were also outlined, which will lead to triangulation of data to gain a rich picture of the research findings and provide an answer to the research questions. The next chapter will present the results of the research.

Chapter Four: Results

4.1 Overview of the Chapter

This chapter outlines the research findings of the study. The data analysis method is described along with the procedures for analysing the data. The pragmatic approach suggests that reality is interpreted in light of its usefulness and the best method is one which solves problems (Biesta, 2010; Johnson & Onwuegbuzie, 2004). In line with the pragmatic, mixed method approach taken by this study the analysis was concerned with the efficacy of a modified, school-based, emotional regulation DBT intervention. The focus was on the development of understanding of ‘what works’ with regard to student and teacher experience of the intervention and its impact on student emotional regulation. Quantitative findings which were analysed using a Factorial Analysis of Variance (ANOVA) are outlined across the three time points and between the groups (Baseline, Time 1, and Time 2). Factorial ANOVAs can be used when there is one continuous variable and two or more independent variables (Fields, 2013). The outcome of the factorial ANOVA provides information on main effects of each variable and the interaction effect and was a method used in previous research studies (Sportel et al., 2013; Urdan, 2015). Data were analysed using IBM SPSS Version 25. Due to the low response rate the parent quantitative data was analysed using a paired samples t-test. This was to investigate the impact of the intervention on participant emotional regulation, addressing question one. Findings from the student interviews were transcribed and analysed using thematic analysis. Data from the Trainee Educational Psychologist (TEP) observations diary and teacher interview were also transcribed and analysed using thematic analysis. This was to investigate participant and facilitator experience of the intervention of the intervention and its efficacy and feasibility as a school based intervention.

4.2 Quantitative Analyses

Complete data sets were obtained for 23 (88%) of the participants who completed all three stages of the intervention programme. One participant did not take part in the intervention programme and two students did not take part in the final data collection and so it was not possible to include these participants in the analysis. The quantitative data were analysed using the Statistical Package for the Social Sciences Version 25 (SPSS 25). The statistical analysis undertaken included factorial ANOVA, as the participants were randomly assigned to an intervention ($N=12$) and control ($N=11$) group and were

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

measured for changes over time. The dependent outcome variable (DV) included total scores on measures completed by students and parents (DERS-SF) to assess changes in participant and parent reported difficulties with emotional regulation across all three time points.

4.2.1 Descriptive Statistic: Student Participant Data. The means and standard deviations for the primary outcome measure at baseline, time one and time two is presented in Table 13. The age of participants in the sample ranged from 14.9 to 16.1 years of age (Mean Age=15.49, SD=.531)

Table 13

Group Scores and Standard Deviations at Baseline, Time 1 and Time 2

Group	Baseline	Time 1	Time 2
Intervention	35.83 (SD=8.24)	31.83(SD=7.96)	30.41(SD=7.19)
Waitlist Control	34.90(SD=8.64)	33.36(SD=7.36)	31.54(SD=8.01)

4.2.2 Initial Analysis: Student Participant Data. The data were inspected for any differences between the groups at baseline using an independent samples t-test. No significant differences were found between group scores at baseline. Data analysis was undertaken to identify the skewness and kurtosis of the data. There were no issues with skewness and kurtosis (all<1). Table 12 highlights the skewness and kurtosis for the outcome measure.

Table 14

Skewness and Kurtosis at Baseline, Time 1 and Time 2

Measure	Baseline	Time1	Time2
DERS-SF Student Skewness	-.232	-.400	-.359
DERS-SF Student Kurtosis	-.993	-.849	-.692

Data were checked for normality using histograms and plots and no extreme scores or outliers were identified. The assumption of sphericity was met in Mauchly's test

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

of sphericity. Further analysis was undertaken using the K-S test for normal distribution, using the Shapiro-Wilks, the p-value is $>.05$ for the measure at baseline, time one and time two, the alternative hypothesis can be rejected and it can be concluded that the data comes from a normal distribution. The measure showed good internal consistency ($\alpha=.77$). As the assumption of normality was met across the data at all three time-points it was identified as appropriate to use parametric statistical analysis. Factorial ANOVAs were used to investigate the effect of time on self-reported difficulties with emotional regulation. The p value was considered significant when $p<.05$. Effect sizes were established using the partial eta-squared. Correction for multiple comparisons to prevent type I errors was done using post hoc testing (Bonferoni correction).

4.2.3 Data Analysis: Student Participant Questionnaire. A factorial ANOVA was undertaken to analyse the effect of group and time on changes in emotional regulation scores from baseline, to time one, and time two data collection and to examine interaction effects.

The factorial ANOVA looked at the influence of the two independent variables (IV) group and time on the scores of self-reported difficulty with emotional regulation. Overall there was a significant main effect of 'Time', with large effect sizes and both groups having a significant change in scores over time ($F(2,42)=14.485, p=.00., \eta_p^2=.386$). In addition there was a non-significant effect of 'Group' on scores of difficulty with emotional regulation, with both groups showing similar scores, with a small effect size ($F(1, 21)=.032, p=.860, \eta_p^2=.002$). There was also a non-significant interaction between 'Group' and 'Time', with a medium effect size ($F(2, 42) =1.12, p=.323, \eta_p^2=.052$). Post-hoc analysis was undertaken to inspect the main effect of time on participant scores.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

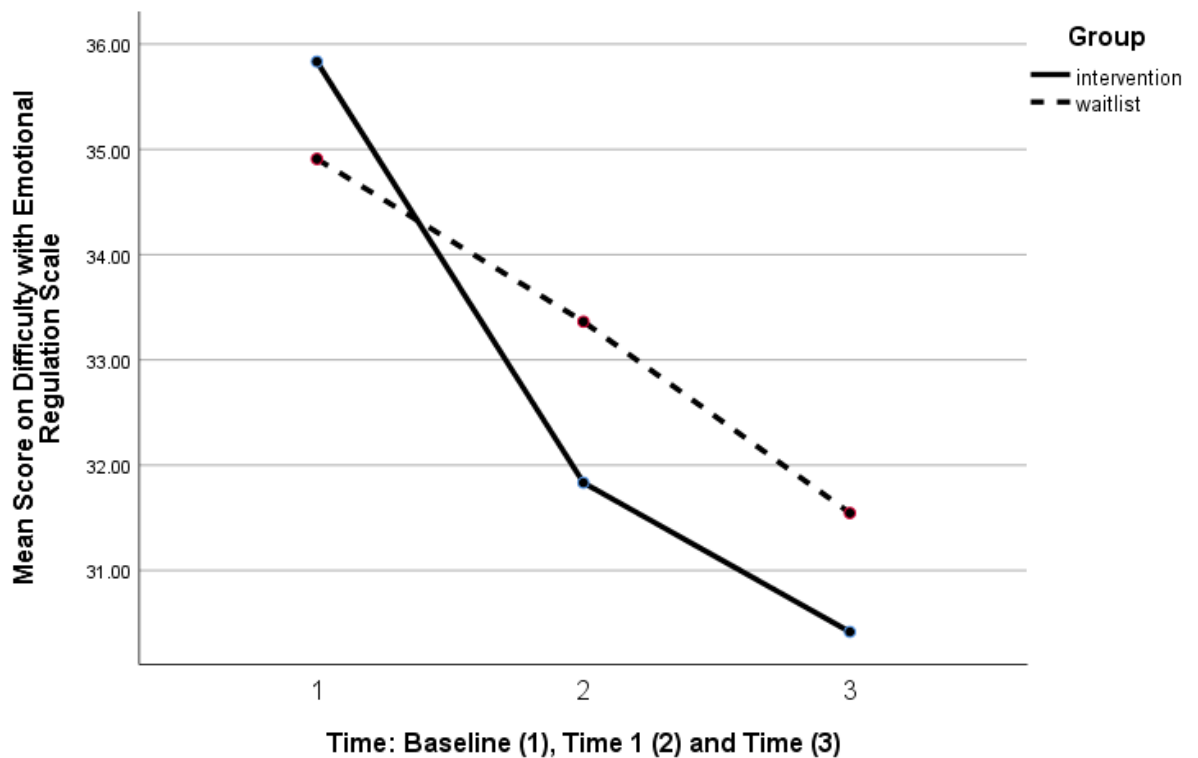


Figure 7: Changes in Student Participant Scores over Time

For the overall group there was a significant change in scores from baseline to time one ($p=.003$) and time two ($p=.00$), but no significant change from time one to time two ($p=.260$). Post-hoc analysis was undertaken to observe the significant change in scores over time. There were no significant differences between groups at baseline ($F(1,21)=.069, P=.796, \eta_p^2=.003$), time one ($F(1,21)=.228, p=.638, \eta_p^2=.011$) or time two ($F(1,21)=.079, p=.782, \eta_p^2=.004$). The intervention group displayed a significant change in scores from baseline to time one ($p=.001$) and baseline to time two ($p=.002$) and non-significant change in scores from time one to time two ($p=.738$). Overall, 66% of this group showed an above average reduction in their overall scores between baseline and time one, compared with 45% of the control group. The waitlist control group displayed a non-significant change in scores from baseline to time two ($p=.463$) and time one to time two ($p=.365$), however, there was a significant change in scores from baseline to time two ($p=.045$). When comparing baseline to time two data 58% of the intervention group and 63% of the delayed control group displayed a significant decline in overall score on the DERS.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

4.2.4 Parent Questionnaires. Parent questionnaires were not forthcoming and so it was not possible to compare changes in parent reported questionnaires over time. At baseline all parent forms were returned ($n=23$, 100%), at Time One 43% of parent forms were returned ($n=10$) and at Time Two only 30% ($n=7$) of parent forms were returned. Instead a paired samples t-test was used to establish changes in parent scores pre and post intervention. Approximately 10 participants provided parent-rated difficulties with emotional regulation before and after the intervention. When outliers were removed eight data sets were available for analysis. Results showed that parent rated difficulties with emotional regulation were significantly higher pre-intervention ($M=30.50$, $SD=5.6$) than post intervention ($M=25.6$, $SD=2.97$), ($t(7) = 2.38$, $p=.049$, with a small effect size ($d=.40$).

4.3 Qualitative Data Analysis

This section outlines the identified themes and sub-themes which emerged from the data. Qualitative data were collected in the form of a researcher diary and observation, comprising of researcher reflections undertaken after each session, and student and teacher interviews. A thematic analysis was undertaken on the collected interview data to establish themes (Braun and Clarke, 2006). The themes are introduced and outlined using their sub-themes. Quotes will be used to provide evidence for each identified subtheme. Thematic maps provide a visual representation of the identified themes and sub-themes. Coded transcripts of the student and teacher interview, along with a sample of the researcher diary observations are presented (Appendix I). The qualitative data were collected from the student participants using semi-structured interviews and provided information based on their participation, including positive aspects of the intervention or barriers posed. Seven students returned consent forms to participate in the semi-structured interviews. These interviews took place when the intervention was complete. Pseudonyms were given to all participants during the transcription phase to ensure confidentiality and anonymity.

4.4 Themes Emerging From Student Interviews

Results of the thematic analysis of the student participants' interviews are presented below. These were undertaken to address the research questions to probe their experience of taking part in the intervention and its feasibility as a school-based

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

intervention for adolescents. The interviews also provided an opportunity to review the effect of the intervention on student's emotional regulation. Student data were collected using semi-structured interviews and then transcribed. Transcriptions of the student interviews were analysed and coded as outlined in the methodology chapter. Overall the interview participants had a positive view of the intervention. The themes which emerged from the data referred to positive aspects of the intervention, areas for improvement, skills development and its relevance. From the analysis of the data four main themes emerged: 'Benefits of the Intervention', 'Effect on Emotional Regulation', 'Relevance of the Intervention' and 'Changes and Differences'. The thematic map (Figure 8, p.79) provides an overview of the identified themes and sub-themes.

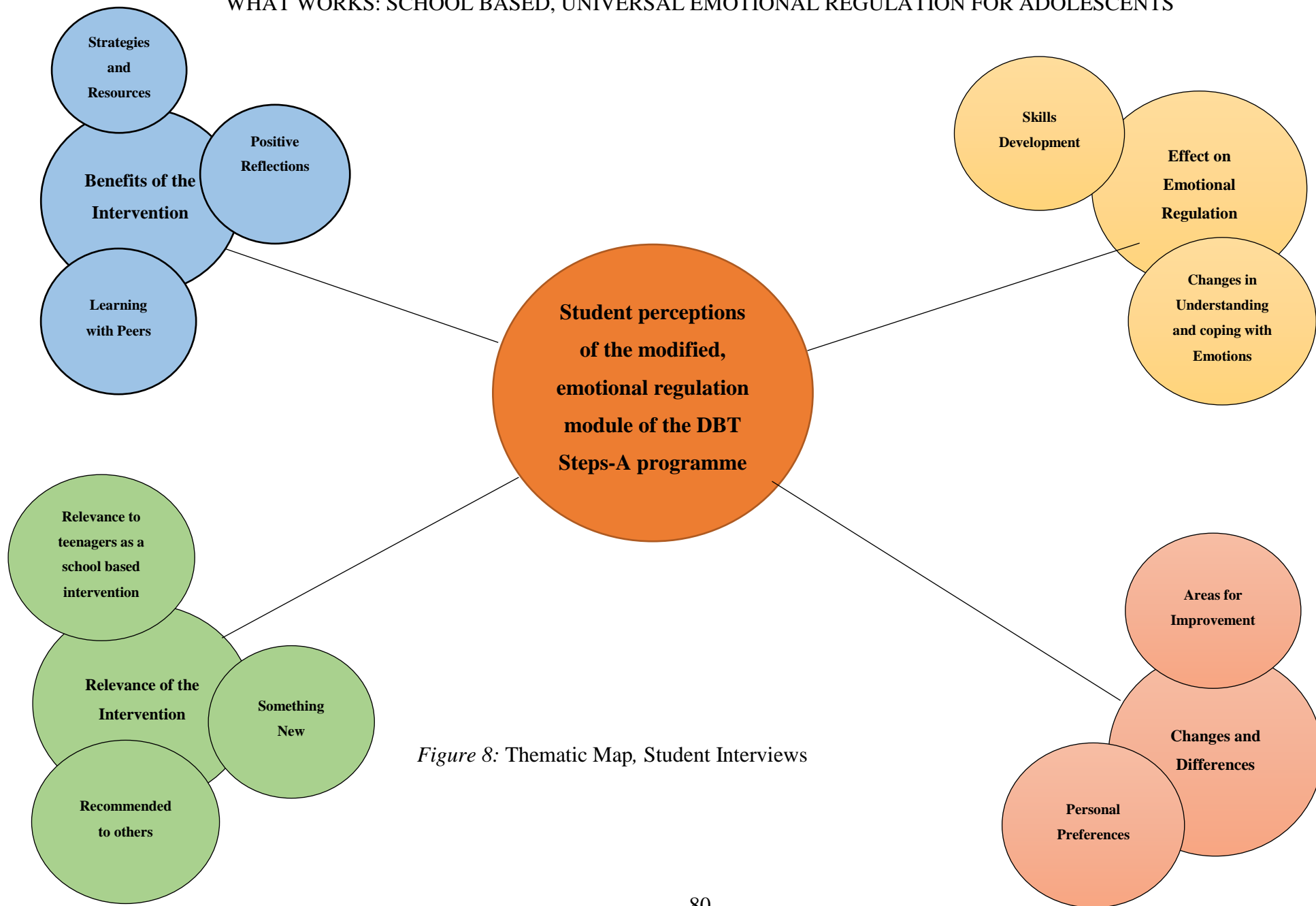


Figure 8: Thematic Map, Student Interviews

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

4.4.1 Theme One: Benefits of the Intervention

This theme relates to the benefits of the intervention as outlined by the student participants. Participants discussed and identified various strategies and resources as beneficial in terms of their enjoyment and engagement with the intervention programme. Overall, student reflections were positive, with participants outlining the practicality and helpfulness of the programme to their lives. The use of a small-group format of delivery was also highlighted as a beneficial aspect of the intervention which enabled students to learn from and with one another in a safe and supportive environment. The theme and extracted subthemes are presented in Figure 9.

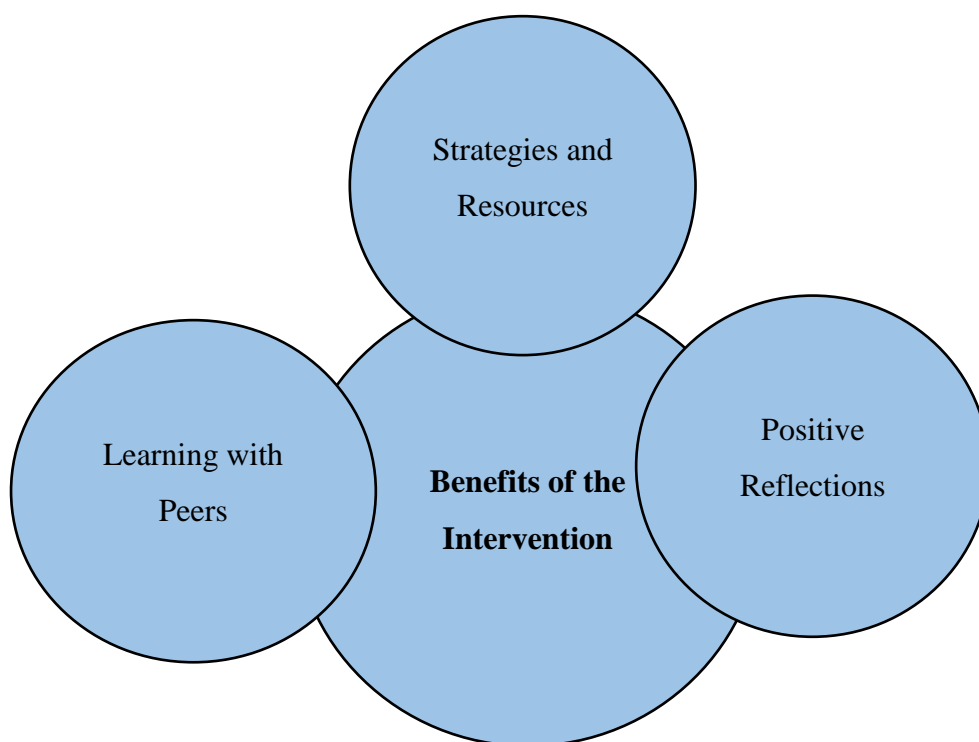


Figure 9: Theme One and Subthemes: Benefits of the Intervention

4.4.1.1 Strategies and Resources.

Within the first broad theme is the sub-theme ‘Strategies and Resources. Participants discussed the different resources and strategies used during the intervention, which they deemed both beneficial and enjoyable. Participants spoke highly of the use of visual supports, provision of the booklets use of the emotions chart and the inclusion of the model of emotional regulation.

“I enjoyed the exercises in the booklet we had.” (John, p.199)

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

“The emotions chart to see how you could act a certain way that was pretty helpful”

(John, p.199)

“The different sections or steps we had” (Maeve, p.199)

The student participants appeared to find the various resources used to support learning beneficial. Visuals, such as the emotions thermometer and the body outline activity, along with the booklet containing the concepts and activities of the intervention were identified as supportive aspects of the intervention.

“The colouring, and the pages, it’s fun and gets the message across, the book was good and getting to keep it after to remind you of it” (Sasha, p.200)

“I quite liked when we learned about all the different body parts that show emotion and we did out the diagram...” (Aine, p.200)

Participants made reference to the use of active learning strategies, such as the art and craft activities and the group collage. The range of active learning strategies appeared to be one aspect of the intervention that participants found valuable and enjoyable. The use of different strategies was viewed as beneficial by the students and appeared to encourage their learning and engagement. It is clear that the use of a variety of resources for school-based interventions can encourage learning and appeared to be a memorable aspect of the programme.

4.4.1.2 Learning with Peers.

The next subtheme participants identified was ‘Learning with Peers’. Participants rated highly the strategy of working with others and learning from peers with almost all students referencing this as a positive aspect of the intervention.

“I liked the group work” (Sasha, p.200)

“And we were in small groups, with people you trusted” (Maeve, p.200)

“...it was a warm environment to talk about your feelings” (Maeve, p.200)

Participants reported that the group provided a safe and warm environment. This format also provided them an opportunity to learn from and with others, to examine emotions and learn to cope with them. There was a sense of belongingness in terms of increased trust in those in their group. For example:

“I learned stuff from other groups as well, about how other people show their emotions differently and I liked the open speaking aspect too that we weren’t all just sitting there watching a slide show and we all got to speak and if we didn’t want to we didn’t have to.”

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

I really enjoyed that part like also having a big conversation about emotions” (Aine, p.200)

“I suppose doing it with other people, was kind of good, you could see other people feel the same emotions as you and they go through the same things as you and you can learn from the way they handle their emotions and they can learn from you, just kind of suppose that bonding experience” (Jane, p.200)

The data suggests that by taking part in the group and speaking openly with one another participants developed trust in each other. The presence in the group made students feel less alone in their feelings and encouraged them to learn about one another. This seemed to reduce the stigma of talking about emotions. The use of a group format also promoted students to learn skills from one another’s experiences.

4.1.1.3 Positive Reflections.

Participant’s reflection on the intervention was overall positive and described the intervention as both enjoyable and practical.

“I enjoyed it...everything was overall it was good” (John, p.199)

“It was realistic, and then doing the positive steps for yourself...I found everything to be helpful in some way” (Maeve, p.199)

“I think it was pretty beneficial” (Jane, p.199)

Participants were unanimously positive about the experience of partaking in the intervention. Students commented on the helpfulness of the programme.

“...I found it was pretty helpful.”(John, p.199)

“The skills they gave were helpful and can be brought into someone’s daily or weekly lives” (Sasha, p.199)

Participants found the different sections and steps of the intervention programme useful and reflected on the ease of its practical application.

“...it’s easy to implement in your own life” (Maeve, p.199)

“...small, simple ways you can do every day to deal with your emotions” (Maeve, p.199)

From the data it appears that students were able to implement the strategies easily in their own lives and generally returned encouraging observations on the intervention.

4.4.2 Theme Two: Effect on Emotional Regulation

This theme considered student-reported effect of the intervention, in terms of understanding and coping with emotions and development and use of skills. This theme

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

outlines how the intervention affected student's abilities to regulate their emotions. Students reported changes in their thinking, behaviour, understanding and awareness of their emotions following the intervention. This theme is made up of two subthemes: 'Changes in Understanding and Coping with Emotions' and 'Skills Development' (Figure 10).

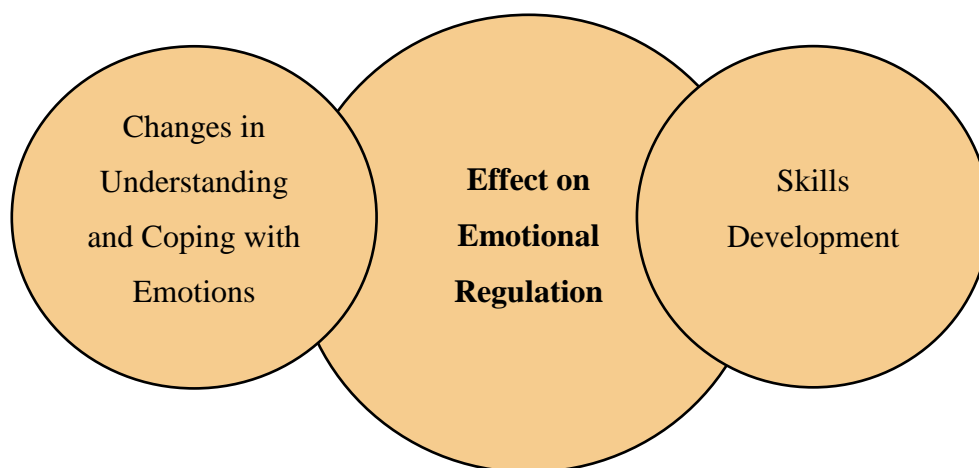


Figure 10: Theme Two and Subthemes: Effect on Emotional Regulation

4.2.2.1 Changes in Understanding and Coping with Emotions.

This subtheme outlines how the intervention supported students to develop their understanding of their emotions. Participants were encouraged to examine their emotions and were enabled to gain insight in terms of identifying and taking meaning from their emotions. All participants referenced how the programme impacted on their ability to understand and make sense of their emotions:

"...if you're moody, it gives you a better understanding."(John, p.203)

"Well it did give me a chance to kind of reflect on my emotions and understand how I'm feeling, to draw meaning from what my emotions were" (Jane, p. 206)

The data suggests the intervention helped participants to identify and label physical feelings as emotions. It also encouraged them to evaluate their feelings and develop problem solving abilities in relation to emotional situations.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

“...explain your emotions, like especially when your studying like feel like crying or screaming at someone it’s good to know it’s not just, there is something you can do” (Maeve, p. 206)

“...thinking through emotions, why I’m feeling this way and then appraising the situation...when you don’t understand how your feeling and that can be confusing and this helps you evaluate, this is what I’m feeling and why” (Jane, p. 206)

Two participants indicated that the intervention gave them an increased understanding of the link between their emotions and their behaviours. They also reported an increased insight into the consequences of behavioural urges activated by emotional experiences.

“...understanding the consequences of emotions and your actions depending on how your feeling, like maybe you should avoid doing certain things if you’re angry or if you’re sad” (Rob, p. 206)

“...the programme helps people to understand emotions...you’re going to get them all the time and the programme helps find solutions...like how to deal with anger instead of taking it out on other people” (Becky, p. 207)

Participants reported that they were more accepting of their emotions, understanding that all emotions were acceptable but acknowledged that it is important to learn to cope with them.

“...ya like its ok to be sad, happy, angry, everyone is like that sometimes, but at the same time you have to learn to deal with your emotions” (Becky, p. 201)

“I think I learned how to deal with the aftermath of emotions and how to process them and think about them in a good and healthy way...think positively about them...maybe think it’s okay to feel that way but reflect on what you did” (Aine, p.209)

The intervention appeared to normalise emotions for the participants. It gave them a better understanding of emotions, in terms of their function and as a method of communicating something to themselves and to others. They also developed an awareness of emotions as universal, experienced by everyone. In light of this they were able to identify how they were feeling and why, leading them to problem solve around their emotions.

4.4.4.2 Skills Development

The next subtheme in this area is ‘Skills Development’. This subtheme relates to the various skills which were reported as developed by participants over the course of the intervention.

“...probably the mindfulness, I actually use that now outside of this” (John, p. 204)

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

“Probably to kind of when I go off worrying to bring myself in and think what is the worst that is going to happen because like if you do something new and go for an interview, I’d be like oh you’re not going to get it...that was a skill I kind of learned, to pep talk myself before I’d go off and worry, you know the steps, what is the worst, basically check the facts like what I’m thinking, is it going to happen, is the worst going to happen” (Aine, p.203)

Data suggest that participants developed various skills following participation in the intervention. They referenced use of mindfulness skills outside of the group setting. Data indicated that participants made use of thought challenging, positive self-talk and cognitive restructuring. This suggests that participants’ abilities to cope with their emotions were enhanced by the intervention.

“...when we had to write about an emotion that we felt during the week I thought after doing it two or three times, I found myself doing it anyway...and checking how I felt previously and also when we had to write the goal we had, and I had said I wanted to spend more time with family and I did end up doing that and I thought that was helpful too” (Aine, p.203)

Data suggests that participants became more aware of their emotions and would check in with how they were feeling. There was evidence of use of goal setting, with participants generalising this skill to situations outside of the group.

“I kind of learned that if you don’t get too angry, if you think for a second about the situation and if it’s not too big don’t get too angry about it that kind of way” (Becky, p.204)

Students reported use of the various skills, including cognitive appraisal and monitoring emotions, covered during intervention in their lives outside of the sessions such as; during school activities or sports.

“ya I’ve used the mindfulness for sports, I box, and before fights sometimes people go in and they’re very nervous. And so I find, I was as well when I first started, but now using this it gets me very relaxed. I think about what I need to do in the ring it’s not any nervous problems, and this mindfulness gets all the other things what if away” (John, p.202)

There were a range of activities and contexts outside of the intervention group setting where students reported making use of the skills.

“Ya after work experience I would have been nervous before going in and you kind of think no it’s going to be fine, they’re going to be nice” (Sasha, p.204)

“I’m doing the BT young scientist and I have to break it down, do a little bit every day, yano it’s kind of that” (Sasha, p.203)

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

“emmm, ya I did a few times, we had a few important soccer matches, you’d be nervous and you’d have a good reason to be, but you’d think realistically am I going to play terribly and kind of go through the steps we did with the class and it really helped, you’re not as nervous. Well I mean, you’re still nervous but you understand why it is you’re nervous and you’re not overly nervous” (Jane, p.203)

The feedback from students on their application of skills to their everyday lives and varying contexts highlights the wider effects of the emotional regulation module. The module appeared to encourage students to reflect on their emotions and helped them to understand them. There was a perception that emotions are normal and acceptable. The importance of coping with emotions was emphasized, as well as the strategies which can be used for this purpose. Participants also indicated that they used the various skills they had learned in a positive way during school, sports and daily-living activities.

4.4.3 Theme Three: Relevance of the Intervention.

This theme outlined student-reported relevance of the intervention, in terms of its relevance to their age group as a school-based intervention, recommendations to others and the programme as something new that they haven’t covered before (Figure 11).

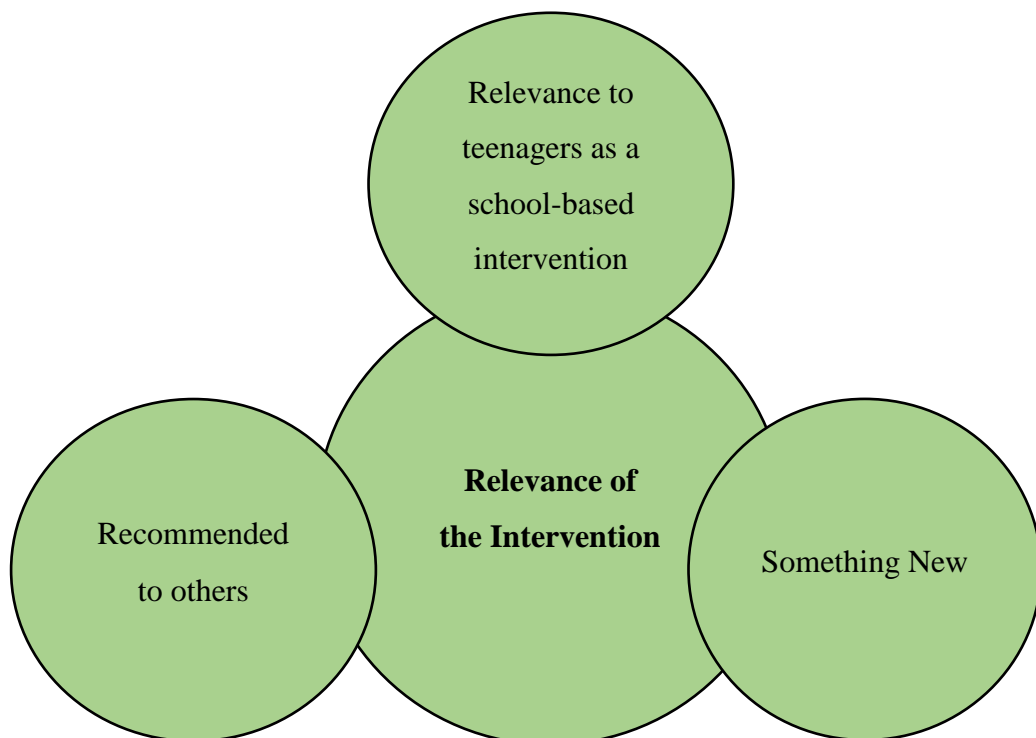


Figure 11: Theme three and Subthemes: Relevance of the Intervention

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

4.4.3.1 Something New.

The first sub-theme which emerged under this theme was ‘Something New’. Participants reported that exploring and learning about emotions was not something they had done before:

“I would never have explored those parts of my mind. Apart from the programme I wouldn’t have done it at all. It helped me look at things I would not necessarily have looked at before. I would never really have thought about it how it could be a certain way or anything like that” (John, p. 204)

“...how I’m feeling I wouldn’t normally have done that” (Jane, p. 204)

Students reported that this was not something they would have done themselves and they would not have really taken the time to consider and reflect on their emotions. They spoke about the relevance of the intervention to teenagers, how their age group are unlikely to sit down and speak about emotions and that the intervention provided them with the opportunity to be more open about emotion and normalise speaking about emotions.

“I think as teenagers we don’t sit down at lunch time and talk about emotions, we might talk about what’s causing them but not really what they are or how to solve them or anything so I think that it’s nice we got to sit down and actually speak about how we are feeling and explore why we feel that way” (Aine, p. 203)

“Ya I probably wouldn’t have done it if we hadn’t spoken about it and I hadn’t of written it down, I wouldn’t have done it” (Aine, p. 203)

“I think as teenagers we are slow to talk about our emotions anyway...I don’t think it’s ever talked about in depth” (Aine, p.201)

They also reported that they have not spent much time in school focusing on emotions. The data suggests that this area was absent in their education to date but it seems having an intervention to manage emotions was identified as a positive step.

“ya because you don’t do that much about emotion, we do a bit but don’t do it too much in school” (Aine, p. 204)

“no, really we wouldn’t...” (Rob, p. 204)

“ya cause we don’t do it” (Jane, p. 204)

4.4.3.2 Recommended to Others.

The second sub-theme which emerged under this theme was ‘Recommendations to Others’, which indicates young people’s views in terms of how useful they found the programme. Participants outlined that they would recommend the intervention to others of their age and would advocate for such an intervention to take place in the school setting

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

“Ya I would, to ya definitely secondary school” (Maeve, pg. 204)

“I think I would recommend it to other people and I know other people have an interest in doing it” (Aine, p.202)

Participants acknowledged that running such intervention programmes in the school setting encouraged participation and motivation to attend.

“...it was a pretty helpful programme and we did it in school so that was more of an incentive to do the programme as starting out it didn't take time, if it was outside school I'd probably be less likely to do it. But because it didn't take time outside of school. So that helped me and got me into it and gave incentive.” (John, p.201)

“I might not necessarily try something like this if it was out of school but because it was in school I had to do it and I actually enjoyed it so I think it's good because some people might not want to do it but might actually enjoy it” (Becky, p.201)

4.4.3.3 Relevance to Teenagers as a School-Based Intervention

The third theme to emerge from the data was ‘Relevance to teenagers as a school-based Intervention’ with participants outlining the relevance of the intervention to their age group. The period of adolescence was identified by youths as a stressful time, which can affect emotions and emotional functioning and as such they felt the intervention was relevant for their age group:

“...cos yano third year, fifth and sixth year even first and second, you've a lot of study and it's kind of new and when you've a time like that and your very stressed you can start to worry about everything and everything seems bigger and worse so it's good to think and be able to check the facts...” (Maeve, p.201)

“Ya it does relieve stress, we don't have a stressful year, but even for exam students, it's helpful it's very stressful doing exams and you don't have a chance to reflect on yourself and how your feeling and I think people should definitely have that opportunity” (Jane, p.201)

Participants were able to link the intervention skills to their own experience with challenging or stressful events such as exam years or transitioning to post-primary school. They reported feeling that such a programme would be beneficial for students during these times.

“Ya I think it would be good for other students to take part in it cause like do you know I think everyone needs to try something different” (Becky, p.202)

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Adolescence was identified by the participants as a period of time where individuals have difficulties dealing with and understanding their emotions.

“I’d definitely recommend it to other students I think not a lot of teenagers know how to deal with their emotions so I’d definitely recommend it for them, it’s useful for them to have that skill” (Rob, p.202)

“Ya, ya I would I think especially our age, there’s a problem with kids, well maybe not a problem, but people don’t kind of look into things that deeply in terms of their emotions and looking into their emotions in terms of understanding their emotions and I think this would help if they wanted to do that” (John, p.202)

Overall, this theme outlined the relevance of the intervention to adolescence and identified this as a time where individuals may struggle to cope and manage their emotions. Participants reflected that they would recommend the intervention to others as it increased ability to understand, explore and cope with emotions. Generally, participants felt exploring emotions and coping strategies were lacking in terms of school focus and in terms of their own abilities to understand and speak about their emotions.

4.4.4 Theme Four: Changes and Differences.

The sub-themes which make up this theme are ‘Personal Preferences’ and ‘Areas for Improvement’ these highlight personal preferences and difficulties students had with the programme and areas students felt could improve the intervention (Figure 12).

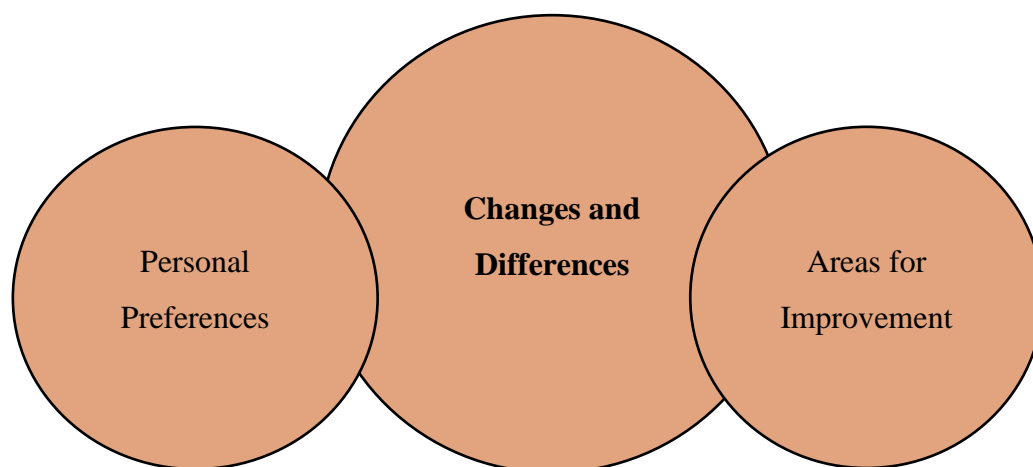


Figure 12: Theme Four and Subthemes: Changes and Differences

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

4.4.4.1 Areas for Improvement.

The first subtheme, which emerged under this broad theme, was ‘Areas for Improvement’. The majority of participants reported that there was nothing which could improve the intervention and were content with it in its current format.

“emm no I don’t think so everything was pretty good...” (John, p.205)

“Ya there was nothing really needed to be changed it all was ok” (Maeve, p.205)

“I liked it all...” (Sasha, p.206)

The majority of the interviewed participants reported that the intervention was overall positive and did not identify any areas for improvement for the programme. A minority of participants identified areas for improvement:

“emmm, (silence) I suppose you probably noticed yourself when we were most interactive was when we were playing the games, so even if there was a way to incorporate more games or a range of other games and explain the significance after to get us to think through during what we had done” (Jane, p.205)

“I think...emmm...(silence)...hmm...I think maybe it could be slightly more updated and maybe bring in social media and mobile phones, like how to take a step back from that and remember to be present...I know we did talk about it, but I don’t think it was part of the course, it kind of came up in conversation as an example and we did speak about it but I think maybe it would be more interesting to go into depth...maybe teach yourself to take a break and teach yourself that you don’t need to compare yourself” (Aine, p.205)

The data which emerged from the interviews suggest that the games were a particular strategy enjoyed by the students and that the inclusion of more games could add to the enjoyment of the programme. There was also reflections on the use of technology to support the intervention in terms of having some focus on social media, as it was felt that social media is so intertwined in their lives.

4.4.4.2 Personal Preferences.

The second subtheme which emerged from this broad theme was ‘Personal Preferences’, which outlines aspects of the intervention which some participants found personally unsuitable for their own use. It appeared that there were many skills identified as valuable by the students, however, some students found particular skills less advantageous for themselves.

“emmm, not really, sometimes if we had to go home with the homework, I mean and kind a, you’d have to come up with stuff on the spot and you’d have other stuff to do, so maybe

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

having a time allotted to do the work maybe...cause if you forgot to do it one day you'd have to catch up on the last day and you'd already moved onto the next day, that kind of thing" (Jane, p. 207)

"I didn't like the homework, it was fine, but you still had to do it, I know a bit of homework is good...I think the stuff we had to do was good but finding the time to do it" (Sasha, p. 207)

The students identified that they did not enjoy the homework and found it challenging to find the time to complete this task, however, they accepted that the outlined homework activities were valuable. Participants acknowledged that they found particular skills more beneficial than others, however they recognized that skills they found unsuitable may be beneficial for others.

"..I don't think I'd have the presence of mind to check the facts there, but I don't think I'd be doing that there...but I mean even if a skill didn't work for me it could work for someone else I don't think it would be valuable to take it out" (Aine, p.205)

"I suppose there was nothing I disliked...sometimes it's hard when you're actually in the situation to think of the stuff we talked about to stop and think it's hard when you're in that situation in my opinion...I don't know if I could do that but maybe I should start" (Becky, p.205)

Overall, data emerging on the student experience of the intervention identified the active learning aspects of the intervention as enjoyable and beneficial. In terms of area for improvement, participants enjoyed the games aspect and felt more of this strategy could increase enjoyment and interaction. Participants were satisfied with the components of the programme, with comments reflecting more personal areas for improvement or responses to specific strategies as opposed to a generally emerging trend.

4.4.5 Summary of Student Reflections

In summary, student participants identified various aspects of the intervention as beneficial including the use of a variety of strategies and resources, such as visual supports, games, booklets and art and craft activities. Student participants outlined the advantage of a small group format which provided the environment for students to learn both from and with one another in a safe and open environment. Overall, the intervention was deemed both helpful and practical by the student participants. They reported that the intervention had an effect on their emotional regulation abilities and they outlined skills they learned as a result of the programme. Student participants reported learning skills to

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

understand, identify, make meaning and cope with their emotions. They reported appraising their emotions and developing an understanding of the link between their emotions, actions and behaviours. They also reported the development of skills in relation to mindfulness, goal setting and problem solving. Student participants reported making use of cognitive reappraisal and increased monitoring and coping with emotions to contexts in their every lives and highlighted the wider effects of the emotional regulation module.

Student participants outlined adolescence as a transitional period of increased stress and anxiety and reported the relevance of the intervention to their age group. They suggested that they would recommend the programme to others of their age and felt it was a beneficial programme for post-primary school students. They identified that the running of such programmes in the school setting increases their accessibility and is more likely to result in student engagement. Student participants identified some skills as personally more beneficial and useful than others, but acknowledged that different skills would likely appeal to different individuals. In relation to improvements, participants acknowledged that although they recognize the importance of homework activities, they found it challenging to complete homework tasks and felt the programme could be improved through inclusion of more games, which promoted interaction and enjoyment. Overall reflections were positive and student participants appeared satisfied with the intervention programme.

4.5 Themes Emerging from Facilitator and Co-facilitator Reflections

This part of the chapter considers the findings of the facilitator observations made over the course of the intervention and the interview with the co-facilitating teacher. The findings will highlight how the students reacted to different aspects of the intervention programme, personal comments on the intervention, experiences of preparing the intervention and aspects of feasibility of the intervention as a school-based programme. The teacher interview and researcher observations were transcribed and analysed for themes using thematic analysis. This provides an overview of issues with the practical application of the intervention and student response to the intervention. This part of the research addresses research question two. Analysis of the interview and researcher observations revealed four main themes (Figure 13, p. 94).

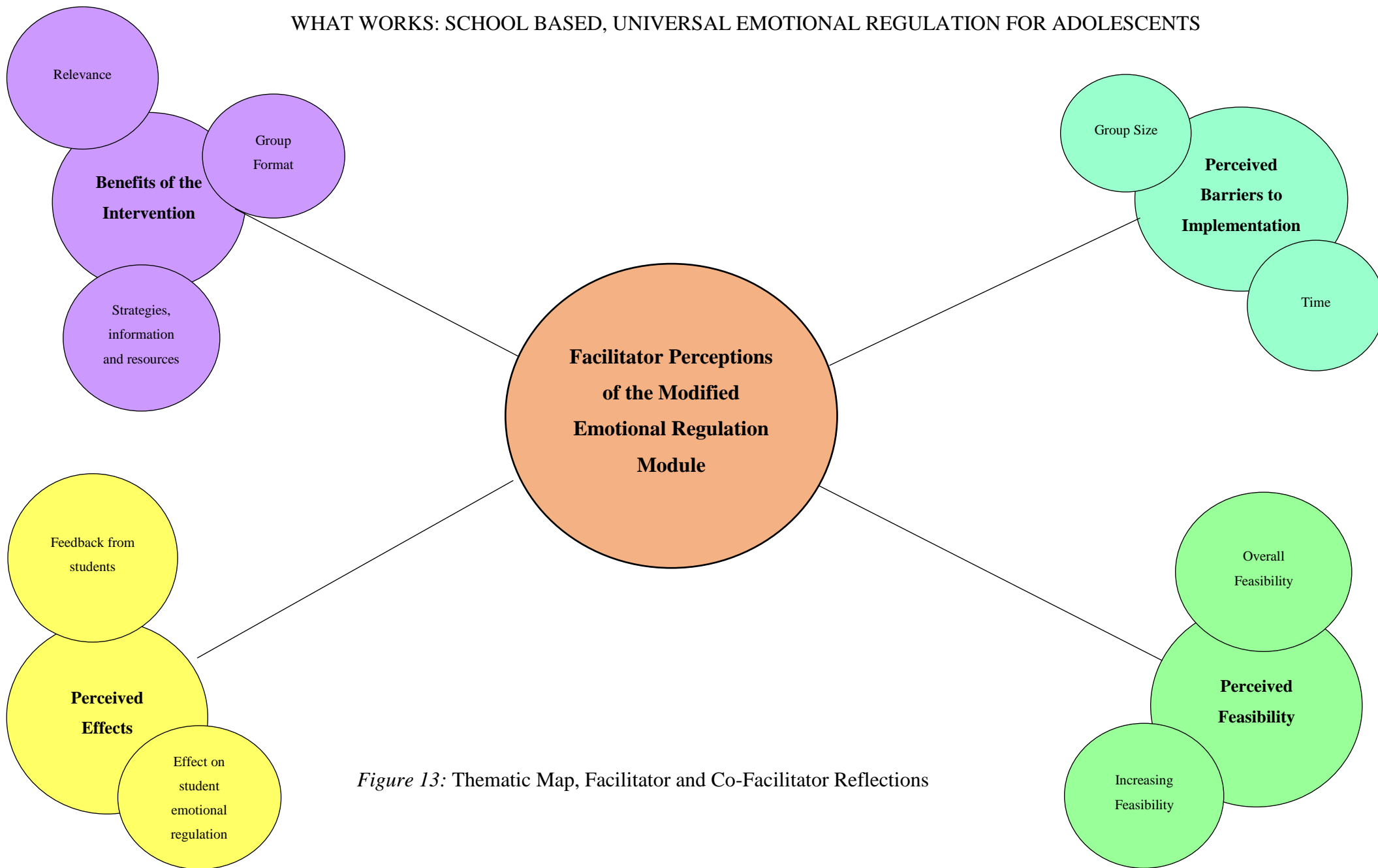


Figure 13: Thematic Map, Facilitator and Co-Facilitator Reflections

4.5.1 Theme One: Benefits of the Intervention.

This theme outlines the perceived benefits of the intervention highlighted by the co-facilitating teacher and facilitator diary, reflections and observations. The emerging subtheme's under this theme are; 'Relevance of the Intervention', 'Group Format' and 'Strategies, Information and Resources'. This theme highlights aspects of the intervention which were perceived as beneficial in terms of participant learning and programme appropriateness (Figure 14).

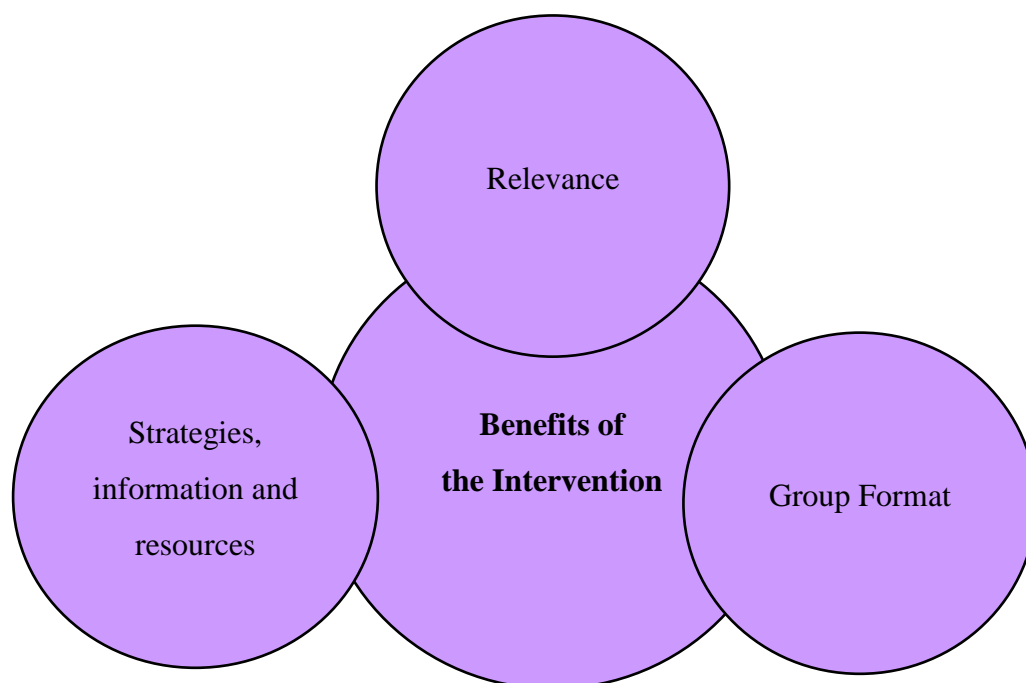


Figure 14: Theme One and Subthemes: Benefits of the Intervention.

4.5.1.1 Relevance

This subtheme relates to the relevance of the intervention for adolescent students and outlines that one benefit of the intervention was its appropriateness for this population.

“Ya, I thought it was good, it was appropriate for their age” (Co-Facilitator, p.215)

“Participants were able to identify times and situations in their own lives where they felt like this” (Facilitator Observations, p.215)

Participants were able to relate to the intervention connecting concepts and skills to their own lives. It was identified that the programme had some similar concepts to other

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

intervention programmes, however, the information provided was identified as suitable and relevant for the students.

“I suppose there is some overlap between this and other programmes...but I suppose the information was quite good for this programme...the information was relevant and appropriate for their age group and they seemed to benefit from taking part in the programme”(Co-Facilitator, p.215)

Overall, the programme was recognized as suitable for transition year students and is a relevant programme which they linked to their own lives.

4.5.1.2 Group Format

The effects of a small-group intervention were also highlighted as a beneficial aspect.

“I suppose there were only twelve to thirteen students in each group so there was the possibility to get around and support everyone...with the small number I think they all felt included and able to share and learn from one another.” (Co-facilitator, p.215)

“Students appeared engaged during group work to establish when their emotions were not facts and laughed during this activity and so seemed to enjoy it and again when completing the charades activity” (Facilitator Observations, p.215)

The data indicate that conducting the intervention in a small group was viewed in a positive manner, providing the opportunity for students to receive support where necessary and enabling all students to have the opportunity to take part in the intervention. The group format of the intervention was highlighted as beneficial, as through group work, student engagement was promoted and participants were able to share information and learn from their peers.

4.5.1.3 Strategies and Resources

There was also a benefit in the strategies and resources of the programme.

“And the different strategies and activities they did, they seemed to enjoy it” (Co-facilitator, p.215)

“...and there were so many different activities, I think it really encouraged everyone to take part.” (Co-facilitator, p.215)

‘The PowerPoint was quite useful to show participants and as a sample for them to use when completing their own’ (Facilitator Observation, p.215)

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

'Participants appeared to enjoy the opposite action game and most of the active learning components.' (Facilitator Observation, p.215)

'I thought the delivery was good, the kids felt relaxed and they participated' (Facilitator Observation, p.215)

The data suggest that participants were relaxed and participated in the intervention, with the different strategies and activities encouraging student participation and the use of different strategies and methodologies, including power point, art and craft, think-pair-share, discussion and other strategies. These strategies appeared to add to student engagement and enjoyment of the programme.

4.5.2 Theme Two: Effects of the Intervention.

This theme emphasises the perceived effects of the intervention highlighted by the co-facilitating teacher and facilitator. The emerging theme's under this theme are; 'Effect on Student Emotional Regulation' and 'Feedback from Students' (Figure 15).

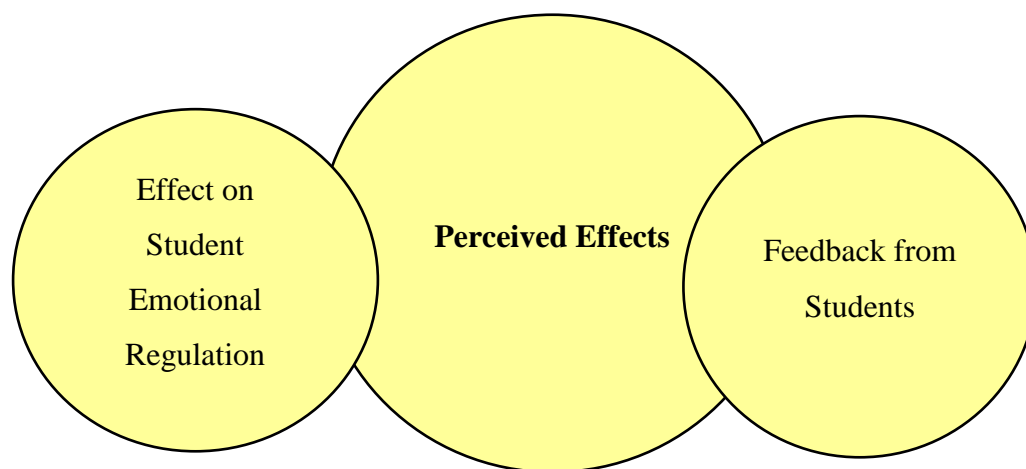


Figure 15: Theme Two and Subthemes: Perceived Effects

4.5.2.1 Effect on Student Emotional Regulation

This theme highlights the data which emerged from the co-facilitator interview and researcher observation which identified effects of the intervention in terms of student emotional regulation abilities, learning and development.

"it gave them a lot of information and a chance to look at their emotions, it was practical"
(Co-facilitator, p.215)

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

The intervention provided student participants with the opportunity to examine their emotions and was identified as a practical programme. The co-facilitating teacher reported that participants developed skills in their abilities to evaluate their emotions, understand and cope with them.

“I think they have all learned something from it” (Co-facilitator, p.215)

“Yes they did, in so far as I think they learned to self-evaluate...it helped them to reflect on how they are feeling...definitely yes they have learned certain skills, particularly just in relation to their own emotions, understanding them and examining them and maybe coping with them...” (Co-facilitator, p.215)

Participants were able to identify the different skills which could be used on the model of emotions for various strategies and seemed to take in the information during the sessions.

‘They were able to identify the model of emotions and so seemed to have taken in the information and could use it to identify different strategies they would use at each part of the model, applying the relevant skills e.g. checking the facts etc.’ (Facilitator Reflections, p.215)

Overall, the programme was reported as both positive and practical, and resulted in skills development and greater emotional regulation knowledge in participants.

4.5.2.2 Feedback from Students

Another subtheme which emerged in this section was ‘Student Feedback’. This outlines feedback and comments made by the students to the implementers during or following the intervention:

“..Overall I thought it was an appropriate and positive programme and the feedback I had gotten from the students was similar” (Co-facilitator, p.216)

“I mean a couple of them did say to me, o my god, I wish we had done this in third year” (Co-facilitator, p.216)

Students reflected that the programme would have been beneficial during their junior cycle exam year in order to aid with management of their emotions during this stressful period.

“On reflection on goals from last week one student commented on how useful it was and how she had set her goal and done it, which she would not have done without the group and how it had worked well for her. Other students reported taking further steps towards their goal.”(Facilitator Reflections, p.216)

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Students found the intervention effective and expressed that they would have appreciated and valued such an intervention during the previous year, when facing exams. Informal feedback from the students echoed the co-facilitators experience of the intervention as appropriate and positive. Participants also made reference use and application of skills in contexts outside of the school setting.

4.5.3 Theme Three: Perceived Barriers to the Implementation. This theme highlights the perceived barriers of the intervention (Figure 16). The sub-themes which emerged under this theme were ‘Time’ and ‘Group Size’.

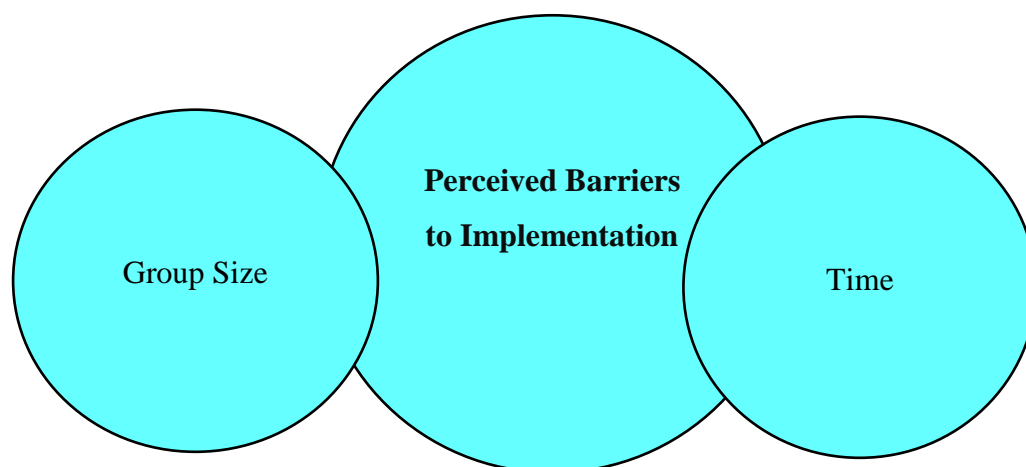


Figure 16. Theme Three and Subthemes: Perceived Barriers to Implementation

4.5.3.1 Group Size

The intervention was delivered in a small group format, with 13 participants in each group. From the data this format was identified as a beneficial layout, adding to participant engagement and ensuring students received support during the intervention. However, in terms of feasibility of the intervention, concerns were expressed in relation to schools’ abilities to facilitate an intervention in such a manner owing to current class sizes and ratios.

“...I’m not sure how that would work with a class of thirty.”(Co-facilitator, p.217)

It was identified that it would be difficult to provide as much support to students and ensure group engagement with a larger group size and this was considered by the teacher

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

co-facilitator in relation to current class sizes and policy. It was reported that the efficacy of the intervention could be reduced if not delivered in a small group format, however the class teacher was responsive to finding solutions for this difficulty such as peer mentoring or team-teaching.

“with a whole class I don’t know would it be as effective with a whole class as opposed to the small class grouping...I think you’d probably need to team teach with a group of thirty to give the time to the concepts. I don’t know how if you were doing it with a class of thirty on your own” (Co-facilitator, p.217)

4.5.3.2 Time

Another identified barrier to implementation of the intervention was ‘Time’. It took a significant amount of time to modify, develop and create resources, and deliver the intervention. This was identified as an obstacle by the co-facilitating teacher, with professionals having little available time to plan and organise resources, difficulty with timetabling and completing sessions in light of other school activities.

“Oh well barriers would be the time constraints, em like there was a lot of resources and organisation on your part and it would take time to maybe do that” (Co-facilitator, p.217)

“Lots of preparation time in terms of the vocabulary grid for students, which could be included as part of the book. The pages associated with the programme have been bound together to create a booklet for students which also took considerable time weekly” (Facilitator reflections, p.217)

“Had to undertake two sessions on one day due to marketing day” (Facilitator reflections, p.217)

“We are so lucky to have 50-55 minute classes so that worked well for facilitation” (Co-facilitator, p.217)

Although the group format was identified as a positive delivery method, difficulties with running the intervention in this format nationally in schools was envisaged. Although the school had 55 minute sessions, which provided the opportunity to deliver the intervention, the co-facilitator identified that other schools may have difficulty accommodating this. Similarly, over the course of the intervention, timetabling and unplanned activities which emerged meant that for both groups session six and seven were combined and delivered in one session of one hour and fifty minutes.

4.5.4 Theme Four: Perceived Feasibility.

The next theme refers to the overall feasibility of the intervention programme in terms of how practical it currently is as a school-based intervention and any changes which could be made to increase feasibility (Figure 17).

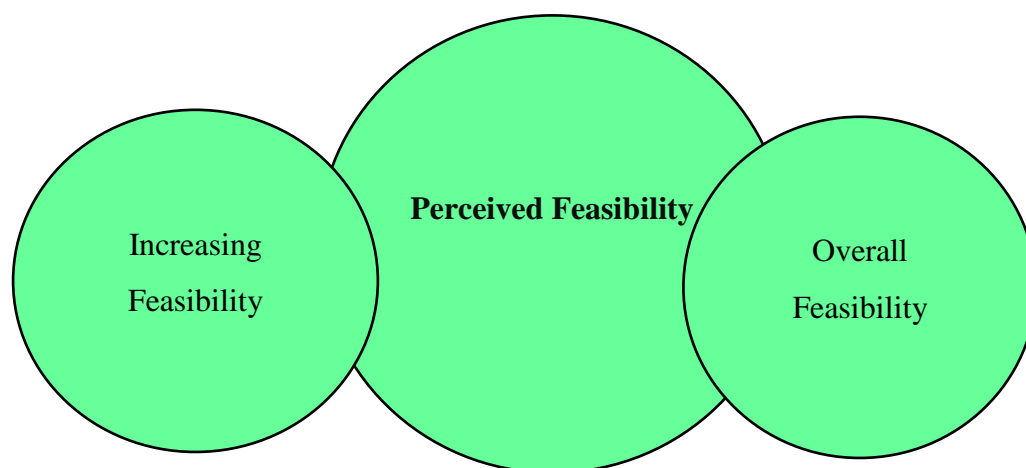


Figure 17. Theme Four and Subthemes: Perceived Feasibility

4.5.4.1 Increasing Feasibility

The concepts and ideas covered during the intervention were identified as beneficial. However, data indicated that certain aspects of the intervention could be modified to increase feasibility. This includes provision of resources with the intervention to reduce the time spent planning and organising resources. It was posited that provision of such resources could increase the ability and willingness of teachers and professionals to undertake the intervention.

“I would definitely sit down and look further, more in depth at the programme and I suppose you had provided the resources so if it was me doing the resources I don’t know, it would be great to just get the resources and I think people would be more willing to do it if they just got the programme and resources and like here you go, and it doesn’t take so much to do it” (Co-facilitator, p.218)

“Were booklets available bound and had resources come with the programme this would significantly reduce time in preparing for the intervention group.”(Facilitator Reflections, p.218)

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Data indicated that having information available to parents was a possible area for improvement for the programme. The provision of information to parents could encourage parents' awareness of their children's emotions and encourage the discussions around emotions. It could also boost the generalisation of the learned skills.

"...maybe to have some information to parents on what the students are doing and how this could maybe be encouraged at home" (Co-facilitator, p.218)

4.5.4.2 Overall Feasibility

Overall, the intervention was regarded in a positive manner, with minimal areas for modifications and changes relating to areas that may improve the intervention as opposed to criticisms of the programme. In terms of improving feasibility the inclusion of resources and information to parents were outlined as areas for increasing feasibility. The provision of resources with the programme, including the bound booklets, power point, games resources and any resources created by the TEP would also reduce time spent preparing for the intervention and potentially increase commitment of school staff to the programme, which would also increase its feasibility.

"...like any programme you could take chunks out of it to do within a class, and em, I could see me using it again, I would like to try it with another group myself and have maybe that other group come in and support, maybe some peer learning." (Co-facilitator, p.217)

"I could definitely see myself doing it again with other groups" (Co-facilitator, p.217)

The data indicate that the programme was well received by the co-facilitating teacher. There were evidential benefits of the programme in terms of the resources and strategies used its structure and the small group format. In terms of effects of the programme, informal observations of students and student comments revealed its effect on promoting their understanding of their emotions and the overall value they placed on the intervention. In terms of barriers to the intervention, timing, group sizes and resources all play a part in the ability of schools to provide appropriate and effective intervention for their students. The programme could also be improved by providing resources for teachers to minimise planning time and increase the likelihood of teachers adopting the programme. The provision of information to parents may also provide support in terms of students' skill development

4.5.5 Summary of Facilitator Reflections

Several aspects of the intervention were deemed beneficial from facilitator reflections. The use of a variety of activities and power point support along with the small group format of the intervention were deemed as positive for student engagement and support. The intervention programme was deemed as relevant for the student population group. The intervention gave students an opportunity to examine and learn about their emotions and develop skills to appraise and cope with their feelings. Student feedback was positive and identified the programme as relevant and practical to their lives, with students making use of the skills in other contexts. Concerns were raised as to the feasibility of the programme with current class sizes and the amount of preparation necessary to design and provide resources to students. It was identified that currently it would be difficult to deliver the programme in a small group format and challenging for teachers to develop resources to support the intervention. It was also suggested that the feasibility of the programme could be increased through other methods of delivery including peer mentoring or team teaching and that the programme would be more feasible were resources provided to facilitators.

4.6 Summary of Findings

4.6.1 Quantitative Findings. Quantitative findings suggest that participants in the intervention group displayed significantly reduced scores of reported difficulties with emotional regulation from baseline to time one, however, the overall effect of group on participant scores were found to be non-significant. The effect of 'Time' was significant, however the effect of 'Group' and the interaction effect was not. This was possibly due to diffusion of the intervention within groups or the class teacher address and using language between groups outside of the session. It is also possible that participant responses were influenced by the time of year as data gathered at time two and time three preceded both the Halloween and Christmas break, resulting in more positive responses of participants at both time points. Furthermore, research suggests that it may be difficult to find significant effects with universal groups as it requires that control groups display no change or a worsening of scores (Pössel et al., 2013). The effect size was, overall, small ($d=.011$). Quantitative results from parent questionnaires suggested a significant

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

reduction in parent scores of student difficulties with emotional regulation, however a low return rate of questionnaires reduced the reliability of this finding.

4.6.2 Qualitative Findings. Qualitative findings provided information on the student and teacher experiences of the intervention, examining ‘what works’ for such school based intervention. Several themes emerged from the student data; benefits of the intervention, relevance of the intervention, effect on emotional regulation and changed and differences. Students outlined various aspects of the intervention as beneficial including the use of visual supports, booklets, games and art and craft activities. The small group format was identified as beneficial as creating an environment for students to feel safe and learn both from and with one another. Participants described the intervention as both helpful and practical and reported that the intervention had an effect on their emotional regulation abilities. They described the various skills they learned as a result of the programme including an increased ability to understand, identify, make meaning and cope with their emotions. They reported appraising their emotions and developing an understanding of the link between their emotions, actions and behaviours. Students also reported use of skills such as mindfulness, goal setting and problem solving. They relayed that they made use of cognitive reappraisal and increased monitoring and coping with emotions to contexts in their every lives and highlighted the wider effects of the emotional regulation module.

Adolescence was identified as a transitional period of increased stress and anxiety and students reported the relevance of the intervention to their age group. They outlined that they would recommend the programme to others of their age and felt it was a beneficial programme for post-primary school students. Students identified that the running of such programmes in the school setting increases their accessibility and is more likely to result in student engagement. Participants identified some skills as personally more beneficial and useful than others, but acknowledged that different skills would likely appeal to different individuals. In relation to improvements, participants acknowledged that although they recognize the importance of homework activities, they found it challenging to complete homework tasks and felt the programme could be improved through inclusion of more games, which promoted interaction and enjoyment. Overall participant reflections were positive and they appeared satisfied with the intervention programme.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Data from the facilitator reflections highlighted the benefit of a variety of activities and power point support along with the small group format of the intervention were positive for student engagement and support. The intervention was deemed relevant for the student population group and they appeared to relate it to their own lives. It gave students an opportunity to explore their emotions and learn skills to appraise and cope with them. Student feedback throughout the intervention was positive. The feasibility of the programme in its current format and in light of current educational practices and policy was questioned.

Current class sizes and the amount of preparation necessary to design and provide resources to students were identified as barriers to implementing the intervention. It was identified that currently it would be difficult to deliver the programme in a small group format and challenging for teachers to develop resources to support the intervention. It was also suggested that the feasibility of the programme could be increased through other methods of delivery including peer mentoring or team teaching and that the programme would be more feasible were resources provided to facilitators. The results and implications of this research, in light of the reviewed literature and research questions will be presented in the following chapter.

Chapter 5: Discussion

5.1 Overview of the Chapter

This chapter outlines the implications of the results of the study, in light of the reviewed literature and identified research questions. This will identify how the research contributes to knowledge on ‘what works’ for school based, emotional regulation interventions and the feasibility and effectiveness of such interventions for student emotional regulation. This chapter outlines the aims of the research, including the research questions. The findings from the study are outlined and considered in terms of previous literature and psychological theory. The methodological strengths and weaknesses of the study are outlined and discussed in terms of strengths and limitations.

5.2 Aim of the Research

The aim of this research was to establish the impact of a universal, modified emotional regulation module facilitated by a Trainee Educational Psychologist (TEP) and a class teacher with a group of adolescents in Transition Year (MA=15.49) and to add to the literature specifically related to universal, school-based therapeutic intervention for this population, and for emotional regulation. The research aimed to answer the following research questions:

- 1) What is the effect of a modified, emotional regulation module on reports of student emotional regulation?
- 2) How do students and facilitators perceive the experience of taking part in the intervention?

Based on previous research on CBT and DBT, it was predicted that there would be some positive effects of the intervention. It was predicted that based on the modifications made to the programme that participants would report overall satisfaction with the intervention.

5.3 Key Findings: Student Quantitative Data

This part of the research aimed to examine the effect of the intervention on student self-report of difficulties with emotional regulation. Quantitative results do not suggest that participants’ reported difficulties with emotional regulation were significantly impacted by the intervention. Participants in the intervention group showed a decline in rated difficulties with emotional regulation, which suggests a positive trend. However, a similar decline in scores occurred within the control group. The interaction between

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

participant-rated scores of emotional regulation and ‘Group’ was non-significant and there was a non-significant interaction effect for ‘Group’ and ‘Time’. However, there was a significant effect of ‘Time’ on participant scores. The intervention group displayed a significant within-group change between scores collected at baseline and time one, which the control group did not. Between baseline and time one, 66% of participants in the intervention group reported an above average decline in scores on the outcome measure, compared with 45% of the control group. This suggests that possibly participants in the intervention group displayed a more noteworthy decline in reported difficulties with emotional regulation following the intervention. There may have been some positive effects but, overall, due to lack of significant interaction and between group effects it was not possible to draw conclusions about the effect of the intervention. Overall effect sizes were small ($\eta_p^2=.011$).

The results were not as expected based on previously reviewed literature on the DBT Steps-A intervention (Flynn et al., 2018), which found positive effects of the intervention on student internalising and externalising problems. However, previous studies of school-based universal DBT and CBT interventions have found inconsistent results. Previous literature found a range of effects of such interventions, with some finding vast improvement in participant scores of anxiety or depression and others finding less promising outcomes (Horowitz et al., 2007; Pössel et al., 2013; Stallard et al., 2012). The outcome of this study was similar to that of Tomy et al. (2016) with the intervention group experiencing a more positive response to the intervention when compared to the control group, however, overall this was non-significant. Research suggests that those with higher levels of emotional difficulties, such as anxiety or depression, experience the most significant decline in scores as a result of such interventions (Spence et al., 2005). It has also been suggested that the impacts of such interventions when delivered universally in contexts such as schools or community settings can lead to weakened effects (Williams et al., 2003).

The reviewed studies took place over a six to twelve week period, with one study by Flynn et al. (2018) lasting 22 sessions. The shortest study reviewed found positive effects of the universal CBT intervention, however, these results were non-significant. Previous research suggests that interventions are most effective if delivered at minimum, over an eight week period (Taylor et al., 2014; Tomy et al., 2016). This study was delivered over a six week period. Quantitative results of the current study may have been

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

influenced by its brief duration; a longer time frame may have provided more opportunities for students to generalise skills or practice strategies leading to increased change. It is possible that the lack of quantitative changes evident in the participant scores of difficulty with emotional regulation was due to lack of clarity or sensitivity in the measure which may not have reflected participant changes, particularly as qualitative reflections of students suggest changes in emotional regulation abilities (Halstead, Youn, & Armijo, 2013). The qualitative data collected from participants also suggests that participants found specific skills useful, but these varied based on their personal preferences and experiences and the intervention components may have led to changes in some participants but not others, based on these personal preferences.

5.4 Parent Questionnaires

This part of the research aimed to examine the effect of the intervention on parent - report of their child's difficulties with emotional regulation. Parent completion and return of questionnaires was successful at baseline, with questionnaires returned for all participants. However, response rates at time one and time two were low. This caused a lack of complete data sets and it was not possible to compare group changes over time. Alternatively, a paired samples t-test provided pre-post changes in parent scores, provided by a very small sample (n=8). This was a similar method used in the study by Rodgers and Dunsmuir (2015) and found similar results, with parent questionnaires reflecting an overall positive change in student emotions. In this study parent report of their child's difficulties with emotional regulation declined. This may suggest that participants were able to generalise skills or practice problem-solving and emotional regulation strategies in the home or other environments outside of the school setting. However, this result must be interpreted with extreme caution due to the low response rates of parents (Faber & Fonseca, 2014). The lack of a control group for analysis also reduces the validity of this conclusion. It has been suggested that low response rates for community or school-based intervention could be due to lack of identified clinical need for such an intervention, which reduces motivation to complete and return questionnaires (Holbrook, Krosnick, & Pfent, 2008). Perhaps the preventative advantages of taking part could have been emphasised to parents and included in a parent information sheet. This will be discussed further under recommendations for future research.

5.5 Perceptions of the Intervention

This part of the research aimed to look at what works for students regarding school-based emotional regulation programmes and what is their experience of this intervention. The qualitative results of this research study provide insight into the real-life effects, implementation factors and the feasibility of such school-based programmes. This aspect of the study investigated the perceptions and experiences of a sub-sample of the participants ($n=7$). Although the quantitative data failed to find significant between-group differences as a result of the intervention, the qualitative data provides further information on everyday effects of the intervention. The qualitative data also generated evidence on aspects of the intervention that were beneficial and useful to participants and also outline the relevance of the programme for this population.

Furthermore, qualitative data collected through the researcher observations and reflections and interview with the co-facilitating teacher provided information on their perceptions of the intervention effects and relevance for their students, along with identifying positive aspects of the intervention and barriers to implementation in the school setting. Similarly to previous qualitative studies on universal school-based CBT and DBT, participants' reflections were overall positive in nature (Garmy et al., 2015; Taylor et al., 2014). The participant interviews revealed four main themes: 'Perceived Benefits of the Intervention', 'Relevance of the Intervention', 'Effect on Emotional Regulation' and 'Changes and Differences' in terms of the programme. Four themes also emerged from the co-facilitator interview and facilitator observations; 'Benefits of the Intervention', 'Feasibility of the Intervention', 'Effects of the Intervention' and 'Barriers to Implementation'. The following section will outline this data in light of the previously reviewed literature.

5.6 Student Interviews: Perceived Benefits of the Intervention

Data which emerged from the student semi-structured interviews identified various aspects of the intervention which the participants perceived as beneficial. Overall, participant reflections suggested that the intervention was regarded in a positive manner, similar to results of previous studies (Garmy et al., 2015; Taylor et al., 2014). The various resources and strategies used throughout the intervention were identified as enjoyable and beneficial aspect of the programme, including the visual supports, workbooks and practical activities. The modifications made to the intervention which included visual and

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

multimedia support, active learning strategies and increased co-operative learning approaches was a factor mentioned by participants and appeared to encourage student engagement and learning. This was similar to results from previous research and concurs with research on the use of active learning approaches for emotional learning programmes (Jones, 2017; Taylor et al., 2014). When compared to the reviewed studies, participant reflections were more positive, with participants in previous studies reflecting overly didactic and passive approaches as a negative aspect of the interventions (Garmy et al., 2014; Flynn et al., 2017; Taylor et al., 2014).

When this study is compared to the previous research on the DBT Steps-A intervention it is apparent that the modifications made to the module appeared to alter participant feedback on the intervention, leading to more positive reflections and enjoyment of the intervention (Flynn et al., 2017). The use of active learning approaches and co-operative learning approaches appeared to have increased participant enjoyment, positive attitudes in terms of the intervention (Chickering & Gamson, 1987; De Witte & Rogge, 2012; Susskind, 2005; Yueh et al., 2012). In contrast to the Flynn et al. (2017) study, participants in this research study experienced greater inclusion of more interactive activities and student interaction, which resulted in no student identifying the intervention as unexciting or inactive. Again, the inclusion of the word-bank and multimedia support resulted in no participant identifying terminology, 'wordiness' or language as an issue (Flynn et al., 2017).

The group format of the intervention was also acknowledged as a positive aspect of delivery. Participants reported learning from one another, increased group bonding, a trusting and warm environment and feeling less isolated as a benefit of the intervention group. Previous research also highlights the benefits of such universal, school-based group approaches, with participants working and learning with each other and feeling less alone (Flynn et al., 2017; Garmy et al., 2015). The use of groups and co-operative learning activity as an approach to learning is rooted in social learning theory and it appears, from the data collected in this study that this approach leads to students learning from one another. Results of this study identified that discussing emotions was an enjoyable and novel experience for participants. The discussion of emotions in a group format appeared to reduce the stigma regarding conversations about feelings and emotional experiences (Chisholm et al., 2016; Patel et al., 2008). The discussion of emotions was normalised through the group intervention (Garnefski et al., 2001; Grusec, 1992). The skills covered

in the intervention were deemed practical and easily applied to participants' everyday lives, outside of the session. Participants found the intervention content appropriate and relevant to their lives, and unlike other studies the intervention was more positively focused (Garmy et al., 2015; Taylor et al., 2014)

5.7 Student Interviews: Effect on Emotional Regulation

Although quantitative data identified an overall reduction in participant-reported difficulties with emotional regulation, lack of significant between-group effects meant it was not possible to conclude that the intervention affected changes in participant-reported emotional regulation difficulties. However, from the student interviews it appears that the intervention did lead to changes in participant emotional regulation. There was a reported change in participants' thinking and behaviour, with similar outcomes to the reviewed studies, including an increased ability to appraise situations, identify feelings and identify causes of emotions (Garmy et al., 2015; Taylor et al., 2014). This is a positive effect of the intervention as greater emotional intelligence and awareness of emotions has been linked to increased well-being, including more positive affect and increased self-esteem (Schutte, Malouff, Simunek, McKenley, & Hollander, 2002). Data outline that students became more aware of physiological signs of emotions, enabling them to identify their feelings. There was an increase in participants' recognition of their control of emotions, identifying that they could take action when they experienced certain emotions. This is another positive finding as research suggests that individuals who have a greater understanding of emotions and believe in their ability to control their emotions tend to use more adaptive emotional regulation strategies (Nyklíček et al., 2010). Similar to the study by Garmy et al. (2015) and Taylor et al. (2014), participants in the study reported an increased insight into the link between their emotions and behaviours and appeared to consider alternative behavioural responses to emotions. Participants were more accepting of emotions, highlighting the importance of acknowledging all emotions in order to use appropriate coping strategies. This suggests that participants may have had an increase in the more adaptive emotional regulation strategy of emotional acceptance (Stoeber & Janssen, 2011).

There was evidence of the development of various skills following student participation in the modified, emotional regulation module. This study concurred with previous research by Garmy et al. (2015) and Flynn et al. (2017), with students developing

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

skills in mindfulness and increased positive thinking. There was a suggestion that participants used adaptive emotional regulation strategies based on the skills learned during the intervention, including visualisation, positive self-talk and cognitive reappraisal (Depape, Hakim-Larson, Voelker, Page, & Jackson, 2006; Stoeber & Janssen, 2011). There was also evidence of goal setting and engagement with positive experiences, which in turn can decrease vulnerability to emotions and promote well-being (Tugade, Fredrickson, & Feldman Barrett, 2004). The results of this study are similar to previous research, with participants generalising skills to their daily lives outside of the intervention setting (Garmy et al., 2015). There was use of learned skills in the context of sports activities, extracurricular-activities and in employment settings. It appeared that participants were able to self-regulate emotions in these contexts in times of stress or anxiety (Carthy, Horesh, Apter, & Gross, 2010).

Participants reported changes in their emotional regulation abilities in terms of their capacity to use different emotional regulation strategies in different environments and social situations (Gratz & Roemer, 2004). They demonstrated increased awareness of their emotions and reported use of antecedent-focused strategies and adaptive strategies, such as problem solving, cognitive restructuring and cognitive reappraisal (Gross, 1998; Kring & Sloan, 2009; Leahy et al., 2011). The use of thought-challenging and positive-thinking styles suggest that participants also became aware of cognitive and antecedent-focused approaches to change negative thinking (Aldao et al., 2010; Gross, 2002). It appears that participants became more aware of the link between thoughts, feelings and behaviours, which is the foundation of CBT. They also became aware of strategies to appraise their emotions and in turn change their feelings and behaviours (J. Roberts, 2018). The awareness and use of more antecedent-focused strategies, such as acceptance, problem-solving and cognitive processes lead to greater self-esteem and well-being (Aldao et al., 2010; Gross & John, 2003; Haga et al., 2009).

5.8 Student Interviews: Relevance of the Intervention

Data from the student interviews suggest that emotional regulation interventions are relevant for the adolescent age group, in a school setting. There was a sense that the focus on and exploration of emotions was a novel activity. This encouraged students to reflect on and discuss their emotions, something they would not usually do. Exploring and speaking about their emotions was identified as an atypical activity for them and there

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

was an evident appreciation for the opportunity to be open and normalise speaking about emotions. Students in the current study stated that exploring emotions at school was something they had not done before and reflected that their own age group are unlikely to sit down and examine their emotions independently. This was surprising considering the recent governmental focus on well-being and identification of emotional learning as a core focus for development (Department of Children and Youth Affairs., 2015). Participants reported that adolescence is a time when people need support to identify, understand and cope with their emotions and identified this period as being a stressful time of exams and transitions (Dooley & Fitzgerald, 2012; Government of Ireland, 2018).

Running such an intervention in school was identified as beneficial, encouraging engagement and participation. Participants in this, and previous intervention research emphasised the importance and appropriateness of such an intervention for adolescents and would be inclined to recommend such an intervention to others (Garmy et al., 2015; Taylor et al., 2014). They acknowledged, as in previous research, that adolescents, at times, experience difficulties coping with emotions and the programme was relevant to this stage of their lives (Auerbach et al., 2010; Steinberg, 2005). Participants also made reference to the period of adolescence as a time of transition for them and identified the stresses they experience, particularly in relation to moving through post-primary school and completing state examinations (Sportel et al., 2013). The students expressed the importance of having such a programme in schools, increasing their ability to access the programme and motivation to attend the sessions. This is reflected in the research into universal school-based interventions, with the provision of such programmes leading to a reduction in the stigma associated with emotional issues to greater accessibility to programmes for students in schools (Chisholm et al., 2016; Patel et al., 2008).

Recent governmental legislation and policy has also outlined the emotional development of students as a focus of the education system and acknowledges the core role of emotional regulation and coping strategies in overall well-being (DCYA, 2015). Although this recent focus is welcomed, the students in this study indicated that they had not had the opportunity to explore and learn skills for managing emotions in school up to this point. This suggests a lack of intervention targeting this area and the need for schools to be equipped with curricular resources and class material to promote such skills for the improved wellbeing of the students in their care and the realisation of the aims of the Irish

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Education System (Government of Ireland, 2018a; National Council for Curriculum Assessment., 2018).

5.9 Student Interviews: Changes and Differences

Overall, participants' reflections on the intervention were positive, with minimal feedback on areas for improvement. Participants reported that they enjoyed the active learning components of the intervention, with the only feedback on this area being the inclusion of more games, as this appeared to be a particularly enjoyable pedagogical approach. This was in contrast to previous research which suggested various areas for improving content and delivery, challenging language and heavy material (Flynn et al., 2017b; Sawyer et al., 2010). Data from the semi-structured interviews also suggested that different strategies were preferred by different participants, with students acknowledging that individually and personally they found some skills less beneficial. However, they acknowledged that different skills were valuable for different people. For some participants certain skills were less effective or more difficult to employ. It is evident that individual factors also impact on responsiveness to intervention, and it is not surprising that students would be more affected and influenced by differing skills.

Contrasting with other studies, participant feedback on this intervention offered no definite area for improvement, unlike the studies by Flynn et al. (2017), Taylor et al. (2014) and Garmy et al. (2015). Participants were content with the overall format and learning methodologies used throughout the intervention. Participants in this study did not make reference to the facilitator, this may have been due to the fact the facilitator undertook the interviews with participants and as facilitation was not targeted as a question over the interview (Taylor et al., 2014). The qualitative findings demonstrate that overall the students were happy that their ability to regulate their emotions had improved. Students reported they had learned skills to regulate their emotions, including cognitive restructuring, accumulating positive experiences, goal setting and problem-solving.

5.10 Summary of Student Perceptions

Generally, qualitative findings from the student semi-structured interviews indicated that participants experienced development in their emotional regulation abilities, becoming more aware of emotions and making use of new coping strategies, both during

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

classroom sessions and in their real lives. Such skills as mindfulness, visualisation, cognitive restructuring, cognitive reappraisal, goal- setting, problem -solving and accumulating positive experiences were identified as practical and applied by participants in their lives, following the intervention. When compared to previous research, the modification of this module to include more active and co-operative learning approaches resulted in more positive reflections by participants and increased enjoyment and engagement of the programme (Flynn et al., 2017; Taylor et al., 2014; Garmy et al., 2015). The universal, school-based, group delivery of the intervention was positive. The programme was more accessible to students when provided in school, which meant students were more likely to attend such a course. Students learned from one another and there was a normalisation and reduction in stigma when conversing and learning about feelings. The stressful period of adolescence reflected the necessity and relevance of such interventions in the school setting, and drew attention the lack of focus on this area to date.

5.11 Facilitator Reflections: Benefits of the Intervention

The intervention was identified as appropriate and relevant for adolescents and there were identified benefits of taking part in the intervention. The group format of the intervention was beneficial, with the small groups ensuring participation and inclusion of all students and allowing them to learn from one another and enjoy their interactions. This was similar to the data from the student semi-structured interviews, which identified the group format as contributing to social learning and reducing feelings of isolation (Flynn et al., 2017; Taylor et al., 2014; Garmy et al., 2015). Facilitator reflections also revealed an overall positive view of the intervention and unlike the study by Taylor et al. (2014), outlined the relevance of the intervention to the student age group, suggesting this programme may be more beneficial for older adolescents. Results of the teacher interview also highlight the appropriateness of the study for the middle to older adolescent age group, unlike the previous studies which used interventions more suitable for younger students (Garmy et al., 2015; Taylor et al., 2014). In comparison to other studies, the classroom teacher did not suggest recommendations in terms of content, resources and activities. The systematic changes made to the module, based on active learning approaches and developmental literature, appears to have reduced the need for adaptations to the intervention, when compared to feedback from teachers in relation to

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

other reviewed intervention studies. Further observation of students suggested that active learning activities encouraged student engagement and participation (Flynn et al., 2017; Taylor et al., 2014; Garmy et al., 2015; (Chickering & Gamson, 1987; De Witte & Rogge, 2012; Susskind, 2005; Yueh et al., 2012). This suggests that participants were relaxed and participated in the intervention, with the different approaches and activities encouraging student participation and the use of different strategies and methodologies (e.g. power point, art and craft, think-pair-share, discussion etc.) adding to student engagement and enjoyment of the programme.

5.12 Facilitator Reflections: Effects of the Intervention

Facilitator reflections highlighted that the intervention contributed to participant learning and development. There was an opportunity for participants to examine their emotions, reflect on how they are feeling, self-evaluate and learn certain skills, particularly in relation to understanding and coping with emotions (Schutte et al., 2002). There were comments made by participants during the sessions and interviews relaying their use of skills, such as goal setting, thought challenging or accumulation of positive experiences outside of the school setting. Similar to the study by Taylor et al. (2014), the researcher observations and student interviews of the study suggested that several aspects of the intervention were particularly useful to students, such as the goal setting activity, accumulation of positive experiences activity and problem solving. This was also evident in the student participant data, whereby students outlined becoming more aware of and developing emotional regulation abilities (Schutte et al., 2002). Reflections of participants towards the class teacher indicated that they valued the intervention and found it relevant and useful. They indicated that it would have been particularly beneficial to complete this intervention or have an intervention which focuses on emotional regulation, during times of stress, including the transition to post primary school or exam years. This was similar to the findings in the Taylor et al. (2014) study which highlighted the relevance of the intervention to the student age group. In contrast with the previous research on this intervention by Flynn et al. (2017) the participants were able to link and use covered skills and strategies in their own lives and did not identify the intervention material as too complex. This was possibly due to the use of various supports and strategies to encourage learning.

5.13 Facilitator Reflections: Barriers to Implementation

The small group format was identified as a benefit of the intervention by both the student participants and co-facilitating teacher, in terms of promoting student engagement and inclusion and aiding with provision of support to students in relation to concepts of the intervention. The small group format was identified as aiding student learning and participation, as students were able to play an active part and receive support where necessary. However, concerns were expressed in relation to the ability to facilitate this intervention in a small group format due to class sizes. The intervention was undertaken with small groups of 12 to 13 students, yet with average class sizes from 25 to 30 the co-facilitator expressed concerns as to the implementation of the study in real life settings in this format.

Similar to the study by Taylor et al (2014), results of this research suggest that teachers and psychologists would both struggle to find the time to deliver the intervention and create the resources. It would be more beneficial were the programme to come with appropriate resources; making the incorporation of the intervention into the syllabus more sustainable. Although the small group format was highlighted as a beneficial aspect of the programme which seemed to encourage participation, the data collected from the teacher suggests that the intervention would be difficult for teachers to implement with a larger class group. Unlike previous research in this area, the teacher in this study did not highlight SPHE as an undervalued subject and acknowledged the importance of such interventions for this population (Garmy et al., 2015), this may be due to increased government focus on emotional well-being for youth (Department of Children and Youth Affairs., 2015).

5.14 Facilitator Reflections: Overall Feasibility

The data from this study indicates that some aspect of the intervention could be supported with resources and information provided to parents to encourage generalisation of skills. This was similar to the recommendations emerging from the study by Flynn et al. (2017). In terms of resources the bound books, power point, games resources and visuals created by the TEP could be provided to support skills development and would reduce time and increase school staffs' ability to plan and deliver the intervention. All reviewed studies outlined weakness in interventions in terms of lack of interactive, hands-on activities (Flynn et al., 2017b; Taylor et al., 2014). However, the teacher feedback

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

from this study suggests that the use of the active learning strategies encouraged student participation and ensured all students received support and were enabled to partake in the group.

The use of the different learning strategies, multimedia supports and co-operative approaches appeared to be beneficial and increase student's participation and enjoyment. However, in order to increase feasibility for delivering the intervention in schools it would be beneficial to provide the intervention with the associated resources, to reduce teacher planning and preparation time (Taylor et al., 2014). The small group format of the intervention was also beneficial, with the class teacher reporting that with current ratios this would not be feasible. However, the class teacher identified that the content of the programme was good and that team-teaching or peer-learning may be an appropriate means of delivering the intervention to small groups and providing appropriate support. It was evident that there were benefits of delivering one module of the four module programme. It may be possible to run such an intervention, with a number of modules over an extended period of time, such as the two year leaving certificate cycle (Flynn et al, 2017).

5.15 Strengths of the Study

The use of a mixed methods approach is a strength of this study, particularly as the data which emerged from the quantitative and qualitative strands of the study were conflicting. The use of both quantitative and qualitative methods is one strength of the study and of increases its validity. The collection of the data using both methods, provides compensation for the weakness of each one in isolation, strengthening the results and conclusions drawn (Creswell & Clark, 2011; Abbas Tashakkori & Teddlie, 2010). Although the effect of the intervention was small and non-significant in terms of quantitative data, the qualitative data suggested that from individuals' perspective the intervention was beneficial and encouraged emotional regulation skills (Creswell, 2013; Mertens, 2014). The use of both methods of data collection prevented the drawing of erroneous conclusions from either data method in isolation (Robson, 2002).

The use of a control group is a strength of the study adding to its validity (Mertens, 2014) The researcher followed the manual for each session and there was no change in content as a result of the modifications. Throughout this research project strategies were used to increase the reliability and the dependability of the research data. A research diary

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

and field notes were used to minimise researcher bias which contained reflections and observations. The researcher engaged in regular supervision with the research supervisor, in terms of systematically modifying the module, planning for data collection and data analysis. Amendments were made following feedback from the research supervisor through various steps of the research process. It is possible that researcher bias may have affected the research in terms of personal interpretations of the findings when interpreting the qualitative data. However, guidance was sought from the researcher supervisor throughout the process and as the researcher was situated within the research, it is important to acknowledge this as part of the reality represented in this study

5.16 Measures

Although there was an overall decline in participant scores on the Difficulties with Emotional Regulation Scale (DERS), between group effects were non-significant. This may have occurred due to a number of factors. It is possible the questionnaire lacked the sensitivity to detect changes over the short time period of the intervention. Although the questionnaire has high internal consistency and was selected as an appropriate non clinical tool to measure changes in emotional regulation, previous research studies had not used this tool and so there is insufficient evidence to support its sensitivity to detect changes in adolescent populations over this time frame. In terms of qualitative data, semi structured interviews were advantageous as they allow for the collection of rich data. Some participants may be more open to talking and sharing their own opinion in the one to one setting. However, only seven students received parental consent to take part in the intervention and so the subsample was small, reducing the validity and generalisability of the findings.

5.17 Findings in Light of the Concept of Emotional Regulation

The findings of the research are considered in light of the model of emotional regulation as developed by Gross (1998) which outlines strategies used at different stages in the process of regulating emotions. Participants of the study reported use of antecedent focused strategies; the strategies which occur before the psychological and behavioural results (Gross, Richards, & John, 2006). This was reported by them following the intervention. Students reported that they were more accepting of their emotions, developing a better understanding of them and appraising them. They reported engaging

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

in problem solving and developing an understanding of the link between their emotions and their behaviours. Student interviews reflected that students began to consider their emotions and the effect they had in the context of their actions towards other people and the impact of these actions on their desired outcomes. Students reported that following the intervention they engaged in other antecedent focused strategies such as mindfulness, relaxation and cognitive reappraisal. Participants relayed changes in their appraisal of their emotions and use of cognitive change (Gross & John, 2003). In terms of cognitive reappraisal students reported changing their emotional responses by reinterpreting the emotional stimulus, making reference to sports activities and work experience. For example some participants reported feeling anxious or having negative thoughts about activities, however, they made use of skills to appraise their emotions and the situation to modulate their emotional responses. Participants also reported making use of more positive strategies including problem solving and becoming more accepting of their feelings (Haga, Kraft, & Corby, 2009). Student participants reported an increased awareness and understanding of their emotions along with an increased acceptance of their emotions (Gratz & Roemer, 2004). They also relayed that they were able to modulate their emotional responses depending on the social context to meet their goal (Gratz & Roemer, 2004). Research into emotional regulation strategies have found that psychopathologies were more likely when response focused strategies are used and when more negative emotional coping strategies such as rumination were used over more positive strategies such as problem solving or acceptance (Haga, Kraft, & Corby, 2009).

5.18 Limitations, Reflections and Challenges

There were many strengths in this study, including the mixed methods approach and the use of a control group, which can increase the validity of the study. However, the sample size was quite small and was possibly underpowered. The use of purposive sampling also reduces the generalisability of the results. The participants in the study and their parents consented to take part and so this may indicate some bias on their behalf. Similarly, the school volunteered to participate in the research which may also lead to bias or may indicate that the school has a particular interest in well-being or emotional regulation. Participants did not have pre-identified difficulties with emotional regulation and so there may have been a lack of motivation on the behalf of parents to complete and return the questionnaires, the inclusion of a parent component of the programme may

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

have increased parent buy-in and lead to questionnaires being returned. The participants who took part in the interviews were selected because they had volunteered to be interviewed and had returned consent forms, this may also have resulted in bias in terms of the feedback from the interviews. The participants were all white, Irish and spoke English as a first language and the sample also contained a minority of male participants ($n=7$). Attrition rate in the study was low, with only one student choosing not to take part in the intervention and three students not returning data at time two.

The researcher in this study occupied the dual-role of researcher and facilitator which may have compromised the validity of the data, however, every effort was made to prevent this. The researcher also delivered the intervention and undertook the interviews with the student participants, which was necessary from a logistical point of view, however, it may have influenced the pupils' reflections on the intervention. In conducting this study, extensive time and planning was required by the researcher who was on placement in an Educational Psychology Service. The time and input given was possible for the TEP as this was part of a thesis. However, difficulties could arise in terms of practical implementation with regard to the planning time and input required from other professionals. It may be more practical for class teachers to deliver the intervention, however it would be easier to implement and sustain were the intervention to come as a packaged programme with provision of resources and supports used by the TEP. The final session for both groups had to be delivered in the form of a double class due to timing constraints. This is similar to barriers faced in other studies in terms of transferring intervention programmes into real life settings, with difficulties arising regarding lesson lengths, timetabling and other events occurring throughout the school year, which may impact on student's ability to engage in the programme (Garmy et al., 2015).

5.19 Dissemination of Findings

Preliminary findings of this research study were presented at the Psychological Society of Ireland (2018) conference. The findings from this research will be presented to two trainee educational psychology cohorts in Mary Immaculate College along with the staff of the Doctorate in Educational and Child Psychology programme. An empirical paper, similar to that outlined in Appendix Y, will be submitted for publication to an international journal. The participating school will be provided with a summary of the findings and will have an opportunity to discuss this with the Trainee Educational

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Psychologist. The results of this research will add to evidence of ‘what works’ in relation to universal, therapeutic interventions for students in post-primary school and provide information on effective components of such programmes. It also provides evidence on the challenges faced in relation to implementing such intervention programmes. This study could assist schools and programme creators in making decisions in terms of the production and planning of intervention programmes and their implementation in the school setting.

5.20 Conclusion

The aim of this research was to implement a modified, emotional regulation module with a DBT approach to examine ‘what works’ for such intervention programmes with adolescents. The research investigated the effect and feasibility of this module as a universal, school based intervention in an Irish post primary school. This research employed a mixed methods approach to gather both quantitative and qualitative data. The quantitative results which emerged from the data found a non-significant interaction effect, however, within group changes for the intervention group were significant suggesting the intervention may have led to a greater or more rapid decline in reported difficulties with emotional regulation. Previous research on school-based CBT and DBT found a variety of results (Flynn et al., 2018; Horowitz et al., 2007). However, there was no worsening in scores found as a result of the intervention, with an overall improvement in participant- reported scores (Stallard et al., 2012). It was not possible to conclude from the quantitative data that the intervention alone had impacted on participant report of difficulties with emotional regulation. This may have been due to the small sample size, short time frame or lack of sensitivity of the measure which resulted in an overall non-significant result. Parent report of their child’s difficulties with emotional regulation showed significant reduction over time, however extreme caution must be taken with drawing this conclusion as it is based on the return of a very small sample of parent questionnaires ($n=8$) and no matched control group questionnaires.

The qualitative findings from the study suggest that participants became more aware of their emotions and displayed an increase in their coping strategies. Participants reported the use of several positive emotional coping strategies relevant to cognitive and dialectical behavioural therapy, including cognitive restructuring, goal-setting, and problem-solving and accumulating positive experiences, in both the sessions and in real-

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

life settings. Several positive aspects of this intervention emerged from this study, when comparing with results of other interventions (Flynn et al., 2017b; Garmy et al., 2015; Taylor et al., 2014). The universal, group format of delivery was viewed positively by the participant and teacher of this study. By taking part in the group participants learned from others and a stigma around difficulties was reduced, with participants feeling less alone. The use of an active and co-operative learning approach was also viewed positively, with participants reflecting that they overall enjoyed engaging with the intervention. The relevance of such an intervention for adolescents was also highlighted. Adolescence is a period of transition which often results in stress; participants of this study were aware of this and felt discussions and skills development in relation to emotions was important for this age group. The facilitation of such interventions in schools was also highlighted as a means to increase attendance and participation. The combination of the reviewed literature and the findings suggest that school-based interventions can be useful for youth emotional regulation abilities. Barriers to facilitation of such an intervention have also been identified including teacher time, resources and difficulty with small group format. Unlike other studies the teacher interviewee was positive about such interventions being run in schools and reported her overall positive view of such interventions. This may be due to the increased focus nationally on youth well-being. Future research has been identified along with implications for future EP practice.

Chapter Six: Conclusion

6.1 Overview of the Chapter

This chapter will outline a summary of this thesis and will highlight the conclusions emerging from the research. The recommendations for school-based, universal interventions for emotional regulation will be examined and elaborated upon which may be beneficial for school intervention developers, teachers and Educational Psychologists wishing to develop, implement or modify such interventions. The implications for future research are also discussed. This chapter will conclude with a discussion of the implications for Educational Psychology practice.

6.2 Summary

This research aimed to build on the previous research into outcomes of the DBT-Steps-A programme by Flynn et al. (2018) by implementing outlined differentiation methods as suggested by Flynn et al. (2017). The programme was delivered by a Trainee Educational Psychologist with the emotional regulation module delivered using multimedia support, ensuring all components of the module can proceed and including more creative supports for students (visuals, games, group work etc.). These changes were based on both the results of the previous study of the DBT Steps-A intervention programme (Flynn et al. 2018) and on the diverse ways that children and young people learn; verbal instruction, nonverbal teaching and channels that provide them with knowledge of emotions whilst appealing to their different learning styles through the use of visual, auditory and kinaesthetic channels (Wyman et al., 2010). This research aimed to establish 'What Works' for such universal, school-based interventions with older adolescents with the view of providing information for future intervention developers, teachers or educational psychologists wishing to develop, deliver or modify school-based interventions. The effect of the programme was investigated through the collection of both qualitative and quantitative data. Qualitative data included researcher diary and observations and semi-structured interviews with the co-facilitating teacher and a sample of student participants ($n=7$). Quantitative data employed the Difficulty with Emotional Regulation scale, a self-report for student participants and an adapted version of this tool for their parents. The previous chapter outlined how the data were analysed, together with findings from the literature review. Conclusions which emerged from this analysis are outlined in the following section.

6.3 Conclusions

A number of conclusions emerged from the analysis of data and literature. These conclusions are as follows:

- The use of the modified version of the DBT-Steps A intervention had a positive effect on participant's emotional regulation skills. Qualitative data highlighted that students learned and used skills to regulate their emotions, in and outside of the school setting, as a result of the intervention. This finding was consistent with findings from previous research (Gross & John, 2003; Garmy et al., 2015; Flynn et al., 2017).
- The literature review highlighted adolescence as a transitional period of increased risk and outlined the importance of emotional regulation abilities during the adolescent period (Auerbach et al., 2010; Gore et al., 2011). The findings of the qualitative data of this research study suggests that adolescence is a stressful time for individuals and that such interventions focusing on emotional regulation and emotional wellbeing are both important and relevant to this population.
- Results from previous research suggested that CBT and DBT interventions were lacking in active and co-operative learning approaches and the inclusion of such methodologies were identified as necessary by student participants (Garmy et al., 2015; Taylor et al., 2014; Flynn et al., 2017). Student reflections of this study were overall more positive, with participants outlining that the use of visuals, group activities, games, power point and art activities as beneficial and encouraging of student engagement.
- The study highlights the fact that though qualitative data suggest that participants developed emotional regulation skills, this was not reflected in the quantitative data and is synonymous with the literature which purports that intervention research, with universal approach, applied in real life settings can often fail to find an effect (Taylor et al., 2014).
- Research suggests that universal well-being interventions can be beneficial for students' emotional regulation (Durlak et al., 2011). The running of such interventions in the school setting can increase accessibility and reduce stigma (Chisholm et al., 2016; Patel, Flisher, Nikapota, & Malhotra, 2008). This study supports reviewed research.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

- Previous research illustrated the benefits of undertaking such interventions in a group format, with participants learning with and from others (Garmy et al., 2015). This research suggests that conducting such interventions in a small group format promotes student participation, enables students to feel less alone and creates a warm and trusting environment where students can learn from one another
- During their training Educational Psychologists gain knowledge of child development and therapeutic approaches and so are in positions to support schools by delivering or supporting teachers to deliver school-based preventative intervention (Squires, 2010). They are also in a position to help schools by supporting them to identify evidence-based interventions for pupils, support staff well-being, and to aid with programme evaluation (Lee, Partt, Weidberg, & Davis, 2018). This study outlines how EPs can aid schools with implementation and delivery of interventions and continuing evaluation of school-based interventions.
- This study supports the use of mixed methods research to examine interventions and highlights the importance of both quantitative and qualitative data to investigate intervention effects and participant experience of the intervention (Creswell, 2014; Creswell & Clark, 2011; Gilgun & Sands, 2012).
- Results of this study suggest that the modified emotional regulation module of the DBT Steps-A intervention was appropriate for older adolescents and encouraged them to develop emotional regulation abilities (Gratz and Roemer, 2014). It appears that the inclusion of a more active and co-operative learning approach, which included multimedia, booklets, art and crafts, games, pair and group work, resulted in a more positive student experience with overall more positive reflections from participants of the intervention when compared to the study by Flynn et al. (2017). This provides further information on what works for school-based emotional regulation interventions for adolescents.

6.4 Recommendations

With regard to the implementation of universal, school-based intervention for mental health and well-being, a number of recommendations emerged from the research

6.4.1 Recommendations for Policy

- Reviewed policy and research emphasises an increased focus on student well-being, including a focus on emotional regulation and the importance of emotional regulation abilities on both an individual and societal level (Funk, 2010; World Health Organisation, 2014; Government of Ireland, 2018). In spite of this, the participants of this study reported that learning about their emotions was not something they had experienced previously. This research recommends that such policy and legislation translates into practice. It is recommended that educational and school-based policies continue to work to achieve these outlined goals through continual implementation and evaluation of interventions in the classroom.
- This research and previously reviewed research outlines barriers to implementation of such interventions in the school setting, including class sizes, resources, teacher time and the value placed on well-being intervention when compared to academic subjects (Garmy et al, 2015; Taylor et al, 2014). It is important that policy promotes the ability of teachers to deliver such interventions in the classroom. Policy must consider the ability of teachers to deliver and plan for such interventions in light of the current school context, in light of current class sizes and teacher allocation, and further procedure should reflect this consideration (Government of Ireland, 2018). This research recommends that such barriers are considered when devising policies and suggests continued exploration for possible solutions to such difficulties.
- This study and previously reviewed research suggests that school-based CBT and DBT interventions can promote students' abilities to regulate emotions (Spence et al., 2003; Horowitz et al., 2007; Garmy et al., 2015). Participants reported making use of more adaptive emotional coping strategies, including, cognitive reappraisal, cognitive restructuring, awareness and understanding of emotions, problem solving, goal setting and mindfulness abilities. Furthermore, these skills appeared to translate and generalise into real-life settings. Research has identified emotional regulation as a core concept for well-being (Funk, 2010; Lyubomirsky et al., 2005; Nelis et al., 2011). This research has demonstrated the utility of a DBT approach for teaching emotional regulation skills for adolescents. It is recommended that policy

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

should reflect the importance of promoting the emotional regulation abilities of Irish adolescents and suggests that the use of a DBT approach may prove beneficial in this regard (Flynn et al., 2018).

- This research and previous research outlined how universal delivery of such interventions in the school setting can reduce stigma when discussing emotions and promote accessibility for students, the current study also recommends the use of this approach based on such benefits (O'Reilly et al., 2018; Durlak et al., 2011, Dooley & Fitzgerald, 2012).

6.4.2 Recommendations for Practice

- Research suggests that there is the need for improvement in relation to resources and strategies used in school-based, universal therapeutic interventions (Flynn et al., 2017; Garmy et al., 2015). From both the facilitator and teacher experience there is scope for improvement in relation to the resources and methodologies used throughout the DBT Steps-A intervention and other interventions identified in the literature review (Taylor et al., 2014). Results of this study suggest that there is a need for active and co-operative learning approaches, along with a variety of resources such as visuals, power points, games and art activities to encourage student engagement and enjoyment of emotional regulation interventions (Buchanan Hill, 2016; Chickering & Gamson, 1987; MacKenty, 2006; Susskind, 2005). This research recommends that EPs guide schools to select interventions which utilise such methods or support them with modification, implementation and evaluation of existing interventions based on this knowledge.
- This study recommends the use of a mixed methods approach to intervention research. Questionnaires alone are not sufficient when gathering data on intervention effects and participant experience of interventions (Creswell & Clark, 2011; Creswell, 2014; Gilgun & Sands, 2012). The statistical analysis of data in this study was non-significant and so conclusions could not be drawn as to the effectiveness of the intervention (Creswell, 2004). However, the collection of qualitative data provided information on the positive effect of the intervention in terms of its effect on skills development and its useful components. This highlights how mixed methods research can reduce the

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

chances of arriving at unfounded conclusions based on the collection of only one form of data.

- This research suggests that the modified module of the DBT Steps-A intervention resulted in more positive reflections of the student participants, when compared with previous studies (Taylor et al., 20014; Garmy et al., 2015). Although no comprehensive conclusions could be drawn from the quantitative data, it appears from the qualitative data that the intervention was beneficial for participants and deemed relevant and effective by the co-facilitating teacher. Previous research on this intervention, which utilised different outcome measures, found significant positive changes in internalising and externalising difficulties as a result of this programme (Flynn et al, 2018). It is recommended that other modules of this intervention could be modified to increase overall student enjoyment and participation and that this emotional regulation module could function in a stand-alone way, paving the way for the intervention to be delivered in a modular manner (Taylor et al., 20014; Garmy et al., 2015).
- This research suggests that emotional regulation interventions are beneficial when using a small group approach. This finding concurs with previous research and it is recommended that this approach be taken for delivering such interventions (Garmy et al., 2015). Through the small group approach support could be given to individual students and the environment was a safe place for students to learn from and with one another (Garmy et al., 2015; Jolliffe, 2007).

6.5 Recommendations for Future Research

Over the course of the research a number of issues were identified which could not be addressed within the scope of this thesis. Further exploration of these issues is recommended:

- The researcher employed convenience, purposive sampling and was limited in the sample available (Daniel, 2011). While students from the school are from different socio-economic backgrounds, the race and ethnicity of the children who attended the intervention was predominantly Caucasian Irish.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Further studies of the intervention could take this into account by including participants from different demographics and ethnicities (Mertens, 2014).

- The research highlighted the need for further studies of the DBT Steps-A programme, with modifications made to other modules of the intervention programme. The intervention has four modules, which could potentially be delivered over a long period of time. Further research could investigate the effect of other systematically modified modules of the intervention (Flynn et al., 2018).
- The duration of the intervention was six weeks. While the programme was completed within the time frame, a longer duration to consolidate learning could be beneficial (Taylor et al., 2014). Similarly, follow-up data could be collected with a greater interim time to investigate delayed or enduring effects of the intervention (Spence et al., 2005; 2003).
- There was difficulty accessing parent feedback on the intervention due to the low return-rate of questionnaires. This could be due to parents failing to see the relevance of the intervention to their child due to lack of clinical involvement or identification of concerns in relation to emotional regulation. Future research could encourage parent 'buy in' by including a parent training or information component and face to face interaction with parents (Williams et al., 2003). The inclusion of parental training and more detailed information sheets may promote parental engagement and thus lead to parental modelling of skills
- Future research should look at changes in emotional regulation in more detail, as this is implied from the qualitative research and not empirically proven. Future research could make use of other outcomes related to the measurement of emotional regulation, such as the Emotional Regulation Questionnaire (Gross & John, 2003).

6.6 Implications for Educational Psychology Knowledge and Practice

- Research along with recent policy and practice has outlined the importance of promoting adolescent emotional regulation and has outlined self-regulation as a core feature of well-being promotion (Government of Ireland, 2018; Auerbach et al., 2004). Research has demonstrated that school-based DBT and CBT can

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

promote emotional regulation and coping abilities in adolescents (Garmy et al., 2015; Horowitz et al., 2007; Spence et al., 2003). This study suggests that the DBT ER intervention encouraged students to develop ER abilities, such as problem solving, cognitive restructuring, cognitive reappraisal, mindfulness and goal setting. The role of the educational psychologist in this instance could involve promotion of such interventions in Irish schools through continuous professional development, provision of training for teachers and supporting schools to identify and deliver evidence-based interventions (Squires et al., 2010).

- The feasibility of delivering such interventions could also be facilitated through a range of factors including careful planning with regards to teacher time and intervention resources (Taylor et al, 2014). EPs could be involved by supporting teachers in selecting interventions which provide developed and available resources or could aid with the development and provision of resources to accompany existing programmes. This research suggests that the use of a range of active and co-operative learning approaches and a variety of strategies, added to the student experience and engagement with the programme. EPs should consider this when supporting schools in selecting appropriate evidence- informed well-being or emotional regulation interventions for adolescent students (Squires et al., 2010; Garmy et al., 2015).
- This study and previously reviewed research outlined the benefit of delivering such interventions in a small group, which enables students to receive support and provides a safe environment for students to learn from and with each other (Garmy et al., 2015). However, this was identified as a barrier to the intervention delivery by the teacher due to current class sizes. EPs could work with schools to research other methods of delivering the intervention, for example, using a team-teaching approach which could ensure appropriate support for students in the classroom.
- The modifications made to the module were based on education developmental research evaluation (Lee, Partt, Weidberg, & Davis, 2018). The inclusion of active and co-operative learning approaches resulted in overall positive feedback on the intervention programme (Flynn et al., 2017). This suggests the importance of a degree of flexibility for school-based intervention programmes. It may be necessary to modify aspects of pace, format or supporting resources for different populations or groups of students. In this instance EPs can support teachers if there

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

is a need to modify and evaluate an intervention for a particular class group or individual (e.g. those with learning or language difficulties, those with special educational needs etc.)(Lee, Partt, Weidberg, & Davis, 2018).

6.7 Concluding Statement

The previously reviewed research investigated between and within-group differences for children following their participation in universal, school-based, cognitive and dialectical behavioural therapy interventions, with regard to changes in emotions, such as anxiety and depression, and reports of internalising or externalising problems. This study aimed to build on existing research and to examine the effect of a school-based, DBT module of emotional regulation on student reported difficulties with emotional regulation. In terms of quantitative data, lack of significant effects may be due to the fact that this is a typical trend for universal intervention or may have been due to the choice of questionnaire and limited sample size. In addition to quantitative data this research study also collected qualitative data to explore this phenomenon and gather further information on ‘what works’ for school based emotional regulation interventions.

To the author’s knowledge, this is the first study to use semi-structured interviews to investigate adolescent reflections on school-based DBT interventions. Qualitative data suggests that this type of brief intervention may act in a preventative nature and provide youth with the opportunity to develop emotional regulation strategies and generalise them to settings outside of the classroom. Participants reported using cognitive restructuring, thought challenging, problem solving and accumulating positive experiences as strategies to cope with their emotions and reduce their vulnerabilities to emotions. Developing more adaptive coping strategies has been linked to more positive mental health outcomes and can mediate emerging difficulties. This research suggests that providing such interventions in a group format can reduce stigma and normalise discussions about emotions, something the government seeks to promote.

In the first instance, as far as the researcher is aware, this is one of the first studies to utilise qualitative interviews to gain reflections from Irish adolescents regarding the effects of school-based interventions for emotional regulation, previous studies in the Irish context relied on questionnaires or primary school children (Rodgers & Dunsmuir, 2005). Furthermore, this is the first study to systematically modify and evaluate this module of the DBT Steps-A intervention. Finally, this research provides a unique

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

understanding of the experiences of older adolescents of school-based emotional regulation interventions, shedding light on ‘what works’ for such interventions, in school, for this population. It also provides information on the barriers to delivery and the feasibility of running such interventions in the Irish post-primary school setting.

This thesis explored the effect of a universal, school-based, modified emotional regulation module of the DBT-Steps A intervention, exploring ‘what works’ for school-based CBT and DBT interventions for adolescents. It is hoped that further research will be conducted into this intervention programme and the effects of other modified modules will be investigated. This research identified beneficial aspects of emotional regulation interventions for post-primary schools and barriers to their implementation. The increased governmental and departmental focus on mental health and well-being must consider the effect and feasibility of such interventions and continued evaluation of evidence-based intervention by EPs is essential. They are in a key position to assume the role of the scientist practitioner, systematically evaluating interventions and feasibility of delivery, whilst also supporting schools and the education system to meet the well-being needs of their students.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

References

- Achenbach, T. M., & Ruffle, T. M. (2000). The Child Behavior Checklist and related forms for assessing behavioral and emotional problems and competencies. *Pediatrics in review, 21*(8), 265-271.
- Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2010). Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical psychology review, 30*(2), 217-237.
- Altrichter, H., Posch, P., Somekh, B., & Feldman, A. (2005). *Teachers investigate their work: An introduction to action research across the professions*. USA: Routledge.
- Anderson, B., Marshall-Lucette, S., & Webb, P. (2013). African and Afro-Caribbean men's experiences of prostate cancer. *British Journal of Nursing, 22*(22), 1296-1307.
- Apsche, J. A. (2010). A literature review and analysis of mode deactivation therapy. *International Journal of Behavioral Consultation and Therapy, 6*(4), 296.
- Ary, D., Jacobs, L. C., Irvine, C. K. S., & Walker, D. (2018). *Introduction to research in education*. UK: Cengage Learning.
- Attwood, T. (2006). *The complete guide to Asperger's syndrome*. London, UK: Jessica Kingsley Publishers
- Auerbach, R. P., Claro, A., Abela, J. R., Zhu, X., & Yao, S. (2010). Understanding risky behavior engagement amongst Chinese adolescents. *Cognitive Therapy and Research, 34*(2), 159-167.
- Basit, T. (2003). Manual or electronic? The role of coding in qualitative data analysis. *Educational research, 45*(2), 143-154.
- Battistich, V., Solomon, D., Watson, M., & Schaps, E. (1997). Caring school communities. *Educational psychologist, 32*(3), 137-151

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). Beck depression inventory-II. *San Antonio, 78*(2), 490-498.
- Becker, C. B., & Zayfert, C. (2001). Integrating DBT-based techniques and concepts to facilitate exposure treatment for PTSD. *Cognitive and Behavioral Practice, 8*(2), 107-122.
- Berger, R. (2015). Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. *Qualitative research, 15*(2), 219-234.
- Berking, M., & Lukas, C. A. (2015). The Affect Regulation Training (ART): a transdiagnostic approach to the prevention and treatment of mental disorders. *Current Opinion in Psychology, 3*, 64-69.
- Björkenstam, E., Björkenstam, C., Vinnerljung, B., Hallqvist, J., & Ljung, R. (2011). Juvenile delinquency, social background and suicide—a Swedish national cohort study of 992 881 young adults. *International journal of epidemiology, 40*(6), 1585-1592.
- Blakemore, S. J., Burnett, S., & Dahl, R. E. (2010). The role of puberty in the developing adolescent brain. *Human brain mapping, 31*(6), 926-933.
- Blaikie, N., & Priest, J. (2019). *Designing social research: The logic of anticipation*. New York, USA: John Wiley & Sons.
- The British Medical Association (2016). *Complete Home Medical Guide: The Essential Reference for Every Family*. London: Dorling Kindersley Limited.
- Boctor, L. (2013). Active-learning strategies: The use of a game to reinforce learning in nursing education. A case study. *Nurse education in practice, 13*(2), 96-100.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

- Boden, J. M., Fergusson, D. M., & Horwood, L. J. (2012). Alcohol misuse and violent behavior: Findings from a 30-year longitudinal study. *Drug and alcohol dependence, 122*(1-2), 135-141.
- Bonnar, S. E. (2010). *Report for the Mental Health Commission on admission of young people to adult mental health wards in the Republic of Ireland*. Dublin: Mental Health Commission.
- Bouffard, S., Parkinson, J., Jacob, R., & Jones, S.M. (2009) *Designing SECURE: A summary of the literature and SEL programs reviewed in preparation for the development of SECURE*. MA, USA: Harvard Graduate Cambridge
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology, 3*(2), 77-101
- Breitenstein, S. M., Gross, D., Garvey, C. A., Hill, C., Fogg, L., & Resnick, B. (2010). Implementation fidelity in community-based interventions. *Research in nursing & health, 33*(2), 164-173.
- Brown, C. A., & Lilford, R. J. (2006). The stepped wedge trial design: a systematic review. *BMC medical research methodology, 6*(1), 54.
- Brualdi, A. C. (1996). Multiple Intelligences: Gardner's Theory. ERIC Digest.
- Buchanan Hill, J. (2016). Questioning techniques: A study of instructional practice. *Peabody Journal of Education, 91*(5), 660-671.
- Buri, C., von Bonin, B., Strik, W., & Moggi, F. (2009). Predictors of attempted suicide among Swiss patients with alcohol-use disorders. *Journal of studies on alcohol and drugs, 70*(5), 668-674.
- Burr, V. (2015). *Social constructionism*. New York: Routledge.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

- Campbell-Sills, L., & Barlow, D. H. (2007). Incorporating emotion regulation into conceptualizations and treatments of anxiety and mood disorders. In JJ Gross (Ed.), *Handbook of emotional regulation* (p.542-559). New York: Guilford Press.
- Campos, J. J., Mumme, D., Kermoian, R., & Campos, R. G. (1994). A functionalist perspective on the nature of emotion. *Japanese Journal of Research on Emotions*, 2(1), 1-20.
- Cannon, M., Coughlan, H., Clarke, M., Harley, M., & Kelleher, I. (2013). *The Mental Health of Young People in Ireland: A report of the Psychiatric Epidemiology Research across the Lifespan (PERL) Group*. Dublin: Royal College of Surgeons
- Carlson, S. M. (2005). Developmentally sensitive measures of executive function in preschool children. *Developmental neuropsychology*, 28(2), 595-616.
- Carrión, V. G., & Rettger, J. (Eds.). (2019). *Applied Mindfulness: Approaches in Mental Health for Children and Adolescents*. USA: American Psychiatric Pub.
- Carter, R., & Lubinsky, J. (2015). *Rehabilitation research-e-book: Principles and applications*. USA:Elsevier Health Sciences.
- Carthy, T., Horesh, N., Apter, A., & Gross, J. J. (2010). Patterns of emotional reactivity and regulation in children with anxiety disorders. *Journal of Psychopathology and Behavioral Assessment*, 32(1), 23-36.
- Casey, B. J., Jones, R. M., Levita, L., Libby, V., Pattwell, S. S., Ruberry, E. J., & Somerville, L. H. (2010). The storm and stress of adolescence: insights from human imaging and mouse genetics. *Developmental Psychobiology: The Journal of the International Society for Developmental Psychobiology*, 52(3), 225-235.
- Cerezo, N. (2004). Problem-based learning in the middle school: A research case study of the perceptions of at-risk females. *RMLE Online*, 27(1), 1-13.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

- Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *AAHE bulletin*, 3(7).
- Chisholm, K., Patterson, P., Torgerson, C., Turner, E., Jenkinson, D., & Birchwood, M. (2016). Impact of contact on adolescents' mental health literacy and stigma: the School Space cluster randomised controlled trial. *BMJ open*, 6(2).
- Chorpita, B. F., Yim, L., Moffitt, C., Umemoto, L. A., & Francis, S. E. (2000). Assessment of symptoms of DSM-IV anxiety and depression in children: A revised child anxiety and depression scale. *Behaviour research and therapy*, 38(8), 835-855.
- Ciarrochi, J., Deane, F. P., & Anderson, S. (2002). Emotional intelligence moderates the relationship between stress and mental health. *Personality and individual differences*, 32(2), 197-209.
- Cicchetti, D., & Rogosch, F. A. (2002). A developmental psychopathology perspective on adolescence. *Journal of consulting and clinical psychology*, 70(1), 6.
- Clark, V. L. P., & Creswell, J. W. (2008). *The mixed methods reader*. Thousand Oaks, USA: Sage Publications.
- Clen, S. L., Mennin, D. S., & Fresco, D. M. (2013). Emotion regulation strategies. *The Wiley handbook of cognitive behavioral therapy*, 1-21.
- Cline, T., Guildford, A., & Birch, S. (2015). *Educational Psychology*. East Sussex, UK: Routledge
- Clyne, C., Latner, J. D., Gleaves, D. H., & Blampied, N. M. (2010). Treatment of emotional dysregulation in full syndrome and subthreshold binge eating disorder. *Eating disorders*, 18(5), 408-424.
- Colby, S. M., Monti, P. M., Barnett, N. P., Rohsenow, D. J., Weissman, K., Spirito, A., & Lewander, W. J. (1998). Brief motivational interviewing in a hospital setting for

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

adolescent smoking: a preliminary study. *Journal of consulting and clinical psychology*, 66(3), 574.

Cole, P. M., Hall, S. E., & Hajal, N. J. (2008). Emotion dysregulation as a risk factor for psychopathology. *Child and adolescent psychopathology*, 2, 341-373.

Connelly, L. M. (2008). Pilot studies. *Medsurg Nursing*, 17(6), 411.

Corno, L., & Anderman, E.M. (2015). *Handbook of Educational Psychology*. New York: Taylor & Francis

Cosmides, L., & Tooby, J. (2000). Evolutionary psychology and the emotions. *Handbook of emotions*, 2(2), 91-115.

Crawford, L. (2004). *Lively learning: Using the arts to teach the K-8 curriculum*. US: Northeast Foundation for Children.

Creswell, J. W. (2013). *Research Design International Student Ed. Qualitative, Quantitative and Mixed Methods Approaches*. Thousand Oaks, USA: Sage.

Creswell, J. W. (2013). *Steps in conducting a scholarly mixed methods study*. Thousand Oaks, USA: Sage

Creswell, J. W., & Clark, V. L. P. (2011). *Designing and conducting mixed methods research*. Thousand Oaks, USA: Sage

Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Australia: Sage.

Cruse, E. (2006). Using educational video in the classroom: Theory, research and practice. *Library Video Company*.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

- Cutcliffe, J. R., & McKenna, H. P. (2004). Expert qualitative researchers and the use of audit trails. *Journal of advanced nursing*, 45(2), 126-133.
- Daniel, J. (2011). *Sampling essentials: Practical guidelines for making sampling choices*. Thousand Oaks, USA: Sage.
- De Witte, K., & Rogge, N. (2016). Problem-based learning in secondary education: evaluation by an experiment. *Education Economics*, 24(1), 58-82.
- Denzin, N. K. (1978). Triangulation: A case for methodological evaluation and combination. *Sociological methods*, 339-357.
- Depape, A. M. R., Hakim-Larson, J., Voelker, S., Page, S., & Jackson, D. L. (2006). Self-talk and emotional intelligence in university students. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 38(3), 250-260.
- Department of Children and Youth Affairs (2018). *Better Outcomes, Brighter Future*. Dublin: DCYA.
- Department of Education and Skills, Health Service Executive & Department of Health (2015), *Wellbeing in Primary Schools Guidelines for Mental Health Promotion*. Dublin: Department of Education and Skills, Health Service Executive & Department of Health.
- Department of Education and Skills, Health Service Executive & Department of Health (2015), *Wellbeing in Post-Primary Schools Guidelines for Mental Health and Suicide Prevention*. Dublin: Department of Education and Skills, Health Service Executive & Department of Health.
- Department of Health (2013). *Healthy Ireland: A Framework for Improved Health and Wellbeing 2013-2025*. Dublin: Department of Health

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

- Donaldson, S. I., & Grant-Vallone, E. J. (2002). Understanding self-report bias in organizational behavior research. *Journal of business and Psychology, 17*(2), 245-260.
- Dooley, B. A., & Fitzgerald, A. (2012). *My world survey: National study of youth mental health in Ireland*. Dublin: Headstrong and UCD School of Psychology.
- Dunning, H., Williams, A., Abonyi, S., & Crooks, V. (2008). A mixed method approach to quality of life research: A case study approach. *Social indicators research, 85*(1), 145-158.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child development, 82*(1), 405-432.
- Ehring, T., Fischer, S., Schnülle, J., Bösterling, A., & Tuschen-Caffier, B. (2008). Characteristics of emotion regulation in recovered depressed versus never depressed individuals. *Personality and Individual Differences, 44*(7), 1574-1584.
- Eison, J. (2010). *Using active learning instructional strategies to create excitement and enhance learning*. Florida: Department of Adult, Career & Higher Education
- Eodanable, M., & Lauchlan, F. (2009). The advance of research and evaluation skills by EPs: implications for training and professional development. *Educational psychology in Practice, 25*(2), 113-124.
- Faber, J., & Fonseca, L. M. (2014). How sample size influences research outcomes. *Dental press journal of orthodontics, 19*(4), 27-29.
- Fairburn, C. G., Cooper D Phil, Dip Psych, Z., Doll D Phil, H. A., O'Connor, M. E., Bohn D Phil, Dip Psych, K., Hawker, D. M., & Palmer, R. L. (2009). Transdiagnostic cognitive-behavioral therapy for patients with eating disorders: a two-site trial with 60-week follow-up. *American Journal of Psychiatry, 166*(3), 311-319.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

- Felgoise, S., Nezu, A. M., Nezu, C. M., & Reinecke, M. A. (Eds.). (2006). *Encyclopedia of cognitive behavior therapy*. New York: Springer Science & Business Media.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Thousand Oaks, USA: Sage.
- Finlay, L. (2002). "Outing" the researcher: The provenance, process, and practice of reflexivity. *Qualitative health research*, 12(4), 531-545.
- Fleischhaker, C., Böhme, R., Sixt, B., Brück, C., Schneider, C., & Schulz, E. (2011). Dialectical behavioral therapy for adolescents (DBT-A): a clinical trial for patients with suicidal and self-injurious behavior and borderline symptoms with a one-year follow-up. *Child and adolescent psychiatry and mental health*, 5(1), 3-3.
- Flynn, D., Joyce, M., Weihrauch, M., & Corcoran, P. (2018). Innovations in practice. Dialectical Behaviour Therapy-Skills Training for Emotional Problem solving for adolescents (DBT STEPS-A): Evaluation of a Pilot Implementation in Irish Post-Primary Schools. *Child and adolescent mental health*, 23(4) 376-380
- Flynn, D., Joyce, M., Weihrauch, M., & Corcoran, P. (2017). *Dialectical Behavioural Therapy- Skills Training for Emotional Problem Solving for Adolescents (DBT Steps-A): Pilot Implementation in an Irish Context*. Dublin: Health Service Executive
- Forbes, E. E., & Dahl, R. E. (2005). Neural systems of positive affect: Relevance to understanding child and adolescent depression?. *Development and psychopathology*, 17(3), 827-850.
- Foyle, H. C. (1995). *Interactive learning in the higher education classroom: Cooperative, collaborative, and active learning strategies*. UK: National Education Association.
- Freeman, A. (2004). *Cognitive behavior therapy in nursing practice*. New York, USA: Springer Publishing Company.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

- Gabbard, G. O. (2009). *Textbook of psychotherapeutic treatments*. Washington: American Psychiatric Pub.
- Galletta, A. (2013). *Mastering the semi-structured interview and beyond: From research design to analysis and publication*. (18). New York, USA: NYU press.
- Garmy, P., Jakobsson, U., Carlsson, K. S., Berg, A., & Clausson, E. K. (2015). Evaluation of a school-based program aimed at preventing depressive symptoms in adolescents. *The Journal of School Nursing, 31*(2), 117-125.
- Garnefski, N., Kraaij, V., & Spinhoven, P. (2001). Negative life events, cognitive emotion regulation and emotional problems. *Personality and Individual Differences, 30*(8), 1311-1327.
- Giedd, J. N., Blumenthal, J., Jeffries, N. O., Castellanos, F. X., Liu, H., Zijdenbos, A., & Rapoport, J. L. (1999). Brain development during childhood and adolescence: a longitudinal MRI study. *Nature neuroscience, 2*(10), 861-863.
- Gillham, J. E., Reivich, K. J., Freres, D. R., Lascher, M., Litzinger, S., Shatté, A., & Seligman, M. E. (2006). School-based prevention of depression and anxiety symptoms in early adolescence: A pilot of a parent intervention component. *School Psychology Quarterly, 21*(3), 323-348.
- Goldin, P. R., Ziv, M., Jazaieri, H., Weeks, J., Heimberg, R. G., & Gross, J. J. (2014). Impact of cognitive-behavioral therapy for social anxiety disorder on the neural bases of emotional reactivity to and regulation of social evaluation. *Behaviour research and therapy, 62*(1), 97
- Gore, F. M., Bloem, P. J., Patton, G. C., Ferguson, J., Joseph, V., Coffey, C., & Mathers, C. D. (2011). Global burden of disease in young people aged 10–24 years: a systematic analysis. *The Lancet, 377*(9783), 2093-2102.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

- Gough, D. (2007). Weight of evidence: a framework for the appraisal of the quality and relevance of evidence. *Research papers in education*, 22(2), 213-228.
- Government of Ireland. (2018). *Well-being Policy Statement and Framework for Practice 2018-2023*. Dublin: Department of Education and Skills
- Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of psychopathology and behavioral assessment*, 26(1), 41-54.
- Grecucci, A., Frederickson, J., & Job, R. (2017). Advances in emotion regulation: From neuroscience to psychotherapy. *Frontiers in psychology*, 8, 985.
- Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of general psychology*, 2(3), 271.
- Gross, J. J. (2002). Emotion regulation: Affective, cognitive, and social consequences. *Psychophysiology*, 39(3), 281-291.
- Gross, J. J., & Feldman Barrett, L. (2011). Emotion generation and emotion regulation: One or two depends on your point of view. *Emotion review*, 3(1), 8-16.
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: implications for affect, relationships, and well-being. *Journal of personality and social psychology*, 85(2), 348.
- Gross, J. J., & Muñoz, R. F. (1995). Emotion regulation and mental health. *Clinical psychology: Science and practice*, 2(2), 151-164.
- Gross, J. J., Richards, J. M., & John, O. P. (2006). Emotion regulation in everyday life. *Emotion regulation in couples and families: Pathways to dysfunction and health*, 2006, 13-35.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

- Grusec, J. E. (1992). Social learning theory and developmental psychology: The legacies of Robert Sears and Albert Bandura. *Developmental psychology*, 28(5), 776.
- Gulliver, A., Griffiths, K. M., & Christensen, H. (2010). Perceived barriers and facilitators to mental health help-seeking in young people: a systematic review. *BMC psychiatry*, 10(1), 113.
- Haga, S. M., Kraft, P., & Corby, E. K. (2009). Emotion regulation: Antecedents and well-being outcomes of cognitive reappraisal and expressive suppression in cross-cultural samples. *Journal of Happiness Studies*, 10(3), 271-291.
- Halstead, J., Youn, S. J., & Armijo, I. (2013). Scientific and clinical considerations in progress monitoring: When is a brief measure too brief? *Canadian Psychology*, 54(1), 83-85.
- Hankin, B. L., & Abela, J. R. (2011). Nonsuicidal self-injury in adolescence: Prospective rates and risk factors in a 2 ½ year longitudinal study. *Psychiatry research*, 186(1), 65-70.
- Harrison, A., Sullivan, S., Tchanturia, K., & Treasure, J. (2010). Emotional functioning in eating disorders: attentional bias, emotion recognition and emotion regulation. *Psychological medicine*, 40(11), 1887-1897.
- Hattie, J., & Anderman, E. M. (Eds.). (2013). *International guide to student achievement*. New York, USA: Routledge.
- Hersen, M. (Ed.). (2006). *Clinician's handbook of adult behavioral assessment*. California: Gulf Professional Publishing.
- Holbrook, A. L., Krosnick, J. A., & Pfent, A. (2008). The causes and consequences of response rates in surveys by the news media and government contractor survey research firms. *Advances in telephone survey methodology*, 1, 499-528.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

- Horowitz, J. L., Garber, J., Ciesla, J. A., Young, J. F., & Mufson, L. (2007). Prevention of depressive symptoms in adolescents: a randomized trial of cognitive-behavioral and interpersonal prevention programs. *Journal of Consulting and Clinical Psychology, 75*(5), 693.
- James, A. C., Taylor, A., Winmill, L., & Alfoadari, K. (2008). A preliminary community study of dialectical behaviour therapy (DBT) with adolescent females demonstrating persistent, deliberate self-harm (DSH). *Child and Adolescent Mental Health, 13*(3), 148-152.
- Johnson, B., & Christensen, L. (2000). *Educational research: Quantitative and qualitative approaches*. Thousand Oaks, USA: Sage Publishing
- Jolliffe, W. (2007). *Cooperative learning in the classroom: Putting it into practice*. Thousand Oaks, USA: Sage Publishing.
- Jones, S., Brush, K., Bailey, R., Brion-Meisels, G., McIntyre, J., & HKhan, J. (2017). *Navigating SEL from the inside out. looking inside and across 25 leading SEL programs: a practical resource for schools and OST providers*. Cambridge: Harvard Graduate School of Education.
- Kaufman, E. A., Xia, M., Fosco, G., Yaptangco, M., Skidmore, C. R., & Crowell, S. E. (2016). The difficulties in emotion regulation scale short form (DERS-SF): validation and replication in adolescent and adult samples. *Journal of Psychopathology and Behavioral Assessment, 38*(3), 443-455.
- Kazantzis, N., Dattilio, F. M., & Dobson, K. S. (2017). *The therapeutic relationship in cognitive-behavioral therapy: A clinician's guide*. New York: Guilford Publications.
- Kendall, P.C. & Hedke, K.A. (2006). *Cognitive-behavioural therapy for anxious children: Therapist manual*. USA: Temple University Child and Adolescent Disorders Clinic

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

- Kessler, R., Berglund, P., Demler, O., Jun, R., Merikangas, K., & Walters, E. (2005). Lifetime Prevalence and Age-of-Onset Distributions of DSM-IV Disorders in the National Comorbidity Survey Replication. *Archives of general psychiatry*, 62(6), 593-602.
- Kim-Cohen, J., Caspi, A., Moffitt, T.E., Harrington, H., Milne, B.J., & Poulton, R. (2003) Prior juvenile diagnoses in adults with mental disorder: developmental follow-back of a prospective-longitudinal cohort. *Archives of general psychiatry*, 60(7), 709-717.
- Kim, B.R., Stuffer, C.A., Philbrook, L.E. & Teti, D.M. (2014). Infant emotion regulation: Relations to bedtime emotional availability, attachment security, and temperament. *Infant Behavior and Development*, 37(4), 480-490.
- Klenke, K (2008). *Qualitative Research in the Study of Leadership*. UK: Emerald Group Publishing Limited
- Kratochwill, T. R., & Shernoff, E. S. (2003). Evidence-Based Practice: Promoting Evidence-Based Interventions in School Psychology. *School Psychology Quarterly*, 18(4), 389-408.
- Kring, A. M., & Sloan, D. M. (Eds.). (2010). Emotion regulation and psychopathology: A transdiagnostic approach to etiology and treatment. New York, NY, US: The Guilford Press.
- Krippendorff, K. (2004) *Content Analysis: An introduction to Its Methodology*. Thousand Oaks, California, USA: Sage Publishing
- Kuppens, P., Sheeber, L. B., Yap, M. B., Whittle, S., Simmons, J. G., & Allen, N. B. (2012). Emotional inertia prospectively predicts the onset of depressive disorder in adolescence. *Emotion*, 12(2), 283.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

- Kutcher, S., & McLuckie, A. (2009). Evergreen: towards a child and youth mental health framework for Canada. *Journal of the Canadian Academy of Child and Adolescent Psychiatry, 18*(2), 89.
- Kumar, R. (2019). *Research methodology: A step-by-step guide for beginners*. Thousand Oaks, USA: Sage Publications Limited.
- Kvale, S., & Brinkmann, S. (2009). *Interviews: Learning the craft of qualitative research interviewing*. Thousand Oaks, California, USA: Sage Publishing.
- Lane, D. A., & Corrie, S. (2007). *The modern scientist-practitioner: A guide to practice in psychology*. New York, USA: Routledge.
- Lau, M.A., & McMMain, S.F. (2005). Integrating Mindfulness Meditation with Cognitive and Behavioural Therapies. *Canadian Journal of Psychiatry, 50* (13), 863
- Lazarus, R. S. (1991). Progress on a cognitive-motivational-relational theory of emotion. *American Psychologist, 46*(8), 819-834
- Leahy, R. L., Tirch, D., & Napolitano, L. A. (2011). *Emotion regulation in psychotherapy: A practitioner's guide*. New York, NY, US: Guilford Press.
- Lee, K., Partt, K., Weidberg, F., & Davis, R. (2018). *Supporting the emotional and mental health of your school community*. Somerset: Support Services for Education
- Lewis, M., Haviland-Jones, J. M., & Barrett, L. F. (Eds.). (2010). *Handbook of emotions*. New York, USA: Guilford Press.
- Liddle, H. A., Dakof, G. A., Turner, R. M., Henderson, C. E., & Greenbaum, P. E. (2008). Treating adolescent drug abuse: A randomized trial comparing multidimensional family therapy and cognitive behavior therapy. *Addiction, 103*(10), 1660-1670.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

- Lindsay, G. (1998). Are educational psychologists serious about research?. *Educational and Child Psychology, 15*, 74-85.
- Linehan, M. M. (1993). *Skills training manual for treating borderline personality disorder*. USA: Guilford Press.
- Linehan, M. M. (1987). Dialectical behavioral therapy: A cognitive behavioral approach to parasuicide. *Journal of Personality disorders, 1*(4), 328-333.
- Litman, J. A. (2006). The COPE inventory: Dimensionality and relationships with approach-and avoidance-motives and positive and negative traits. *Personality and Individual differences, 41*(2), 273-284.
- Litosseliti, L. (2003). *Using focus groups in research*. London UK:: A&C Black.
- Lodico, M., Spaulding, D.T., & K.H. (2010) *Methods in Educational Research: From Theory to Practice*. California, USA: Jossey Bass Publishing.
- Lynch, T.R., Chapman, A.L., Rosenthal, M.Z., & Linehan, M.M. (2006). Mechanisms of change in dialectical behavior therapy: theoretical and empirical observations. *Journal of Clinical Psychology, 62*(4), 459-80.
- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological bulletin, 131*(6), 803.
- MacKenty, B. (2006). All Play and No Work: Computer Games Are Invading the Classroom And Not a Moment Too Soon. *School Library Journal, 52*(9), 46.
- Maliphant, R., Cline, T., & Frederickson, N. (2013). Educational psychology practice and training: The legacy of Burt's appointment with the London County Council. *Educational and Child Psychology, 30*(3), 46-59.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

- March, J. S., Silva, S., Petrycki, S., Curry, J., Wells, K., Fairbank, J., & Vitiello, B. (2007). The Treatment for Adolescents With Depression Study (TADS): long-term effectiveness And safety outcomes. *Archives of general psychiatry*, 64(10), 1132-1144.
- Maxwell, J. A. (2012). *Qualitative Research Design: An Interactive Approach*. Thousand Oaks, USA: SAGE Publications.
- Mazza, J. J., Dexter-Mazza, E. T., Miller, A. L., Rathus, J. H., & Murphy, H. E. (2016). *DBT? Skills in Schools: Skills Training for Emotional Problem Solving for Adolescents Dbt Steps-a*. New York, USA: Guilford Publications.
- McDaid, D., Zechmeister, I., Kilian, R., Medieros, H., Knapp, M., & Kenelly, B. (2008). *Making the economic case for the promotion of mental well-being and the prevention of mental health problems*. London, UK: Personal Social Services Research Unit
- McNiel, D. E., Binder, R. L., & Robinson, J. C. (2005). Incarceration associated with homelessness, mental disorder, and co-occurring substance abuse. *Psychiatric Services*, 56(7), 840-846.
- McSweeney, F. K., & Murphy, E. S. (Eds.). (2014). *The Wiley-Blackwell handbook of operant and classical conditioning*. Oxford, London: Wiley Blackwell.
- Mennin, D. S., Heimberg, R. G., Turk, C. L., & Fresco, D. M. (2002). Applying an emotion regulation framework to integrative approaches to generalized anxiety disorder. *Clinical psychology: Science and practice*, 9(1), 85-90.
- Mennin, D. S., Holaway, R. M., Fresco, D. M., Moore, M. T., & Heimberg, R. G. (2007). Delineating components of emotion and its dysregulation in anxiety and mood psychopathology. *Behavior Therapy*, 38(3), 284-302.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

- Mertens, D. M. (2008). *Transformative Research and Evaluation*. New York, USA: Guilford Publications.
- Mertens, D. M. (2014). *Research and Evaluation in Education and Psychology: Integrating Diversity With Quantitative, Qualitative, and Mixed Methods*. Thousand Oaks, USA: SAGE Publications.
- Miller, A. L. (1999). Dialectical behavior therapy: A new treatment approach for suicidal adolescents. *American Journal of Psychotherapy*, 53(3), 413-417.
- Miller, A. L., Rathus, J. H., DuBose, A. P., Dexter-Mazza, E. T., & Goldklang, A. R. (2007). Dialectical behavior therapy for adolescents. *Dialectical behavior therapy in clinical practice: Applications across disorders and settings*, 245-263.
- Millis, B., Lyman, F., & Davidson, N. (1995). In HC Foyle. *Interactive learning in the higher education classroom*, 204-225.
- Morgan, D.L. (2019). *Basic and Advanced Focus Groups*. Thousand Oaks, California, USA, Sage Publishing
- Morrow, S. L. (2005). Quality and trustworthiness in qualitative research in counseling psychology. *Journal of counseling psychology*, 52(2), 250.
- Mitchell, M. L., & Jolley, J. M. (2009). *Research Design Explained*. California, USA: Cengage Learning.
- Morris, A. S., Silk, J. S., Steinberg, L., Myers, S. S., & Robinson, L. R. (2007). The role of the family context in the development of emotion regulation. *Social development*, 16(2), 361-388.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

- Nadin, S., & Cassell, C. (2006). The use of a research diary as a tool for reflexive practice: Some reflections from management research. *Qualitative Research in Accounting & Management*, 3(3), 208-217.
- National Council for Curriculum Assessment. (2017). *Junior Cycle Wellbeing Guidelines*. Dublin: Department of Education and Skills
- Neacsiu, A. D., Rizvi, S. L., Vitaliano, P. P., Lynch, T. R., & Linehan, M. M. (2010). The dialectical behavior therapy ways of coping checklist: development and psychometric properties. *Journal of clinical psychology*, 66(6), 563-582.
- Neo, M., & Neo, K. T. (2001). Innovative teaching: Using multimedia in a problem-based learning environment. *Educational Technology & Society*, 4(4), 19-31.
- Neumann, A., van Lier, P. A., Gratz, K. L., & Koot, H. M. (2010). Multidimensional assessment of emotion regulation difficulties in adolescents using the difficulties in emotion regulation scale. *Assessment*, 17(1), 138-149.
- Ng, K. H., & Komiya, R. (2000). Introduction of intelligent interface to virtual learning environment. *Proceedings of the Multimedia University International Symposium on Information and Communication Technologies 2000*, Petaling Jaya, Malaysia.
- Nolen-Hoeksema, S., Wisco, B. E., & Lyubomirsky, S. (2008). Rethinking rumination. *Perspectives on psychological science*, 3(5), 400-424.
- O’Cathain, A., Murphy, E., & Nicholl, J. (2010). Three techniques for integrating data in mixed methods studies. *British Medical Journal*, 341
- O’Reilly, M., Svirydenka, N., Adams, S., & Dogra, N. (2018). Review of mental health promotion interventions in schools. *Social Psychiatry and Psychiatric Epidemiology*, 53(7), 647-662

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

- Otto, M. W., Smits, J. A., & Reese, H. E. (2004). Cognitive-behavioral therapy for the treatment of anxiety disorders. *The Journal of clinical psychiatry*.
- Pachana, N. A., & Laidlaw, K. (2014). *Oxford Handbook of Clinical Geropsychology*. London, UK: Oxford Press.
- Pellegrini, A. D., & Bjorklund, D. F. (1998). *Applied child study: A developmental approach*. New Jersey, USA: Psychology Press.
- Peña-Sarrionandia, A., Mikolajczak, M., & Gross, J. J. (2015). Integrating emotion regulation and emotional intelligence traditions: a meta-analysis. *Frontiers in psychology*, 6, 160
- Pfefferbaum, A., Mathalon, D. H., Sullivan, E. V., Rawles, J. M., Zipursky, R. B., & Lim, K. O. (1994). A quantitative magnetic resonance imaging study of changes in brain morphology from infancy to late adulthood. *Archives of neurology*, 51(9), 874-887.
- Phillippi, J., & Lauderdale, J. (2018). A Guide to Field Notes for Qualitative Research: Context and Conversation. *Qualitative Health Research*, 28(3), 381-388.
- Plotnik, R., & Kouyoumdjian, H. (2013). *Introduction to psychology*. California, USA: Cengage Learning.
- Pons, F., Harris, P. L., & de Rosnay, M. (2004). Emotion comprehension between 3 and 11 years: Developmental periods and hierarchical organization. *European journal of developmental psychology*, 1(2), 127-152.
- Posner, M. I., & Rothbart, M. K. (2000). Developing mechanisms of self-regulation. *Development and psychopathology*, 12(3), 427-441.
- Pössel, P., Martin, N. C., Garber, J., & Hautzinger, M. (2013). A randomized controlled trial of a cognitive-behavioral program for the prevention of depression in

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

adolescents compared with nonspecific and no-intervention control conditions.
Journal of Counseling Psychology, 60(3), 432.

Prince-Embury, S. (2007). *Resiliency scales manual: For children & adolescents: A profile of personal strengths*. New York, USA: Harcourt Assessment Incorporated.

Prince, M. (2004). Does active learning work? A review of the research. *Journal of engineering education*, 93(3), 223-231.

Psychological Society of Ireland. (2011). *Code of Professional Ethics*. Dublin: PSI

Rait, S., Monsen, J. J., & Squires, G. (2010). Cognitive Behaviour Therapies and their implications for applied educational psychology practice. *Educational Psychology in Practice*, 26(2), 105-122.

Resnick, M. D., Bearman, P. S., Blum, R. W., Bauman, K. E., Harris, K. M., Jones, J., & Shew, M. (1997). Protecting adolescents from harm: findings from the National Longitudinal Study on Adolescent Health. *Jama*, 278(10), 823-832.

Reynolds, C. R. (2010). Behavior assessment system for children. *The Corsini encyclopedia of psychology*, 1-2..

Rhoads, C. H. (2011). The implications of “contamination” for experimental design in education. *Journal of Educational and Behavioral Statistics*, 36(1), 76-104.

Riediger, M., & Klipker, K. (2014). Emotion regulation in adolescence. In J. J. Gross (Ed.), *Handbook of emotion regulation*(pp. 187-202). New York, NY, US: Guilford Press

Roberts, J. (2017). *Cognitive Behavioral Therapy: A Practical Guide on How to Rewire the Thought Process and Flush Out Negative Thoughts, Depression, and Anxiety, Without Resorting to Harmful Meds* (Vol. 2). USA: Publishdrive

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

- Roberts, R. E., Andrews, J. A., Lewinsohn, P. M., & Hops, H. (1990). Assessment of depression in adolescents using the Center for Epidemiologic Studies Depression Scale. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 2(2), 122.
- Robson, C. (2002). *Real World Research: A Resource for Social Scientists and Practitioner Researchers*. USA: Wiley.
- Rodgers, A., & Dunsmuir, S. (2015). A controlled evaluation of the 'FRIENDS for Life' emotional resiliency programme on overall anxiety levels, anxiety subtype levels and school adjustment. *Child and Adolescent Mental Health*, 20(1), 13-19.
- Roth, A., & Fonagy, P. (2006). *What works for whom?: a critical review of psychotherapy research*. New York, USA: Guilford Press.
- Rothbart, M. K., Posner, M. I., & Boylan, A. (1990). Regulatory mechanisms in infant development. *The development of attention: Research and theory*, 47-66.
- Royal College of Psychiatrists. (2015) Cognitive Behavioural Therapy (CBT). Retrieved 12th October, 2018, from [http://www.repsych.ac.uk/mental-health/treatments-and-well-being/cognitive-behavioural-therapy-\(cbt\)](http://www.repsych.ac.uk/mental-health/treatments-and-well-being/cognitive-behavioural-therapy-(cbt))
- Rubie-Davies, C. M. (2010). *Educational Psychology: Concepts, Research and Challenges*. UK: Taylor & Francis.
- Rubin, A., & Babbie, R. (2009). *Essential Research Methods for Social Work*. USA: Cengage Learning.
- Rupke, S. J., Blecke, D., & Renfrow, M. (2006). Cognitive therapy for depression. *Am Fam Physician*, 73(1), 83-86.
- Saarni, C. (1999). *The development of emotional competence*. New York, USA: Guilford Press.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

- Safer, D. L., Couturier, J. L., & Lock, J. (2007). Dialectical behavior therapy modified for adolescent binge eating disorder: A case report. *Cognitive and behavioral practice, 14*(2), 157-167.
- Samaras, A. P. (2010). *Self-Study Teacher Research: Improving Your Practice Through Collaborative Inquiry*. Thousand Oaks, USA: SAGE Publications.
- Sarıtaş-Atalar, D., Gençöz, T., & Özen, A. (2015). Confirmatory factor analyses of the difficulties in emotion regulation scale (DERS) in a Turkish adolescent sample. *European Journal of Psychological Assessment*.
- Sawyer, M. G., Pfeiffer, S., Spence, S. H., Bond, L., Graetz, B., Kay, D., & Sheffield, J. (2010). School-based prevention of depression: a randomised controlled study of the beyondblue schools research initiative. *Journal of Child Psychology and Psychiatry, 51*(2), 199-209.
- Scott, D., & Morrison, M. (2006). *Key ideas in educational research*. UK: A&C Black.
- Shabiralyani, G., Hasan, K. S., Hamad, N., & Iqbal, N. (2015). Impact of Visual Aids in Enhancing the Learning Process Case Research: District Dera Ghazi Khan. *Journal of Education and Practice, 6*(19), 226-233.
- Sheppes, G., & Gross, J. J. (2011). Is timing everything? Temporal considerations in emotion regulation. *Personality and Social Psychology Review, 15*(4), 319-331.
- Sher, K. J., & Grekin, E. R. (2007). Alcohol and Affect Regulation. In J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 560-580). New York, NY, US: The Guilford Press
- Silvers, J. A., McRae, K., Gabrieli, J. D., Gross, J. J., Remy, K. A., & Ochsner, K. N. (2012). Age-related differences in emotional reactivity, regulation, and rejection sensitivity in adolescence. *Emotion, 12*(6), 1235.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

Sklad, M., Diekstra, R., Ritter, M. D., Ben, J., & Gravesteyn, C. (2012). Effectiveness of school-based universal social, emotional, and behavioral programs: Do they enhance students' development in the area of skill, behavior, and adjustment? *Psychology in the Schools, 49*(9), 892-909.

Slavin, R. E. (2011). Instruction based on cooperative learning. In *Handbook of research on learning and instruction*. UK: Routledge.

Slee, N., Garnefski, N., van der Leeden, R., Arensman, E., & Spinhoven, P. (2008). Cognitive behavioural intervention for self-harm: randomised controlled trial. *The British Journal of Psychiatry, 192*(3), 202-211.

Spear, L. P. (2000). Neurobehavioral Changes in Adolescence. *Current Directions in Psychological Science, 9*(4), 111-114.

Spence, S. H., Barrett, P. M., & Turner, C. M. (2003). Psychometric properties of the Spence Children's Anxiety Scale with young adolescents. *Journal of anxiety disorders, 17*(6), 605-625.

Spence, S. H., Sheffield, J. K., & Donovan, C. L. (2003). Preventing adolescent depression: an evaluation of the problem solving for life program. *Journal of consulting and clinical psychology, 71*(1), 3.

Spence, S. H., Sheffield, J. K., & Donovan, C. L. (2005). Long-term outcome of a school-based, universal approach to prevention of depression in adolescents. *Journal of consulting and clinical psychology, 73*(1), 160.

Spielberger, C. D. (1980). *Test Anxiety Inventory: Sampler Set: Manual, Test Scoring: test Attitude Inventory: Preliminary Professional Manual*. California, USA: Mind Garden.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

- Spores, J. M. (2012). *Clinician's Guide to Psychological Assessment and Testing: With Forms and Templates for Effective Practice*. New York, USA: Springer Publishing Company.
- Sportel, B. E., de Hullu, E., de Jong, P. J., & Nauta, M. H. (2013). Cognitive bias modification Versus CBT in reducing adolescent social anxiety: a randomized controlled trial. *PLoS One*, 8(5), 64355.
- Spradlin, S. E. (2010). *Don't let your emotions run your life: How dialectical behavior therapy can put you in control*. California, USA: New Harbinger Publications
- Squires, G. (2010). Countering the argument that educational psychologists need specific training to use cognitive behavioural therapy. *Emotional and Behavioural Difficulties*, 15(4), 279-294.
- Stallard, P. (2009). *Anxiety: cognitive behavioural therapy with children and young people*. Hove: Routledge.
- Stallard, P., Sayal, K., Phillips, R., Taylor, J. A., Spears, M., Anderson, R., & Montgomery, A. A. (2012). Classroom based cognitive behavioural therapy in reducing symptoms of depression in high risk adolescents: pragmatic cluster randomised controlled trial. *BMJ : British Medical Journal*, 345.
- Stanley, B., Brodsky, B., Nelson, J. D., & Dulit, R. (2007). Brief dialectical behavior therapy (DBT-B) for suicidal behavior and non-suicidal self injury. *Archives of Suicide Research*, 11(4), 337-341.
- Steinberg, L. (2005). Cognitive and affective development in adolescence. *Trends in cognitive sciences*, 9(2), 69-74.
- Steinberg, L., & Avenevoli, S. (2000). The role of context in the development of psychopathology: A conceptual framework and some speculative propositions. *Child development*, 71(1), 66-74.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

- Stoeber, J., & Janssen, D. P. (2011). Perfectionism and coping with daily failures: Positive reframing helps achieve satisfaction at the end of the day. *Anxiety, Stress & Coping, 24*(5), 477-497.
- Susskind, J. E. (2005). PowerPoint's power in the classroom: enhancing students' self-efficacy and attitudes. *Computers & Education, 45*(2), 203-215.
- Tashakkori, A., & Teddlie, C. (2010). *Sage handbook of mixed methods in social & behavioral Research*. Thousand Oaks, USA: Sage.
- Teddlie, C., & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Thousand Oaks, California, USA: Sage.
- Tashakkori, A., Teddlie, C., & Teddlie, C. B. (2003). *Handbook of Mixed Methods in Social & Behavioral Research*. Thousand Oaks, USA: SAGE Publications.
- Tasman, A., Kay, J., Lieberman, J.A., First, M.B., & Riba, M. (2015). *Psychiatry Fourth Edition Volume One*. Sussex, UK: John Wiley Publishing
- Taylor, J. A., Phillips, R., Cook, E., Georgiou, L., Stallard, P., & Sayal, K. (2014). A qualitative process evaluation of classroom-based cognitive behaviour therapy to reduce adolescent depression. *International journal of environmental research and public health, 11*(6), 5951-5969.
- The Department of Education and Skills. (2015). *Wellbeing In Primary Schools*. Ireland: DES.
- Thomas, J.C., & Hersen, M. (2009). *Handbook of Clinical Psychology Competencies*. New York, USA: Springer Publishing.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

- Thompson, R. A., & Nelson, C. A. (2001). Developmental science and the media: Early brain development. *American Psychologist*, 56(1), 5.
- Thyer, B. (2009). *The handbook of social work research methods*. USA: Sage.
- Tomyn, J. D., Fuller-Tyszkiewicz, M., Richardson, B., & Colla, L. (2016). A comprehensive evaluation of a universal school-based depression prevention program for adolescents. *Journal of abnormal child psychology*, 44(8), 1621-1633.
- Torgerson, D. J. (2001). Contamination in trials: is cluster randomisation the answer? *Bmj*, 322(7282), 355-357.
- Tugade, M.M., Frederickson, B.L., & Feldman Barrett, L. (2004). Psychological resilience and positive emotional granularity: Examining the benefits of positive emotions on coping and health. *Journal of personality*. 72(6), 1160
- Urquhart, C. (2012) *Grounded Theory for Qualitative Research: A Practitcal Guide*, Thousand Oaks, USA: Sage Publications.
- Van Dijk, S. (2013). *DBT Made Simple: A Step by Step Guide to Dialectical Behaviour Therapy*, USA: New Harbinger Publication.
- Wagner, E. E., Rathus, J. H., Miller, A. L., & Baer, R. A. (2006). Mindfulness in dialectical behavior therapy (DBT) for adolescents. *Mindfulness-based treatment approaches: Clinician's guide to evidence base and applications*, 167-189.
- Webster-Stratton, C. (1999). *How to Promote Children's Social and Emotional Competence*. Thousand Oaks, California, USA: Sage Publications.
- Wellman, H. M., Cross, D., & Watson, J. (2001). Meta-analysis of theory-of-mind development: The truth about false belief. *Child development*, 72(3), 655-684.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

- Welty, W. M. (1989). Discussion method teaching. *Change: The Magazine of Higher Learning*, 21(4), 40-49.
- Wilding, C. (2012). *Cognitive Behavioural Therapy: CBT self-help techniques to improve your life*. UK: Hodder & Stoughton.
- Williams, P. D., Williams, A. R., Graff, J. C., Hanson, S., Stanton, A., Hafeman, C., & Ridder, L. (2003). A community-based intervention for siblings and parents of children with chronic illness or disability: the ISEE study. *The Journal of pediatrics*, 143(3), 386-393.
- Wisniewski, L., & Kelly, E. (2003). The application of dialectical behavior therapy to the treatment of eating disorders. *Cognitive and behavioral practice*, 10(2), 131-138.
- Wood, A., Kroll, L., Moore, A., & Harrington, R. (1995). Properties of the mood and feelings questionnaire in adolescent psychiatric outpatients: a research note. *Journal of Child Psychology and Psychiatry*, 36(2), 327-334.
- Wood, C. P., Giles, D., & Percy, C. (2009). *Your psychology project handbook: Becoming a researcher*. New York, USA: Pearson Education.
- World Health Organisation. (2014). *Mental health: a state of well-being*. WHO.
- Wyman, P. A., Cross, W., Brown, C. H., Yu, Q., Tu, X., & Eberly, S. (2010). Intervention to Strengthen emotional self-regulation in children with emerging mental health problems Proximal impact on school behavior. *Journal of abnormal child psychology*, 38(5), 707-720.
- Yoder, N. (2014). *Teaching the whole child: Instructional practices that support social emotional learning in three teacher evaluation frameworks*. Washington, DC: American Institutes for Research Center on Great Teachers and Leaders.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

Yueh, H.-P., Lin, W., Jo-Yi, H., & Sheen, H.-J. (2012). Effect of student engagement on multimedia assisted instruction. *Knowledge Management & E-Learning*, 4(3), 346.

Zapolski, T. C. B., & Smith, G. T. (2017). Pilot Study: Implementing a Brief DBT Skills Program in Schools to Reduce Health Risk Behaviors Among Early Adolescents. *The Journal of School Nursing*, 33(3), 198-204.

Zimmer-Gembeck, M. J., & Skinner, E. A. (2011). The development of coping across childhood and adolescence: An integrative review and critique of research. *International Journal of Behavioral Development*, 35(1), 1-17.

Appendices

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Appendix A: References of Included Studies

- Gillham, J. E., Reivich, K. J., Freres, D. R., Chaplin, T. M., Shatté, A. J., Samuels, B., & Gallop, R. (2007). School-based prevention of depressive symptoms: A randomized controlled study of the effectiveness and specificity of the Penn Resiliency Program. *Journal of consulting and clinical psychology, 75*(1), 9
- Horowitz, J. L., Garber, J., Ciesla, J. A., Young, J. F., & Mufson, L. (2007). Prevention of depressive symptoms in adolescents: A randomized trial of cognitive-behavioral and interpersonal prevention programs. *Journal of consulting and clinical psychology, 75*(5), 693
- Pössel, P., Martin, N. C., Garber, J., & Hautzinger, M. (2013). A randomized controlled trial of a cognitive-behavioral program for the prevention of depression in adolescents compared with nonspecific and no-intervention control conditions. *Journal of Counselling Psychology, 60*(3), 432
- Rodgers, A., & Dunsmuir, S. (2015). A controlled evaluation of the 'FRIENDS for Life' emotional resiliency programme on overall anxiety levels, anxiety subtype levels and school adjustment. *Child and Adolescent Mental Health, 20*(1), 13-19
- Sawyer, M. G., Pfeiffer, S., Spence, S. H., Bond, L., Graetz, B., Kay, D & Sheffield, J. (2010). School-based prevention of depression: a randomised controlled study of the beyond blue schools research initiative. *Journal of Child Psychology and Psychiatry, 51*(2), 199-209
- Spence, S. H., Sheffield, J. K., & Donovan, C. L. (2003/2005). Long-term outcome of a school-based, universal approach to prevention of depression in adolescents. *Journal of consulting and clinical psychology, 73*(1), 160
- Stallard, P., Sayal, K., Phillips, R., Taylor, J. A., Spears, M., Anderson, R., Montgomery, A. A.(2012). Classroom based cognitive behavioural therapy in reducing symptoms of depression in high risk adolescents:

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

pragmatic cluster randomised controlled trial. *BMJ : British Medical Journal*, 345.

- Tomy, J. D., Fuller-Tyszkiewicz, M., Richardson, B., & Colla, L. (2016). A comprehensive evaluation of a universal school-based depression prevention program for adolescents. *Journal of abnormal child psychology*, 44(8), 1621-1633.
- Flynn, D., Joyce, M., Wehrauch, M., & Corcoran, P. (2018). Innovations in Practice: Dialectical behaviour therapy – skills training for emotional problem solving for adolescents (DBT STEPS-A): evaluation of a pilot implementation in Irish post-primary schools. *Child and Adolescent Mental Health*, 23(4), 376-380.
- Zapolski, T. C. B., & Smith, G. T. (2017). Pilot Study: Implementing a Brief DBT Skills Program in Schools to Reduce Health Risk Behaviors Among Early Adolescents. *The Journal of School Nursing*, 33(3), 198-204.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Appendix B: Weight of Evidence Ratings

Weight of Evidence A

Weight of evidence A (WoE A) reflects the methodological quality of the included studies. Studies were rated based on the reliability of measures which increase reliability and replicability of the study. Comparison groups were weighted based on active or waitlist which can add to the validity of the study. Analysis was appraised in terms of sample size which effects generalisation and power. Studies were examined for long term effects of interventions with follow up and increased the reliability and validity of findings by collecting data from multiple sources.

The scoring criteria are as follows:

High=2.4-3.0

Medium=1.7-2.3

Low=1.0-1.6

Measures

High: Reported the alpha co-efficient of the measures of $>.8$ for all relevant outcome measures

Medium: Reported reliability co-efficient of $>.7$ for all primary outcome measures

Low: Used a widely references measure but provided no information on reliability co-efficient

Comparison Group

High: Had at least one alternative comparison group

Medium: Had a comparison group

Low: No comparison group

Analysis

High: Conducted an appropriate analysis providing effect sizes and used a sufficient sample size

Medium: Provided effect sizes for some outcome measures and had a medium sample size

Low: Conducted appropriate analysis but provided no information on effect size

Follow up: High: Collected data at multiple time points

Medium: Collected data at one point following the intervention

Low: No follow up data collected

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

Source

High: Information collected from one source

Medium: Information collection from one source, but included self-report

Low: Information collected from one source, not self-report

Study	Measures	Comparison Group	Analysis	Follow-Up	Source	WOE A
Spence et al. (2005)	3	2	3	3	2	2.6
Tomyn et al. (2016)	3	2	1	2	2	2
Gillham et al. (2007)	2	3	3	2	2	2.4
Rodgers and Dunsmuir (2015)	1	2	1	2	3	1,8
Sportel et al. (2013)	2	3	3	3	2	2.6
Stallard et al. (2012)	1	3	1	2	2	1.8
Horowitz et al. (2007)	3	3	3	2	2	2.6
Sawyer et al. (2010)	1	2	3	2	2	2
Pössel et al. (2013)	3	3	1	3	2	2.4
Flynn et al. (2018)	3	3	3	1	2	2.4
Zapolski and Smith (2017)	2	1	1	1	2	1.4

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Weight of Evidence B

This is the methodological relevance of the studies to the review question and refers to the design of the study to the review question. This specifically looks at changes in emotional domains and is interested in effects of universal school based CBT interventions. The following criteria were selected to weight the studies.

Randomisation

High: Fully randomised control design

Medium: Block randomisation

Low: Non-random control design

Comparison Group

High: Alternative intervention provided to comparison group

Medium: Waitlist control intervention group

Low: No comparison group

Group Equivalence

High: Information provided on equivalence or counter balancing

Medium: Some information provided on equivalence of groups

Low: Equivalence of groups not addressed

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

Study	Randomisatio n	Comparison Group	Group Equivalence	WoE B
Spence et al. (2005)	2	2	2	2.3
Tomyn et al. (2016)	2	2	3	2.3
Gillham et al. (2007)	3	3	3	3
Rodgers and Dunsmuir (2015)	3	2	1	2
Sportel et al. (2013)	2	3	3	2.6
Stallard et al. (2012)	2	3	3	2.6
Horowitz et al. (2007)	3	3	3	3
Sawyer et al. (2010)	2	2	3	2.3
Pössel et al. (2013)	2	3	2	2.3
Flynn et al. (2018)	2	2	2	2
Zapolski and Smith (2017)	1	1	2	1

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Weight of Evidence C

As this review is particularly interested in school based CBT intervention impacts on emotions and emotional regulation, information gathered by studies was important in terms of relevance to the review question. Studies were weighted based on the information provided in relation to this function.

Intervention

High: Used an established manualised intervention programme

Medium: Offered a good description of the components of the intervention

Low: Minimal information provided about the intervention

Measures

High: Collected information from more than one source

Medium: Collected information from one source but included self-report

Low: Collected information from one source

Fidelity

High: Information provided on three of the following: Manual, facilitator training, supervision or monitoring

Medium: Information provided on two of the following: Manual, facilitator training, supervision or monitoring

Low: Minimal information provided on fidelity

Intervention Delivery

High: Intervention delivered universally

Medium: Intervention delivered universally but focus on high risk populations

Low: Intervention delivered to a selected population

Measures

High: Provides measure of overall changes in emotional regulation

Medium: Provides measure of an aspect of emotional regulation

Low: Provides measure of change related to emotions

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

Study	Intervention	Source	Fidelity	Delivery	Measures	WOE C
Spence et al. (2005)	3	2	2	3	2	2.4
Tomyn et al. (2016)	3	2	1	3	1	2
Gillham et al. (2007)	3	2	3	3	1	2
Rodgers and Dunsmuir (2015)	3	3	1	3	1	2.2
Sportel et al. (2013)	1	2	2	1	2	1.6
Stallard et al. (2012)	3	2	1	3	1	2
Horowitz et al. (2007)	3	2	3	3	1	2.4
Sawyer et al. (2010)	3	2	2	3	2	2.4
Pössel et al. (2013)	3	2	3	3	1	2.4
Flynn et al. (2018)	3	2	2	3	2	2.6
Zapolski and Smith (2017)	2	2	2	2	2	2

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Weight of Evidence D

This provides an overall score for each study based on averages of methodological quality, relevance and overall relevance to the review.

Study	WOE A	WOEB	WOEC	WOED
Spence et al. (2005)	2.6	2.3	2.4	2.4 High
Tomyn et al. (2016)	2	2.3	2	2.1 Medium
Gillham et al. (2007)	2.4	3	2	2.4 High
Rodgers and Dunsmuir (2015)	1,8	2	2.2	2 Medium
Sportel et al. (2013)	2.6	2.6	1.6	2.1 Medium
Stallard et al. (2012)	1.8	2.6	2	2.2 Medium
Horowitz et al. (2007)	2.6	3	2.4	2.6 High
Sawyer et al. (2010)	2	2.3	2.4	2.2 Medium
Pössel et al. (2013)	2.4	2.3	2.4	2.2 Medium
Flynn et al. (2018)	2.4	2	2.6	2.3 Medium
Zapolski and Smith (2017)	1.4	1	2	1.4 Low

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

Appendix C: Student Questionnaire

Please complete the following questionnaire to the best of your ability. You should read each statement and circle the answer that most applies to you. You should

- Circle almost never if this almost never applies to you.
- Circle sometimes if this sometimes applies to you.
- Circle half of the time if this applies to you half of the time.
- Circle most of the time if most of the time this applies to you.
- Circle almost always if this almost always applies to you.

Try your best to answer every statement. Almost Never (0–10%)	Some-times (11–35%)	About Half Of the Time (36–65%)	Most of the Time (66–90%)	Almost Always (91–100%)	
1. I pay attention to how I feel	1	2	3	4	5
2. I have no idea how I am feeling	1	2	3	4	5
3. I have difficulty making sense out of my feelings	1	2	3	4	5
4. I care about what I am feeling	1	2	3	4	5
5. I am confused about how I feel	1	2	3	4	5
6. When I am upset I acknowledge my emotions	1	2	3	4	5
7. When I am upset I become embarrassed for feeling that way	1	2	3	4	5
8. When I am upset I have difficulty getting work done	1	2	3	4	5
9. When I am upset I become out of control	1	2	3	4	5
10. When I am upset, I believe that they will end up feeling very depressed	1	2	3	4	5

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

11. When I am upset I have difficulty focusing on other things	1	2	3	4	5
12. When I am upset I feel guilty for feeling that way	1	2	3	4	5
13. When upset I have difficulty concentrating	1	2	3	4	5
14. When upset I have difficulty controlling behaviours	1	2	3	4	5
15. When upset, I believe there is nothing I can do to make myself feel better	1	2	3	4	5
16. When upset, I become irritated with myself for feeling that way	1	2	3	4	5
17. When upset I lose control over my behaviour	1	2	3	4	5
18. When upset it takes my child a long time to feel better	1	2	3	4	5

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

Appendix D: Parent Questionnaire

Difficulties in Emotion Regulation Scale – Short Form (DERS-SF)

Please complete the following questionnaire to the best of your ability. You should read each statement and circle the answer that most applies to your child. You should

- Circle almost never if this almost never applies to your child.
- Circle sometimes if this sometimes applies to your child.
- Circle half of the time if this applies to your child half the time.
- Circle most of the time if most of the time this applies to your child.
- Circle almost always if this almost always applies to your child.

Try your best to answer every statement. Almost Never (0–10%)	Some-times (11–35%)	About Half Of the Time (36–65%)	Most of the Time (66–90%)	Almost Always (91–100%)	
1. My child pays attention to how they feel	1	2	3	4	5
2. My child has no idea how they are feeling	1	2	3	4	5
3. My child has difficulty making sense out of their feelings	1	2	3	4	5
4. My child cares about what they are feeling	1	2	3	4	5
5. My child is confused about how they feel	1	2	3	4	5
6. When my child is upset they acknowledge their emotions	1	2	3	4	5
7. When my child is upset they become embarrassed for feeling that way	1	2	3	4	5
8. When my child is upset they have difficulty getting work done	1	2	3	4	5
9. When my child is upset they become out of control	1	2	3	4	5

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

10. When my child is upset, they believe that they will end up feeling very depressed	1	2	3	4	5
11. When upset my child has difficulty focusing on other things	1	2	3	4	5
12. When upset my child feels guilty for feeling that way	1	2	3	4	5
13. When upset my child has difficulty concentrating	1	2	3	4	5
14. When upset my child has difficulty controlling behaviours	1	2	3	4	5
15. When upset, my child believes there is nothing they can do to make themselves feel better	1	2	3	4	5
16. When upset, my child becomes irritated with for feeling that way	1	2	3	4	5
17. When upset my child loses control over their behaviour	1	2	3	4	5
18. When upset it takes my child a long time to feel better	1	2	3	4	5

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Appendix E: Student Interview Questions

Researcher Script: Thank you for agreeing to complete this interview with me. As part of my research I am hoping to find out your experience on the DBT Steps-A emotional regulation module which you attended over the past seven weeks. I must remind you that your participation is voluntary. If you do not want to complete this interview or answer any questions you do not have to and you can say stop at any time. If at any time you decide you do not want to take part in this interview you can say so and any collected information will be destroyed. Do you understand?

- Was there anything you particularly liked about taking part in steps a ?
- Was there anything you particularly disliked about taking part in steps a?
- What skills, if any, do you feel you learned from taking part in steps a?
- What did you find valuable about taking part in steps a?
- Is there any way the Steps a programme could be improved?
- Do you feel like you have been able to use any of the skills you have learned outside of the group sessions (e.g. at home, at sports etc.)
- What did you think of steps a?

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Appendix F: Post Intervention Interview (Co-facilitator)

Researcher Script: My name is X and I am a Trainee Educational Psychologist at Mary Immaculate College. As part of my research I am hoping to find out your opinion on the 'DBT steps A' Emotional Regulation Module which you co-facilitated with me in your school. I must remind you that your participation is voluntary. If you do not want to complete this interview or answer any questions you do not have to and you can say stop at any time. If at any time you decide you do not want to take part in this interview you can say so and any collected information will be destroyed. Do you understand? Are you happy to proceed with the interview?

- Do you feel your students learned any skills as a result of steps a?

-What was your view of the information provided to students and teachers from the programme?

-What was your favourite part about the programme?

-What was your least favourite part about the programme?

-Is there any way the programme could be improved?

-Do you feel there any barriers to this school based intervention?

-Do you feel this is a feasible intervention to run in schools?

-How do you think this intervention could fit into Irish post primary schools?

-Did you observe your students use any group skills outside of the group?

-Is there anything else you want to add?

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Appendix G: Letter/Email to the Principal



Dear Principal,

My name is X and I am completing a Professional Doctorate in Educational and Child Psychology in Mary Immaculate College, Limerick. I have received Garda Vetting from Mary Immaculate College and from the Teaching Council. I have experience working with children and adolescents and of delivering therapeutic interventions. As part of my doctoral thesis I am conducting research into a differentiated module of a school based emotional problem solving programme for post primary school students, named 'DBT Steps-A'. This programme is based on dialectical behavioural therapy and I am trying to see if running a differentiated module of this programme at school leads to any changes in emotional regulation abilities for students in an Irish post primary school. **Emotional regulation** is a person's ability to effectively manage and respond to an *emotional* experience.

I would be grateful if you would consider allowing me to run this intervention in your school and allowing me to seek consent from pupils, teachers and parents to allow them to take part in this study. Consent would also be required from the school's board of management.

This project would run for a total of 14 weeks, between September and December. Each session would last two class periods would take place once a week and an identified teacher would be required to co-facilitate the intervention. I envisage that the intervention could be run with a transition year class group. I would hope that the class could be split in half, with half the class taking part in the intervention for 7 weeks, whilst the other group continue with SPHE as normal. I would then hope that the second half of the class would take part in the intervention and the first group would complete the missed SPHE classes.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

This would mean that a whole class group (25-30 students) would be required. As part of this it is hoped that the session would be timetabled into student's week between September and December 2018. As part of this study participants (students, parents) would be asked to complete a questionnaire before, during and after the intervention (on three occasions; once every seven weeks between September and December), this would take approximately 10 minutes. Some students and the co-facilitating teacher would be asked to complete an interview following the programme. Participation is voluntary and participants may withdraw from the study at any time. All gathered information will be kept confidential on a password protected USB stick or in a locked filing cabinet. Data would be stored according the Mary Immaculate College data retention policy and would be erased after three years, analysed data will be used for the findings of my thesis and may be disseminated to others in research articles or other formats. Confidentiality may be broken if there is risk of harm to you or another person or in relation to disclosure of information pertaining to a crime.

If you have any concerns or questions about this study please contact me or my project supervisor, X or Course Leader DECPSY/ Research Co-ordinator, X. Please find enclosed an information sheet for participants, parents and teachers which explains the details of the study. If you are interested in running this intervention in your school I would appreciate if you would contact me at this email address X.

Thank you for your time and consideration. Once I receive your email I will phone you in order to discuss the project further and answer any of your questions.

Yours sincerely,

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Appendix H: Co-facilitator Information Sheet



Dear Principal/Teacher/Staff member,

My name is X and I am currently completing the Professional Doctorate in Educational and Child Psychology in Mary Immaculate College, Limerick. As part of my doctoral research, I am conducting research into promoting well-being and school based mental health intervention for Irish students. As part of this research I am hoping to run the Emotional Regulation module of the ‘DBT steps’ A programme with a class in your school, this is a programme based on Dialectical Behavioural Therapy that aims to teach teenagers how to identify and cope with their emotions. **Emotional regulation** is a person's ability to effectively manage and respond to an *emotional* experience. The following offers information on this research project.

Who will be working with students in my school?

X will run the programme and another teacher in your school to help co-facilitate the group with a group of transition year pupils in your school. Charlotte is a trainee educational psychologist and a trained teacher. X has Garda Vetting and has completed child protection training.

What is this project about?

This project aims to establish if the ‘DBT Steps-A’ Emotional Regulation Module, with recommended modifications, leads to positive outcomes for Irish adolescents, if this programme is enjoyable for them and if this programme is a feasible school based intervention.

What will students and teachers in my school have to do?

A transition year class in your school will be split in half. The first half of the group will take part in the Emotional Regulation class from September to October, the other half will continue to attend their SPHE class. The second half of the group will then take part in the Emotional Regulation class from November to December and the first half of the group will attend the SPHE class. The class will last for two class periods

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

and will run for 7 weeks. Your students will be asked to complete a questionnaire based on their emotions and how they cope with them. They will complete this on three occasions (once every seven weeks between September and December). Their parents will also be asked to complete a short questionnaire which provides information on how their child regulates their emotions, this will also be completed on three occasions (once every seven weeks between September and December). Both questionnaires take approximately 10-15 minutes to complete. . Your students may also be asked to complete a short interview following the programme to give their opinion of taking part in the programme. During the programme your students will take part in discussion activities, games, art activities, group work and pair work.

A teacher in your school will be asked to co-facilitate the group. This means they will be asked to assist with delivering the intervention, this will last for 14 weeks and will take two class periods each week. They will be asked to help with the activities and help monitor the students. They will also be asked to complete a short interview to give their opinion of the programme, this will be recorded and following transcription the recording will be deleted.

What are the benefits?

A growing number of children and adolescents are presenting with emotional difficulties such as anxiety or depression. There are currently long waiting lists for public services providing therapeutic support for individuals to develop emotional coping skills. By providing school wide preventative interventions to address these issues we are helping promote positive mental health and well-being in our teenagers. It is important that school wide interventions are trialled with individuals with to get their opinion of programmes suitability to meet their needs and to ensure they are receiving evidence based interventions. Overall the current study aims to establish if a differentiated module of the 'DBT Steps-A' programme leads to changes in emotional regulation in adolescents in an Irish primary school, and if, in their opinion, this is an enjoyable and effective programme. A teacher in your school may also learn skills in facilitating well-being interventions in the school setting and may continue to run the programme in the future.

What are the risks?

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Some teenagers may experience anxiety taking part in the group or may focus more on their anxiety. If your students become upset or are unhappy taking part in the programme they may decide they no longer want to take part.

What if people do not want to take part?

Participation in this study is voluntary and individuals can choose not to take part or to stop taking part in this study at any time. At such a point any information provided will be deleted.

What happens to the information?

The information is collected and kept private, safely and securely on a password encrypted USB stick. Names of teachers, parents or students' names will not appear on any collected information. They will be assigned a code. Any hard copy information provided will be stored securely in a locked filing cabinet as will consent forms. Audio information will be kept on the password protected USB stick and will be deleted following transcription. In line with Mary Immaculate College retention policy any information gathered will be kept for three years and will then be destroyed. Data will be analysed by the researcher or support staff. Analysed, anonymous data will be used for my thesis, the findings of which may be disseminated to a wider audience in the form of a journal article etc. Confidentiality may be broken if there is a risk of harm to you or another person or in relation to disclosure of information pertaining to a crime.

Thank you for taking the time to read this. Please do not hesitate to contact me or my supervisors if you have any further questions.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

Appendix I: Teacher Consent Form



Dear Teacher

As outlined in the information sheet, this research aims to establish if a differentiated module of the 'DBT Steps-A', an emotional problem solving programme for adolescent's leads to positive outcomes for adolescents in an Irish post primary school and if it is an appropriate school based intervention for this group. Details of what you will have to do to do is provided in the information sheet. This information sheet should be read carefully before you agree to take part in the study. Please read the following statements and ensure you understand before you sign the consent form.

- I have read and understood the information sheet
- I understand what the project is about and what the results will be used for
- I am fully aware of all procedures involving myself
- I know my participation is voluntary and I can withdraw myself from the project at any time without giving any reason
- I am aware that results will be kept confidential
- I am aware that I will take part in a recorded interview following the intervention

Name: _____

Date: _____

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Appendix J: Letter to the Board of Management



Dear Chairperson,

My name is X and I am currently undertaking the Doctorate in Child and Educational Psychology at Mary Immaculate College, Limerick.

As part of my doctoral thesis I am hoping to research the effect of a school based emotional regulation module on the emotional regulation abilities of transition year students in an Irish post primary school. **Emotional regulation** is a person's ability to effectively manage and respond to an *emotional* experience. As part of this study a class in your school will be asked to split in half, with half the students taking part in the programme from September to October and the other half taking part in the programme from November to December. When not taking part in the programme the students will continue to attend SPHE class. The students will attend the programme for seven weeks, once a week for two class periods and will take part in activities such as discussion, role play, games, worksheets and simple home activities. The programme in question is 'DBT Steps-A', a dialectical behavioural therapy programme with some limited evidence for positive outcomes.

As part of this research a teacher will be required to co-facilitate the group. Students and their parents will be asked to complete a short questionnaire about emotional regulation on three occasions completed on three occasions (once every seven weeks for the duration of the programme) between September and December, this questionnaire should not take longer than 10 minutes. Some of the students and the co-facilitating teacher will then be asked to take part in a short interview about their experience of the programme. All collected information will be stored securely and will be anonymised. (Please see attached information sheet)

Thank you for your time and consideration

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

Appendix K: Parent Consent Form for Student Interview



Dear Parent

You have already received an information sheet in relation to the Emotional Regulation module which your child has attended. Following on from this I am hoping to collect information from your child on their experience of the programme, any skills they have learned and their opinion of DBT steps A. As part of this your child will be recorded using a Dictaphone. The audio information collected will be anonymised and your child's name **will not** be present on the recording, they will be identified by a number. This interview should take approximately 10-15 minutes. Please read the following statements and ensure you understand before you sign the consent form.

- I am aware my child will be recorded but that the audio recording will contain no identifying information relating to my child
- I am aware my child will take part in an interview as part of the DBT steps A study
- I have read and understood study the information sheet
- I understand what the project is about and what the results will be used for
- I am fully aware that I can withdraw myself or my child at any time
- I know my participation is voluntary and I can withdraw myself from the project at any time without giving any reason
- I am aware that results will be kept confidential

I consent to my child taking part in the interview to provide information on their experience of the 'DBT Steps-A' programme.

Yes No

Name: _____

Date: _____

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Appendix L: Parent/Guardian Information Sheet



Dear Parent/Guardian,

My name is X and I am currently completing the Professional Doctorate in Educational and Child Psychology in Mary Immaculate College, Limerick. As part of my doctoral research I am conducting research into promoting well-being and school based mental health interventions for Irish students. As part of this research I am aiming to run the Emotional Regulation module of the ‘DBT Steps-A’ programme with your child’s class. This is a programme designed for teenagers and it is based on dialectical behavioural therapy. This module aims to teach teenagers how to identify emotions and teach them positive ways of coping with emotions. This programme has been run with other teenagers and feedback has been positive. However, further research is necessary to evaluate the outcomes of the programme. This is why you are being asked to consent to your child taking part in this research study.

Who will be working with my child?

X and a designated teacher from your child’s school will run the programme with your child. X is a trainee Educational Psychologist and a trained Teacher. X has Garda Vetting and has completed child protection training.

What is this project about?

This project aims to establish if the ‘DBT Steps-A’ Emotional Regulation module leads to changes in emotional regulation abilities of Irish students, if this programme is enjoyable for them and if this programme is a feasible school based intervention.

Emotional regulation is a person's ability to effectively manage and respond to an *emotional* experience

What will my son/daughter and I have to do?

Your son/daughter’s class will be split in half. The first half of the group will take part in the Emotional Regulation class from September to October, the other half will continue to attend their SPHE class. The second half of the group will then take part in the Emotional Regulation class from November to December and the first half of the group will attend the SPHE class. The class will last for two class periods and will run for 7 weeks. Your son/daughter will not miss any lesson content. Your son/daughter

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

will be asked to complete a questionnaire based on their emotions and how they cope with them. They will complete this on three occasions; in September, October and December. You will also be asked to complete a short questionnaire which provides information on how your child regulates their emotions, this will also be completed on three occasions (September, October and December). Both questionnaires take approximately 10-15 minutes to complete. . Your son/daughter may also be asked to complete a short interview following the programme to give their opinion of taking part in the programme, this will be recorded using a Dictaphone, but will be deleted after it has been transcribed. During the programme your son or daughter will take part in discussion activities, games, art activities, worksheets, group work and pair work.

What are the benefits?

It is important to promote positive mental health and well-being in our teenagers. It is also important to get teenagers opinions on mental health programmes. This research study will establish if this programme leads to positive outcomes for Irish students and will also establish their opinion of the programme.

What are the risks?

Some teenagers may experience anxiety taking part in the group or may focus more on their anxiety. If your child becomes upset or is unhappy taking part in the programme they may decide they no longer want to take part. If there are any concerns for your child's well-being during the programme your child's teacher and you will be contacted immediately.

What if I do not want my child to take part?

Participation in this study is voluntary and you and your child can choose not take part or to stop taking part in this study at any time. Also your son/daughter can take part in the programme without providing any information for the purpose of the study.

What happens the information?

The information is collected and kept private safely and securely on a password encrypted USB stick. Your son/daughter's name or your own name will not appear on any collected information. Your child and you be assigned a code. Any hard copy information provided will be stored securely in a locked filing cabinet as will consent forms. In line with Mary Immaculate College retention policy any information gathered will be kept for three years and will then be destroyed. You can request your child's results at the end of the study and are free to share this information with your child,

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

teachers or other professionals. Data will be analysed by the researcher or support staff. The anonymised, analysed data from the study which will be used to inform my thesis may be published in a journal, presented at conferences or disseminated to other audiences. Confidentiality may be broken if there is risk of harm to you or another person or in relation to disclosure of information pertaining to a crime.

Who else is taking part?

Other students the same age as your son/daughter in your child's class will take part in this study.

If you have any further questions you may contact X or my supervisor Dr X, or Course Leader DECPSY/ Research Co-ordinator, Dr. X. It is important that you feel your questions have been answered.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

Appendix M: Adolescent Assent Form



My name is X. I am learning how to be an Educational Psychologist, which means I am interested in learning about how to help children and teenagers.

I am going to run a programme that you can be part of if you choose. This programme is like an SPHE class. You will be asked to learn some skills, talk with other students in your class, play games, complete worksheets and practice some activities at home. This programme will focus on emotions, learning about them and how to cope with them. Before you decide if you want to be part of this group please read the information sheet with your parents and ensure you understand the points made below.

Tick	Please Read
	I know I don't have to take part in the group or any other activities if I don't want to
	I know if I feel like stopping at any time that's ok, I know I will not get in trouble and I don't have to say why I want to stop
	I know that this isn't a test or exam and that I am taking part in this programme to learn about emotions and to help decide if this is a good programme for other teenagers
	I know I will be asked to complete a questionnaire three times during the programme and that I may be asked to take part in a recorded interview .
	I have read the information sheet and understand the information

If you are not sure on anything ask me any questions you may have.

Do you want to take part in this research group?

Yes

No

Signed: _____

Date: _____

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

Appendix N: Parent Consent Form



Dear Parent/ Guardian

As outlined in the information sheet, this study aims to establish if the ‘Emotional Regulation’ module of the ‘DBT Steps-A’ programme for adolescents leads to positive outcomes in emotional regulation for them and if it is an appropriate school based programme for students. Details of what you and your child will be asked to do is provided in the information sheet. The information sheet should be read carefully before deciding to take part in the study. Please read the following statements before you sign the consent form.

- I have read and understood the information sheet
- I understand what the project is about and what the results will be used for
- I am fully aware of all procedures involving myself and my child along with the risks and benefits of the study
- I know mine and my child’s participation is voluntary and I can withdraw them and myself from the project at any time without giving any reason
- I am aware that results will be kept confidential but I can access any results up to three years following the study.
- I am aware that I will be asked to complete a short questionnaire about my child on three occasions during the study
- I am aware that my child will be asked to complete a short questionnaire on three occasions during the study
- I am aware that my child may be asked to take part in a short recorded interview following the intervention

I consent for myself and my child to take part in this research study.

Yes

No

Name:

Date:

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Appendix O: Teacher Co-Facilitator Information Sheet



Dear Teacher,

My name is X and I am currently completing the Professional Doctorate in Educational and Child Psychology in Mary Immaculate College, Limerick. As part of my doctoral research, I am conducting research into promoting well-being and school based mental health intervention for Irish students. As part of this research I am aiming to run the Emotional Regulation module of the 'DBT Steps-A' programme. This is a programme designed for teenagers based on dialectical behavioural therapy and this module aims to teach them how to identify emotions and positive ways of coping with emotions. This programme has been run with other teenagers and feedback has been positive. However, further research is necessary to evaluate the outcomes of the programme. This is why you are being asked to consent to taking part in this research study.

Who will be working with me and/or my students?

X will run the programme and you will be asked to co-facilitate the group with a group of pupils in your school. X is a trainee educational psychologist and a trained teacher. X has Garda Vetting and has completed child protection training.

What is this project about?

This project aims to establish if the DBT Steps-A programme, with recommended modifications, leads to positive outcomes for Irish adolescents, if this programme is enjoyable for them and if this programme is a feasible school based intervention.

What will my students and I have to do?

A transition year class in your school will be split in half. The first half of the group will take part in the Emotional Regulation class from September to October, the other half will continue to attend their SPHE class. The second half of the group will then take part in the Emotional Regulation class from November to December and the first half of the group will attend the SPHE class. The class will last for two class periods and will run for 7 weeks. Your students will be asked to complete a questionnaire based on their emotions and how they cope with them. They will complete this on three occasions; September, October and December. Their parents will also be asked to

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

complete a short questionnaire which provides information on how their child regulates their emotions, this will also be completed in September, October and December. Both questionnaires take approximately 10-15 minutes to complete. . Your students may also be asked to complete a short interview following the programme to give their opinion of taking part in the programme. During the programme your students will take part in discussion activities, games, art activities, group work and pair work.

You will be asked to co-facilitate the group. This means you will be asked to assist with delivering the intervention, this will last for 14 weeks and will take two class periods each week (one lesson time slot). You will be asked to help with the activities and help monitor the students. You may be asked to help if a student becomes distressed by accompanying the student from the lesson to a safe space at which point outlined school protocol can be followed. You will also be asked to complete a short interview to give your opinion of the programme, this will be recorded and following transcription the recording will be deleted.

What are the benefits?

A growing number of children and adolescents are presenting with emotional difficulties such as anxiety or depression. There are currently long waiting lists for public services providing therapeutic support for individuals to develop emotional coping skills. By providing school wide preventative interventions to address these issues we are helping promote positive mental health and well-being in our teenagers. It is important that school wide interventions are trialled with individuals with to get their opinion of programmes suitability to meet their needs and to ensure they are receiving evidence based interventions. Overall the current study aims to establish if a differentiated module of the 'DBT Steps-A' programme is effective in promoting positive outcomes for adolescents in an Irish primary school, and if, in their opinion, this is an enjoyable and effective programme. You may also learn skills in facilitating well-being interventions in the school setting and may continue to run the programme in the future.

What are the risks?

Some teenagers may experience anxiety taking part in the group or may focus more on their anxiety. If your students become upset or is unhappy taking part in the programme they may decide they no longer want to take part. You will be asked to liaise with the

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

researcher if pupils experience any difficulties during the programme. You are also asked to be available to talk to students/parents when the researcher is not present.

What if I do not want to take part?

Participation in this study is voluntary and you can choose not take part or to stop taking part in this study at any time.

What happens the information?

The information is collected and kept private safely and securely on a password encrypted USB stick. Your name, parents or students names will not appear on any collected information. You will be assigned a code. Any hard copy information provided will be stored securely in a locked filing cabinet as will consent forms. In line with Mary Immaculate College retention policy any information gathered will be kept for three years and will then be destroyed. Data will be analysed by the researcher or support staff. The anonymous, analysed data will be used as part of my thesis and may disseminated to a wider audience. Confidentiality may be broken if there is risk of harm to you or another person or in relation to disclosure of information pertaining to a crime.

Who else is taking part?

A group of transition year students and their parents, along with other teachers in your school.

Thank you for taking the time to read this. I would be most grateful if you would consider allowing your child to take part in this study. Please do not hesitate to contact me or my supervisors if you have any further questions

Yours sincerely

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Appendix P: Initial Codes Emerging from Student Interviews

John	Maeve	Jane	Aine	Sasha	Rob	Becky
<ul style="list-style-type: none"> • Enjoyable • Resources • Something new • Helpful • Understanding emotions • Development skills • Use of skills • Use of skills in personal life • Benefit/Helpful • Positive feelings • Interacting with others • Relaxed • Coping with emotions • Benefitting of doing it at school • Positive experience • Benefit for teenagers 	<ul style="list-style-type: none"> • Skill development • Easy to do • Feeling safe • Coping with emotions • Relating to others • Not alone • Practical skills • Helpful • Use of skills • Learning skills • Pedagogical approach • Working with others • Easy to implement • Benefit for teenagers • Understanding emotions • Skills to cope 	<ul style="list-style-type: none"> • Something new • Negative aspect • Skills learned • Coping with emotions • Understanding emotions • Pedagogical approach • Group work • Games • Area for improvement • Use of skills • Altering behaviour • Beneficial • Helpful • Positive effect • Relevance for students 	<ul style="list-style-type: none"> • Pedagogical approach • Resource • Learning from others • Enjoyable • Talking about emotions • Something new • Identifying with others • Unhelpful skills • Coping with emotions • Skills development • Understanding emotions • Linking emotions and behaviour • Area for improvement • Skills use • Helpful and beneficial • Easy and 	<ul style="list-style-type: none"> • Games • Pedagogical approach • Group work • Positive reflection • Useful • Negative aspects (home work) • Skills • Understanding and coping with emotions • Use of skills • Understanding emotions • Coping with emotions • Something new for teenagers • Problem solving -use of skill • Group work • Pedagogical approach • Strategies and 	<ul style="list-style-type: none"> • Understanding emotions • Linking emotions and behaviour • Feeling comfortable in the group • Group approach • Use of skills • Relevance to age group • Group work • Something new 	<ul style="list-style-type: none"> • Games • Pedagogical approach • Enjoyment • Positive experience • Skills use • Difficulty applying skills • Something new • Resources • Relating to others • Coping with emotions • Understanding emotions • Group work • Areas for improvement • Art • Use of skills • Relevance to age group • Linking emotions and behaviour

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

			<p>practical</p> <ul style="list-style-type: none">• Recommended•	<p>resources</p>		<ul style="list-style-type: none">• Benefit of having it in school• Identifying with others
--	--	--	--	------------------	--	--

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Appendix Q: Sample Student Interview

Comparing themes with entire data set

Transcription
Interview One: John

Interviewer: Thank you for agreeing to complete this interview with me. As part of my research I am hoping to find out your experience on the DBT Steps A emotional regulation module which you attended over the past seven weeks. I must remind you that your participation is voluntary. If you do not want to complete this interview or answer any questions you do not have to and you can say stop at any time. If at any time you decide you do not want to take part in this interview you can say so and any collected information will be destroyed. Do you understand? Are you happy to continue?

John: ya

Interviewer: So, the first question is, was there anything you particularly liked about taking part in the programme?

John: Ya I did, I enjoyed the exercises in the booklet we had. Because..mm..i suppose I would never have explored those parts of my mind.. and the things in life, in everyday life, you do automatically and don't really thinking about them...giving time to explore them, sit down take your time and go through them, found was pretty helpful. because apart from the programme I wouldn't have done it all. And the mindfulness I thought that was pretty helpful as well.

→ becht's strategy + resources
→ relaxation - something new.
→ becht's - positive reflection.
→ becht's strategy + resources

Interviewer: Ok, so you enjoyed maybe the focus on emotion?

John: Ya

Interviewer: And was there anything that you didn't like about the programme?

John: No, everything was pretty good. as I said, it helped me look at things I would not necessarily have looked at before

→ positive reflection.
→ something new.

Interviewer: What kind of things?

John: Like them emotion chart you had to see what would make you act a certain way. can't remember its exact details, it was like a mind map, that was pretty helpful I would never really have thought about it how it could make be a certain way, or anything like that. And now looking back on it whenever stuff like that happens in the morning or what ever if your moody or anything like that you kind of know why, it gives you a better understanding

→ strategies + resources
→ something new
→ change in understanding + coping with emotions

Interviewer: Ok, do you feel you learned anything, any skills from taking part in the programme?

John: Ya I learned how to do mindfulness, like meditation and how to get a better understanding of my own emotions. That's pretty much it

→ change in understanding + coping with emotions
→ skills development
→ emotion

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

Appendix R: Student Interviews, Themes, Subthemes and Quotes

Theme	Subtheme	Quotes
Student Perceptions- Benefits of the Intervention	Positive Reflections: This subtheme refers to positive comments or reflections made by participants in relation to the intervention in terms of enjoyment and practicality.	<p>I found was pretty helpful (John)</p> <p>I think everything went pretty well (John)</p> <p>Overall, I thought it was pretty helpful (John)</p> <p>enjoyed it, everything, overall it was a good (John)</p> <p>It was nice having different things you could do like small steps instead of having a big this is what to do with your emotions, small easy steps, simple ways you can do every day to deal with your emotions. (Maeve)</p> <p>was it realistic, and then doing positive steps for yourself (Maeve)</p> <p>Ya they're practical you could actually apply them (Maeve)</p> <p>I found everything to be helpful in some way. No, I didn't dislike anything (Maeve)</p> <p>Ya, you can just do it, you can easily do it, it's not like oh I've to do this you can do it once you have learned how to do it it's easy to implement in your own life(Maeve)</p> <p>I think it was pretty beneficial (Jane)</p> <p>The open speaking aspect too, that we weren't all just sitting there watching a slide show, we all got to speak if we didn't want to speak we didn't have to, i really enjoyed that part (Aine)</p> <p>I think it snice that we got to sit down and speak about what we are feeling and why we feel that way (Aine)</p> <p>I think overall it was quite enjoyable (Aine)</p> <p>I did enjoy it (Aine)</p> <p>The skills they gave were helpful and can be brought into someone's daily or weekly lives</p> <p>I think I generally liked it, I thought it was a good programme and thought it was useful (Sasha)</p> <p>There was nothing that made me feel u uncomfortable or anything (Rob)</p> <p>I don't think so it was all well done (Rob)</p> <p>No I really enjoyed it (Becky)</p> <p>I thought the programme was really good (Becky)</p>
	Resources and Strategies- This subtheme relates to participant references to particular strategies or resources they found enjoyable or beneficial.	<p>Ya I did, I enjoyed the exercises in the booklet we had (John)</p> <p>And the mindfulness I thought that was pretty helpful as well. (John)</p> <p>The emotions chart to see how you could act a certain way that was pretty helpful (John)</p> <p>Like them emotion chart you had to see what would make you act a certain way, I can't remember its exact details, it was like a mind map, that was pretty(John)</p> <p>the booklet was pretty helpful(John)</p> <p>the different sections, or steps we had(Maeve)</p> <p>we had the art and posters (Maeve)</p>

**WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS**

		<p>Even the ones being in the moment, the mindfulness games (Jane) Ammm I quite liked when we learned all about the different body parts that show emotions on the diagram (Aine) Or the emotions thermometer i thought that it's interesting and i did learn from it (Aine) Ya.m..I liked em the way every now and then we did the simple games (Sasha) The colouring and the pages, its fun, gets the message across and the book was good getting to keep it after and remind you of it (Sasha) Something i particularly liked was when you did the games with us (Becky) Like when we did the number thing, when you're not allowed say the same one...the game, I enjoyed that (Becky) There was nothing I disliked, I really enjoyed it, it's a good experience (Becky) Like the meter (Becky) I liked the game, the art and craft (Becky)</p>
	<p>Learning with Peers- This subtheme relates to benefits identified by participants regarding the small group format of the intervention and the benefits of working with others.</p>	<p>and got people interacting (John) Ya they were probably my favourite parts, interacting with others (John) it was a warm environment to talk about your feelings. Cos its not an easy thing to talk about sometimes It was nice. Everybody was there and you found that they felt the same thing that you thought oh they aren't worrying about it at all but they are but they mightn't show it. And it wasn't like oh if I say that now it will come out outside the classroom. And we were working in a small group so it was with people you trusted. It was not a harsh this is what you've to do. It was kind of whatever works for you (Maeve) Ya I did it was safe (Maeve) I suppose doing it with other people, was kind of good, you could see that other people feel the same emotions as you and they go through the same things as you and you kind of learn a lot from the way they handle their emotions, and they can learn from you, just kind of suppose that bonding (Jane) More beneficial than having a one to one class on your own (Jane) I learned stud from other groups as well, how other people show their emotions differently (Aine) And identify with other people too (Aine) Group work, definitely (Sasha) I liked the group work (Sasha) I mean activities with friends see what they're interested in, what their goals are, a better understanding of what they're like' (Rob) I think with other people you're more comfortable because they're talking about the same thing, you're not feeling alone or anything (Rob)</p>

**WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS**

		<p>I thought it was really good as it shows you everyone gets angry like some people think I'm the only one who gets angry cause you see your friends and they're always happy do you know whatever but it shows that everyone can be in the same situation as you they can get angry, they can get sad' (Becky)</p> <p>I enjoyed working in a group, it shows you what makes some people upset or happy about compared to you and people like different things that make them happy and so it shows you how people are different (Becky)</p>
<p>Relevance of the Intervention</p>	<p>Relevance to teenagers as a school based intervention- This subtheme relates to the relevance of the intervention for teenagers in the school setting.</p>	<p>There's a problem, with kids, well maybe not a problem, but people don't kind of look into things that deeply in terms of their emotions and looking into their emotions in terms of understanding their emotions so I think this would help with that if they wanted to do it(John)</p> <p>we did it in school so that was an more of an incentive to do the programme as staring out it didn't take time. If it was that was outside of school id probably be less likely to do it. But because it didn't take time outside of school (John)</p> <p>cos yano third year, fifth and sixth year and even first and second, you've a lot of study and its kind of new and when you've a time like that and your very stressed you can start to worry about everything and things seem bigger and worse so its good to think, and be able to say check the facts, am I just tired (Maeve)</p> <p>Ya it does relieve stress, we don't have a stressful year, but even for exam students, it's helpful it's very stressful doing exams and you don't have a chance to reflect on yourself and how you're feeling (Jane)</p> <p>I would, I mean i was talking to my friends at lunch time , who weren;t doing it and they said it was something they'd like to do aswell; (Aine)</p> <p>Ya i think so, I think as teenagers we are slow to talk about our emotions anyway mm as i said we might talk about in general how we are feeling, so we might say oh i'm upset today cause so and so did this, but i don't think it's ever talked about in depth. When did you start, how could you fix it, is it ok you feel like this kind of thing? (Aine)</p> <p>I think as teenagers we don't sit down at lunch time and talk about emotions, we might talk about what's causing them but not really what they are or how to solve them or anything so I think that it's nice we got to sit down and actually speak about how we are feeling and explore why we feel that way' (Aine)</p> <p>I think not a lot of teenagers know how to deal with their emotions so I'd definitely recommend it for them, it's useful for them to have that skill (Rob)</p> <p>I might not necessarily try something like this if it was out of school but because it was in school I had to do it and I actually enjoyed it so I think</p>

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

		it's good because some people might not want to do it but might actually enjoy it (Becky)
	Something new- This subtheme relates to the indications made by participants that exploring emotions was something new to them that they had not done before.	<p>I said, it helped me look at things I would not necessarily have looked at before (John)</p> <p>I suppose I would never have explored those parts of my mind.. and the things in life, in everyday life, you do automatically and don't really thinking about them...giving time to explore them, sit down take your time and go through them (John)</p> <p>I would never really have thought about it how it could make be a certain way, or anything like (John)</p> <p>'I wouldn't normally have done that' (Jane)</p> <p>Ya cause we don't do it (Jane)</p> <p>I think like as teenagers we don't sit down at lunch time and talk about emotions we might talk about what's cusing them, but not really what they are or how to solve them'(Aine)</p> <p>It was a nice break from normal classes and was quite different to anything we had done before (Aine)</p> <p>Its not something we talk about (Aine)</p> <p>You don't do that much of emotion, we do a bit but don't do much in school (Aine)</p> <p>Ya I probably wouldn't have done it if we hadn't spoken about it and I hadn't of written it down, I wouldn't have done it (Aine)</p> <p>Not really, no we wouldn't (Rob)</p> <p>Something different to do in the morning (Becky)</p> <p>Ya I think it would be good for other students to take part in it cause like do you know I think everyone needs to try something different' (Becky)</p>
	Recommended to others- This subtheme relates to participants recommendations of the interventions to others	<p>Ya, ya I would I think especially our age (John)</p> <p>Ya I would, to ya definitely secondary school (Maeve)</p> <p>I think people should take part, it does help (Jane)</p> <p>I think people should have that opportunity (Jane)</p> <p>I would recommend it to other people and I know other people and I know other people have an interest in doing it (Aine)</p> <p>Ya id definitely recommend it to other students (Rob)</p>
Effect on Emotional Regulation	Skills Development- This subtheme was related to participants mentioning particular skills from the intervention that they found useful.	<p>Ya ive used the mindfulness for sports (John)</p> <p>I have this class on youtube and they say things to you for like pre-competition for sports and stuff. The night before or day before like just to relax (John)</p> <p>Ya I learned how to do mindfulness, (John)</p> <p>probably the mindfulness, I actually use that now outside of this, every couple of weeks, I find that helpful to wind down myself, get away from (John)</p> <p>Especially check the facts sometimes I tend to over think things it was nice that I wasn't alone . That someone can kind of tell you this is what</p>

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

		<p>you could do. Its not just you irrationally thinking there is something you can do to stop that. (Maeve)</p> <p>that was a skill I kind of learned, to pep talk myself, before id go off and worry, you know the steps, is it rational, what is the worst, basically check the facts like what I'm thinking is it going to happen is the worst thing going to happen (Maeve)</p> <p>like sometimes if like i experience an emotion, like anger, I'd go through the steps we did in class, like why am I feeling angry and it would calm me down. (Jane)</p> <p>Em ya i did a few times, we had a few important soccer matches, and you;'d be nervous and you would have good reason o be, but then you'd think realistically am i going to play terribly, kind of go through the steps we did' (Jane)</p> <p>mmm...when we had to write about an emotion we felt during the week, i thought after doing it two or three times, i found myself doing it anyway... and I'd have brought it into routine (Aine)</p> <p>Ya and checking how i felt previously, and also when we had to write a goal we had and i said i wanted to spend more time with family and i did end up doing that and i thought that was helpful too (Aine)</p> <p>I liked the check the facts part (Sasha)</p> <p>I'm doing the BT young scientist and I have to break it down, do a little bit every day, yano like that (Sasha)</p> <p>If i was looking to go with friends but had stuff to do and wasn't able to go, I'd try to figure out a way to go (Rob)</p> <p>I was like ya i get angry at those things I realised its not that big of a deal, i learned skills like that (Becky)</p> <p>Ya i used it a lot on work experience, like sometimes you might meet people on work experience that you like mightn't think I'd get on with that person very well. So you have to be thinking, its ok I don't have to get on with everyone (Becky)</p> <p>Ya kind of you might think that person doesn't like me but you're over thinking it, I learned not to constantly be over thinking things about maybe what is that person thinking about me' (Becky)</p>
	<p>Changes in understanding and coping with emotions- This subtheme relates to how participants changes ways they understood and regulated their emotions as a result of the intervention.</p>	<p>I box, and before fights sometimes people go in and their very nervous. And so I find, I was aswell when I first started, but now using this it gets me very relaxed, I think about what I need to do in the ring and it's not any nervous problems, and this mindfulness gets all the other things what if away, mindfulness I've used that outside and its very helpful (John)</p> <p>if your moody, it gives you a better understanding (John)</p> <p>I like to listen to that it relaxes me and , it lets me think about my emotions before this and then I go in without any problems , yano, and I find that pretty helpful (John)</p> <p>How to get a better understanding of my own emotions. (John)</p>

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

		<p>Probably to kind of when I go off worrying to bring myself in and think what is the worst that is going to happen (Maeve)</p> <p>if yano that it wasn't just me worrying, there are other people that worry and they've found a way to help you cope if you're feeling really bad about something and there's no need for it. That would be the most valuable. For me anyway there were obviously there has been other people because there is a thing you can implement to help with that (Maeve)</p> <p>explain your emotions, like especially when your studying like feel like crying or screaming at someone it's good to know it's not just, there is something you can do and that you know you're not alone stressed or sad(Maeve)</p> <p>It did give me a chance to kind of reflect on my emotions and understand how I'm feeling' (Jane)</p> <p>Draw meaning on what my emotions were (Jane)</p> <p>...evaluating my emotions (Jane)</p> <p>-it helped, you're not as nervous, i mean you're still nervous but you understand why you're nervous and you're not overly nervous' (Jane)</p> <p>'kind of assessing the situation and acting accordingly (Jane)</p> <p>Thinking through emotions, why I'm feeling this way and then appraising the situation..sometimes you feel a way and you don't understand how you're feeling and that can be confusing and this helps you evaluate this is what I'm feeling and this is why' (Jane)</p> <p>I think i learned how to deal with the aftermath of the emotions, and maybe how to process them and think about them in a good and health way (Aine)</p> <p>But i think most of it was how to deal with emotions afterwards, process them, think positively bout them afterwards, instead of ughh why did you feel that way, to maybe think it's okay to feel that way but reflect on what you did, did you over react, if you did why do you think you did Like when you're feeling really sad like finding out why and then you can change it if you can or you can do something about it (Sasha)</p> <p>After work experience I would have been nervous before going in and you kind of think no it's going to be fine, they are going to be nice, my mom knows them, she says they are nice, yano you reassure yourself with what you know already' (Sasha)</p> <p>Also if you're worried it's good to be able to tell yourself its more than likely not going to happen (Sasha)</p> <p>It's good to have a course to help you manage them (Sasha)</p> <p>I got to learn about the consequences of emotions and your actions, depending on how you're feeling and why you should maybe avoid doing certain things if you're angry or sad (Rob)</p> <p>Ya just how to deal with my emotions more and what not to do if you're feeling angry or sad or whatever (Rob)</p>
--	--	--

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

		<p>Ya like that you can get so angry at the littlest thing and then you might think it's not that big of a deal i won't get too angry about it. I kind of learned that because i get angry at a lot of things and i kind of learned that if you don't get too angry, if you think for a second about the situation, like if it's not too big don't get too angry about it that kind of way(Becky)</p> <p>We are the same, emotions are emotions and we have to deal with them (Becky)</p> <p>It's ok to be sad, happy, angry everyone is like that but at the same time you have to learn t deal with your emotions (Becky)</p> <p>'Sometimes you have to deal with those people when you don't like them...you end up getting along better instead of kicking up a fuss,,' (Becky)</p> <p>the programme helps people to understand emotions...you're going to get them all the time and the programme helps find solutions...like how to deal with anger instead of taking it out on other people (Becky)</p>
Changes and Differences	<p>Personal Preferences – This subtheme relates to particular aspects of the intervention identifies as less useful by particular participants.</p>	<p>Sometimes if we had to go home with the homework, i mean, and kind a , you'd have to come up with stuff on the spot...cause if you forgot to do it one day they you'd have to catch up on the last day and you'd already moved on to the next day (Jane)</p> <p>I didn't dislike anything but i don't think the check the facts while in the middle of a bad emotion i don't think id have the presence to check the facts there..(Aine)</p> <p>I think even if a skill didn't work for me it could work for someone else so I don't think it would be valuable to take it out. And that's I'm sure why we are doing so many interviews, different things work for different people (Aine)</p> <p>Mmm well obviously I didn't like the homework, it was fine, but yoi still had to do it, I know a bit of homework is good..finding the time to do it (Sasha)</p> <p>If w were given more problem solving, like the earlier example (Rob)</p> <p>To think like i was in a situation like that maybe i can do this next time is hard when you're actually in the situation, to stop and i think it's hard when you're in the situation (Becky)</p> <p>Ya like if you're angry you're not going to stop and think what can I do now, that was something i thought, i don't know if i could do that, but maybe i should start that kind of think, but i really enjoyed it all (Becky)</p>
	<p>Areas for Improvement-This subtheme relates to areas of the intervention which could be improved,</p>	<p>Ya there was nothing really needed to be changes it was all ok (Maeve)</p> <p>Sometimes if you go home with homework, I mean, you'd have to come up with stuff on the spot and you'd have other stuff to do, so maybe having a time allotted to do the homework (Jane)</p> <p>'Cause if you forgot to do it one day you'd have to catch up on the last day, and you're already moved to the next day, that kind of thing' (Jane)</p>

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

	<p>identified by the participants.</p>	<p>I suppose you probably noticed yourself when we were most interactive was when we were playing games, so if there was a way to incorporate more games or a range of different games (Jane)</p> <p>Ya there was nothing really needed to be changed it all was ok (Maeve)</p> <p>emm no I don't think so everything was pretty good...(John)</p> <p>I think maybe it could be slightly more updated and maybe bring in social media and mobile phones...i know we did talk about it but i don't think it was part of the course and just came up in conversation and we id speak about it but i think maybe it would be interesting to go more in depth with it (Aine)</p> <p>I liked it all (Sasha)</p>
--	--	--

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

Appendix S: Ethical Approval Form



Decision of the DECPsy Research Ethics Committee

1 Applicant	
Name:	Charlotte Carey
Programme:	Doctorate in Educational and Child Psychology
Year:	2
Ethical Considerations Relating to this Project	
Additional Considerations:	
Re-phrase research question 2 – Not scientific to refer to ‘thoughts and opinions’ in a research question.	
Is it ?.....	
How do students and teachers perceive the experience of taking part in a differentiated Emotional Regulation Module of DBT-Steps A?	

3 Decision and Conditions on Award of DECPsy REC Ethical Clearance	
	<i>Tick as</i>
<i>appropriate</i>	
I. Application approved	<input type="checkbox"/>
II. Application approved subject to minor clarifications or changes without the need for formal re-submission	<input checked="" type="checkbox"/>
III. Application referred back for revision in specified areas and resubmission within two weeks to the Chair of the DECPsy Research Ethics Committee	<input type="checkbox"/>
IV. Application not approved	<input type="checkbox"/>
V. Application referred to MIREC for resolution	<input type="checkbox"/>

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Appendix T: Sample Lesson Plan

Session 1

- The total outlined time is 55 minutes. However as this is the group's first time meeting the homework activity to be reviewed will be left out. Instead the group will spend time coming up with group ground rules and receiving input on what mindfulness is. Research suggest that social or emotional learning curriculum should take place in a warm, positive and prosocial environment , setting the ground rules at the beginning should encourage the students to take ownership of the programme and ensure it is a positive experience for participants (Jones, 2017; Yoder, 2014). Overall the session will last 55 minutes to ensure sufficient time is available to cover the material (Jones, 2017). The class teacher will provide support to students during the intervention and assist the facilitator throughout, however, the teacher will not deliver the intervention.
- This Mindfulness activity will take place as stipulated by the programme. The mindfulness game will be displayed on the board in the form of a ppt. The game is quite wordy and could be challenging for some adolescents to follow. The use of visuals can help reduce cognitive load and aid learning, it is also a beneficial strategy for supporting students with special educational needs in their understanding and ability to follow a task (Mayer & Moreno, 1998; Quill, 1995; Shabiralyani, Hasan, Hamad, & Iqbal, 2015; Swanson et al., 1991; Van Merriënboer & Sweller, 2010). Following on from the activity students will in pairs and then as a group discuss their experience of the mindfulness programme (12 minutes)
- The main ideas of the session will be introduced. As the students have not taken part in the distress tolerance module reference to this will be excluded. The researcher will read the overview to the students. The metaphor of a wave will be used to describe emotions and a visual for this will be displayed on the board. This section will be differentiated as instead of the researcher describing the metaphor, the visual of the wave will be used to stimulate discussion on how students think emotions could be described like a wave, the use of questioning

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

will promote student thinking and problem solving and incorporate a more active student centred approach (Prince, 2004; Van Zee & Minstrell, 1997)

- The students will look at handout 15.1. And the researcher will read out the overview of the skills they will learn for the module.
- The students will watch the identified YouTube video. This YouTube video is certified General and so is suitable for this audience. This video displays certain emotions we experience, what stimulates us to display these emotions and the behaviour of the girl as a result of these emotions. This short video was chosen with support of my supervisor as an aid to stimulate discussion and to encourage the students to think of emotions people experience, why they do so and how they express them. (<https://www.youtube.com/watch?v=pHKQHkoWNyU>). The use of video in relation to education, has been found to reinforce material, aid in the development of knowledge acquisition, enhanced comprehension and discussion, provides accommodation for different student learning styles and increases student motivation and enthusiasm (Brualdi, 1996; Cruse, 2006; Saltrick, Honey, & Pasnick, 2004). Furthermore, evidence suggests that as opposed to what they hear, individuals generally remember 50% of what they hear and see (Cruse, 2006). As part of evidence based social and emotional learning programmes, videos have commonly been used to aid learning and are also often used to prompt discussion around emotions (Bouffard, 2009)
- The students will then look at this list of the four emotions, which will be displayed on the board. In pairs they will identify and discuss the purpose of the emotions and then this will be discussed as a whole class group. The use of pair work and group discussion has been used as an effective strategy in many evidence based social and emotional learning programmes (Bouffard, 2009; Yoder, 2014). The TEP and teacher will provide support to groups and assess understanding.
- The researcher will then read the rest of the section on the goals of the programme on page 190.
- The students in pairs will receive a sticky notes and be encouraged to come up with as many emotions as they can. This will be stuck on the board before

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

reviewing handout 15.2. Doing this before the feelings are revealed encourages problem solving, it is important for active student centred learning and also an essential strategy of evidence based social emotional learning programmes (Bouffard, 2009; Prince, 2004; Service., 2012; Yoder, 2014) This adapted activity incorporates both pair work and active learning. The use of pair work and active learning promote student engagement and learning and are strategies used in many evidence based emotional learning programmes (Yoder, 2014).

- Handout 15.2 will be reviewed with the students and as a whole class we will discuss any emotions absent from the list that we have identified or any emotions we did not identify. Discussion is a commonly used methodological approach in many evidence based to social and emotional learning curriculums and an example of best practice experiential, active learning (Bouffard, 2009; Welty, 1989)
- Next we will explore how emotions can be useful. First the researcher will read pg 191. Students in the class will be encouraged to share how emotions have been helpful for them. This will be supported with visuals and include situations relevant to the students (Fear of coming to school without having your hair done/ fear of not wearing your seatbelt in the car). This is in line with best practice guidelines for social and emotional learning by linking the learning to the students own context and the use of visuals to stimulate discussion (Bouffard, 2009; Yoder, 2014)
- Students will read Handout 15.3 and this will be read by the researcher on how our emotions can help us communicate with others. We will through whole class discussion, explore why it is important to show emotions on our faces/non-verbally. Students will share their experiences in pairs and then to the whole class. Questioning will also be incorporated into this section. Pair work, whole class discussion and questioning are all strategies common to evidence based emotional learning curriculum strategies and promote active student centred learning necessary to promote student thinking and learning (Brookhart, 2010)
- Students will play the emotions charades game in pairs and then as a whole class activity. Students will be encouraged to display emotions appropriately in order

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

for their partner to figure out the emotion they are feeling. This is a practical activity which complies with learner centred and active learning approaches, and also makes use of games which is another methodology commonly used in many evidence based social and emotional learning programmes (Bouffard, 2009; Freeman et al., 2014; Jones, 2017; Slavin, 2011)

- Students will look at the Yerkes-Dodson emotional curve and identify where they think the best place to be is. Students will each receive a curve. They will be encouraged to identify where they would be on the curve in relation to different situations and emotions. This is an example of a learner centred approach and best practice of linking emotional learning to the wider context and also encouraging students to see that we all feel different emotions in relation to different situations. Learner centred approaches along with social learning experiences have been found to lead to better student attitudes to learning and improvement in student thinking and learning and active learning strategies are a core component of any social and emotional learning programme (Freeman et al., 2014; Jones, 2017; Prince, 2004; Slavin, 2011)
- The Homework activity will be outlined for the students as per p

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Appendix U: Sample Teacher Interview

Comparing themes with entire data set

... Steps A Emotional Regulation module which you co-facilitated with me in your school. I must remind you that your participation is voluntary. If you do not want to complete this interview or answer any questions you do not have to and you can say stop at any time. If at any time you decide you do not want to take part in this interview you can say so and any collected information will be destroyed. Do you understand? Are you happy to proceed with the interview?

Teacher: Ya, perfect

Interviewer: X, thank you for agreeing to take part in this interview, the first question I want to ask you is what overall was your view of the DBT Steps A intervention?

Teacher: ya, I thought it was good, it was appropriate for their age, it gave them a lot of information and a chance to discuss and look at their emotions, it was practical, I think they have all learned something from it, it was well done and overall I thought it was an appropriate and positive programme, and the feedback I had gotten from the students was similar

Interviewer: And do you feel that your students learned any skills as a result of the programme?

Teacher: Am yes they did, in so far as I think they could self-evaluate. I mean a couple of them did say to me, o my god, I wish we had done this in third year. And look sure I suppose if they had done this in third year they would be saying they wished they had done it in second year so, it would have helped them, it helped them to reflect I suppose on how they're feeling, and particularly in a year where they're not, under pressure so, em, I think they probably might need a refresher course em, again to remind them of the skills, maybe when they go back into fifth year, but definitely yes, they have learned certain skills, particularly just in relation to their own emotions and examining them and understanding them and maybe coping with them

Interviewer: Okay, em did you find the information provided, what did you think of the information provided to the students and did you find the information provided to teachers and students informative?

Teacher: am... yes I thought the information was quite good. I suppose there is some overlap between this and the friends for life programme and aware come in and do coping triangles with them. But I suppose the information was quite good from this programme. And the different strategies and activities they did, they seemed to enjoy it. I would in future definitely sit down and look further more in depth at the programme. I suppose you had provided the resources if it was me doing it I don't know I would be great to just get the resources and I think people would be more willing to do it if they just got the resources and

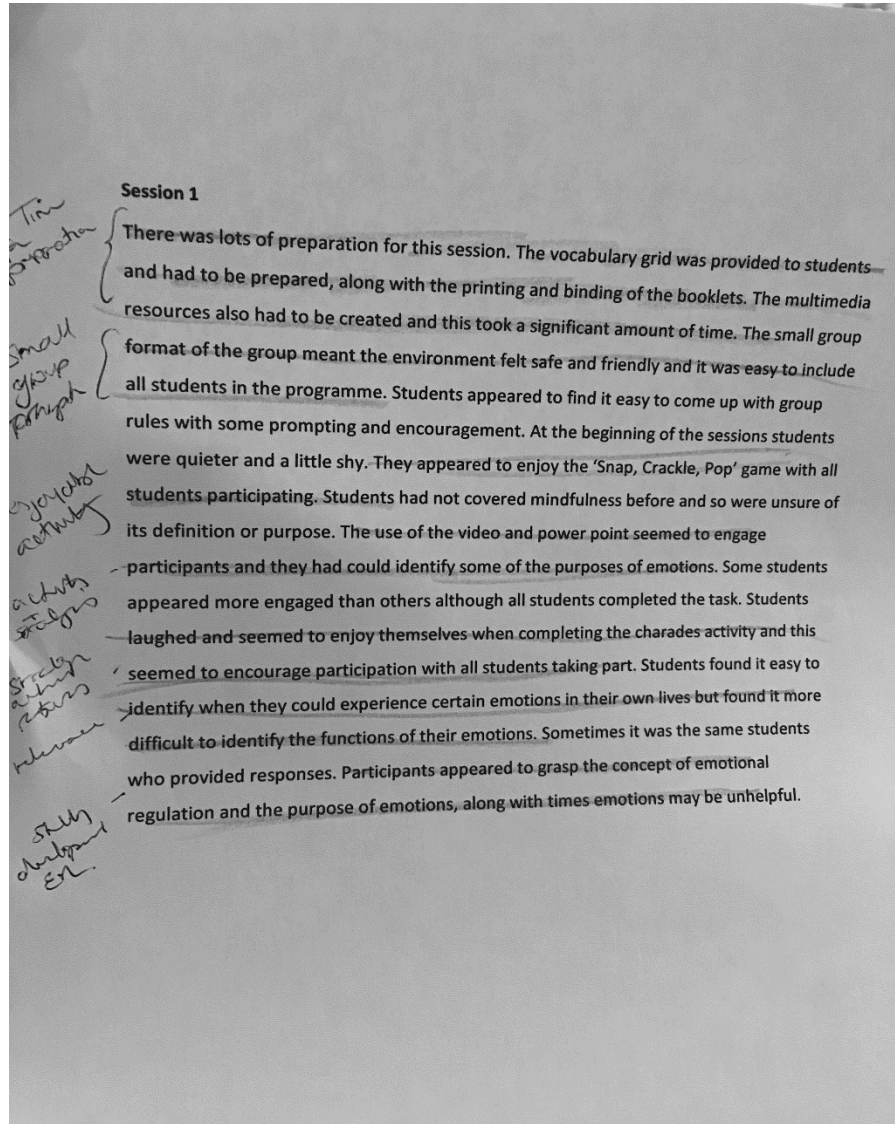
Handwritten notes:

- Effect - emotional regulation
- Benefit → Relevance
- Benefit relevance
- Student feedback
- Effect - emotional regulation
- Relevance
- Benefit - strategies + resources
- feasibility - increasing feasibility
- feasibility

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Appendix V: Sample Extract from Field Note Diary and Observations

Comparing themes with entire data set



WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

**Appendix W: Initial Codes Emerging from Teacher Interview and Research
Reflections and Observations**

Teacher Interview	Research Diary and Observations
<ul style="list-style-type: none"> -Appropriateness and positive -Information on emotions -Positive-Practical -Learning -Relevant for age group -Learned to self-evaluate -Feedback of appropriateness and relevance from students -Learned to reflect on feelings -Refresher course in future -Learned certain skills-emotions -Information -Overlap with other programmes -Strategies and activities -Time to provide resources -Appropriateness and relevance -Learning-skill development -Positive structure -Small group-participation -Small group-included, share, learn from each other -Feasibility of small group in normal class -Improvement: Information for parents -Small group-seeing how others cope with emotions -Time -Class length -Class size for small group -Team Teaching -Feasibility-could do bits - Delivery-relaxed -Positive feedback from students -Would implement again -Practical -Benefitted students 	<ul style="list-style-type: none"> -Preparation time -Group participation -Activities and strategies -Use of multimedia -Use of multimedia -Activities and strategies -Preparation time -Strategy art and craft -Group work -Group work 1:1 support -Relevant, relatable -Learning and skills -Use of skills -Use of multimedia -Group support -Learning skills-mindfulness -Student participation -Understanding of concepts -Group participation -Problem based learning -Activities and strategies-games/active learning -Activities and strategy-think pair share -Activities and strategies -Relevant -Group support -Learning and skills -Understanding of concepts -Strategy-problem based learning -Use of skills -Use of skills -Strategies and activities-active/ppt -Relevance -Group support -Skills learned following programme

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

**Appendix X: Themes, Subthemes and Quotes from Co-facilitator Interview and
Research Diary Field Notes and Observations**

Benefits of the Intervention	Relevance of the Intervention- This subtheme relates to the perceived relevance and appropriateness of the intervention for the age group	<p>ya, I thought it was good, it was appropriate for their age (Co-facilitator)</p> <p>I suppose there is some overlap between this and other programmes...but I suppose the information was quite good for this programme...(Co-facilitator)</p> <p>the information was relevant and appropriate for their age group (Co-facilitator)</p> <p>The participants were able to identify times and situations in their own lives where they have felt like this (Research diary and observations)</p> <p>Participants identified when they could use this skill (Researcher diary and observations)</p>
	Group Effects – This subtheme relates to the group format of the intervention	<p>I suppose there was only twelve to thirteen students in each group so there was the possibility to get around and support everyone...with the small number I think they all felt included and able to share and learn from one another (Co-facilitator)</p> <p>Students appeared engaged during group work to establish when their emotions were not facts and laughed during this activity and so seemed to enjoy it and again when completing the charades activity (Researcher diary and observation)</p> <p>The small group format allowed me to get around to the students and support them with the model of emotions, which some students found more difficult (Researcher diary and observation)</p>
	Strategies, resources and information- This subtheme relates to beneficial strategies, resources or information used	<p>different strategies and activities they did, they seemed to enjoy it (Co-facilitator)</p> <p>...and there were so many different activities, I think it really encouraged everyone to take part. (Co-facilitator)</p> <p>The PowerPoint was quite useful to show participants and as a sample for them to use when</p>

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

	during the intervention	<p>completing their own (Research diary and observation)</p> <p>Participants appeared to enjoy the opposite action game and most of the active learning components. I thought the delivery was good, the kids felt relaxed and they participated (Research diary and observation)</p> <p>Questioning was an appropriate strategy used as participants identified physical effects on well-being (Researcher diary and observation)</p> <p>Think pair share as strategy appeared to encourage student engagement (Researcher diary and observation)</p>
Effects of the Intervention	Effect on Student Emotional Regulation- This subtheme relates to the effect of the intervention on participant learning or skills regarding emotions	<p>it gave them a lot of information and a chance to look at their emotions, it was practical (Co-facilitator)</p> <p>I think they have all learned something from it</p> <p>Yes they did, in so far as I think they learned to self-evaluate...it helped them to reflect on how they are feeling...definitely yes they have learned certain skills, particularly just in relation to their own emotions, understanding them and examining them and maybe coping with them (Co-facilitator)</p> <p>They were able to identify the model of emotions and so seemed to have taken in the information and could use it to identify different strategies they would use at each part of the model, applying the relevant skills e.g. checking the facts etc. (Researcher Diary and observations)</p> <p>Students could identify how lack of sleep hunger or illness could affect their ability to regulate their emotions (Researcher diary and observations)</p>
	Student Feedback- this subtheme relates to feedback provided by the students to the facilitators or	<p>Overall I thought it was an appropriate and positive programme and the feedback I had gotten from the students was similar (Co-facilitator_</p> <p>I mean a couple of them did say to me, o my god, I wish we had done this in third year (Co-facilitator)</p>

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

	during the intervention sessions	On reflection on goals from last week one student commented on how useful it was and how she had set her goal and done it, which she would not have done without the group and how it had worked well for her. Other students reported taking further steps towards their goal. (Researcher diary and observations)
Perceived Barriers to Implementation	Group- this subtheme relates to difficulty with delivering interventions to small groups in the school setting.	...I'm not sure how that would work with a class of thirty (Co-facilitator) with a whole class I don't know would it be as effective with a whole class as opposed to the small class grouping...I think you'd probably need to team teach with a group of thirty to give the time to the concepts. I don't know how if you were doing it with a class of thirty on your own (Co-facilitator)
	Time- This subtheme relates to time as a barrier to implementation in terms of facilitation and planning.	We are so lucky to have 50-55 minute classes so that worked well for facilitation (Co-facilitator) Oh well barriers would be the time constraints, em like there was a lot of resources and organisation on your part and it would take time to maybe do that (Co-facilitator) Lots of preparation time in terms of the vocabulary grid for students, which could be included as part of the book. The pages associated with the programme have been bound together to create a booklet for students which also took considerable time weekly (Researcher diary and observation)
Feasibility	Overall Feasibility- this subtheme relates to the current feasibility of the intervention.	maybe to have some information to parents on what the students are doing and how this could maybe be encouraged at home (Co-facilitator) ...like any programme you could take chunks out of it to do within a class, and em, I could see me using it again, I would like to try it with another group myself and have maybe that other group come in and support, maybe some peer learning (Co-facilitator) I could definitely see myself doing it again with other groups (Co-facilitator)

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION
FOR ADOLESCENTS

		<p>The intervention has lots of good concepts and modifications increased its feasibility as they aided with student participation and enjoyment, however I that required a lot of planning and would likely be unfeasible for a teacher or professional to do (Researcher diary and observation)</p>
	<p>Increasing Feasibility- this subtheme relates to ways to increase the feasibility of running the intervention in schools</p>	<p>I would definitely sit down and look further, more in depth at the programme and I suppose you had provided the resources so if it was me doing the resources I don't know, it would be great to just get the resources and I think people would be more willing to do it if they just got the programme and resources and like here you go, and it doesn't take so much to do it (Co-facilitator)</p> <p>Were booklets available bound and had resources come with the programme this would significantly reduce time in preparing for the intervention group (Researcher diary and observation)</p>

Appendix Y: Sample Article

What works: exploring the impact of a modified, universal, emotional regulation module for transition year students in an Irish Post-Primary School

Charlotte Anne Carey

Abstract

Aims: The aim of this research was to explore the impact of a modified, emotional regulation module for a universal group of adolescents (Mean Age=15.49), in an Irish post-primary school. The study sought to examine ‘what works’ for cognitive and dialectical behavioural, therapeutic interventions in this setting. The emotional regulation module of the DBT Steps-A programme was modified based on previous research on the programme and existing educational and developmental literature. The modifications included delivery by a Trainee Educational Psychologist, increased time, multimedia support and active and co-operative learning approaches. The research sought to answer two broad questions:

- 1) What is the effect of a modified emotional regulation module on reports of student emotional regulation?
- 2) How do students and facilitators perceive the experience of taking part in the intervention?

Method: This study was underpinned by pragmatic theory and adopted a mixed methods approach with the collection of both qualitative and quantitative data. The intervention was delivered by a Trainee Educational Psychologist to an intervention ($n=12$) and delayed intervention group ($n=11$). Quantitative data was collected using the Difficulties with Emotional Regulation Scale-Short Form from students and parents at three time points (Baseline, Time 1 and Time 2). Qualitative data was collected through field notes and semi-structured interviews with a sub-sample of participants ($n=7$) and the co-facilitating teacher.

Results: Quantitative data suggested a significant within-group reduction in self-reported difficulties with emotional regulation for the intervention group, however, between groups outcomes were non-significant. Parent reports showed a significant decline in difficulties with emotional regulation, although return of questionnaires was low. Qualitative findings identified several positive aspects of the intervention, including practical resources, a small group format and active and co-operative learning approaches. Areas for improvement and barriers to implementation were also identified. Furthermore, the relevance of the intervention to this age group was outlined.

Conclusions: Outcomes from the quantitative measure suggested both the emotional regulation intervention group and regular school provision group displayed a reduction in self-reported difficulties with emotional regulation. Improvements were greater for the intervention group, although overall differences between the groups were statistically non-significant. Qualitative data suggests that preventative, universal interventions, with a dialectical behavioural approach can be beneficial. This research provides further information regarding the development, feasibility and implementation of universal, school-based, therapeutic interventions by Educational Psychologists in the post-primary school setting. It appears that the use of active and co-operative learning approaches can enhance participant experience and engagement with the programme, leading to increased understanding of emotions and ability to regulate emotions. The relevance of such interventions to this age group is certain and generalisation of skills to other environments is evident. Such intervention could be run in schools, with positive effects, but may need some element of adaptation and increased system wide support.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Introduction

Emotional regulation refers to ‘process by which we influence the emotions we have, when we have them and how we experience and express these emotions’ (Lewis et al., 2010, p. 500). Emotional regulation can include ‘any coping strategy (problematic or adaptive) that the individual uses when confronted with an unwanted intensity of emotion’ (Leahy et al., 2011, p. 3). More positive, adaptive emotional regulation strategies include cognitive reappraisal, problem solving, assertiveness and behavioural activation (Kring & Sloan, 2009; Leahy et al., 2011). Maladaptive emotional regulation strategies include emotional suppression, situational avoidance, catastrophizing and rumination (Aldao et al., 2010; Gross, 2002). Research suggests that individuals with higher emotional intelligence; a greater understanding of their emotions and a belief in their ability to control their emotions tend to have a greater ability to use adaptive strategies to regulate their emotional responses and thus have increased well-being, positive affect and self-esteem ((Nyklíček et al., 2010). Emotional regulation is a core feature of well-being, with regulation abilities impacting on the individuals adaptive functioning and lack of regulation abilities resulting in poorer outcomes and poorer mental health (Gross & Muñoz, 1995). Emotional regulation plays a major role in many psychopathologies, including; depression, anxiety, eating disorders, alcohol abuse and self-harm (Ciarrochi et al., 2002; Ehring et al., 2008; Garnefski et al., 2001; Harrison et al., 2010). It is suggested that individuals who experience difficulties with regulating their emotional responses are more likely to experience greater negative responses in their day to day lives, leading to clinical conditions and in turn reinforcing increasing the incidents of negative coping strategies (Clyne et al., 2010; Mennin et al., 2007; Nolen-Hoeksema et al., 2008; Sher & Grekin, 2007). Furthermore, treatment for these conditions of depression, anxiety, eating disorders, self-harm and suicidality have regularly used targeted emotional regulation intervention approaches with positive results (Berking & Lukas, 2015; Campbell-Sills & Barlow, 2007; Clyne et al., 2010; Mennin et al., 2002).

During the period of adolescence individuals begin to behave more autonomously in order to reach their own long term goals and regulate their own emotions independently, with less guidance from parents or caregivers (Steinberg & Avenevoli, 2000). Simultaneously, adolescents are undergoing significant physical changes. In this period changes occur hormonally; with onset of puberty, cognitively, socially and neurologically (Blakemore et al., 2010; Casey et al., 2010). Social changes in adolescence

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

lead to new experiences and social interactions resulting in more social independence and increased social referencing of peers as opposed to parents, which can influence emotional regulation abilities (Morris et al., 2007). Brain changes occurring during adolescence include changes to the prefrontal cortex, changes in grey and white matter volume, increased myelination of fibres and increased synaptic pruning (Giedd et al., 1999; Pfefferbaum et al., 1994; Spear, 2000; Thompson & Nelson, 2001). These alterations in the brain have a wider impact on the individual's ability to respond to risk and reward, control their impulses, plan, reason and process information as well as their overall executive functioning (Cicchetti & Rogosch, 2002; Spear, 2000; Steinberg, 2005).

It has been supposed that disconnect between development in different domains can influence emotional regulation abilities. For example, compared to adults, adolescent brains experience differences in levels of arousal and motivation, however the ability to regulate arousal and motivation may occur later in their development impacting on their ability to self-regulate (Steinberg, 2005). Similarly, the individual is at a stage of increased level of risk and vulnerability as the timing of changes in each domain (social, physical, cognitive) may be disconnected, meaning the individual may not have developed sufficiently to negotiate these changes leading to the emergence of psychopathology (Steinberg, 2005). The period of adolescents is considered a health paradox, as what should be a period of optimum health and development, is, compared to childhood, a period of raised mortality and risks (Gore et al., 2011; Resnick et al., 1997). Based on developmental changes the adolescent individual should be capable of identifying their emotions and should have the skills to cope with them in a positive and proactive way, changing their coping strategies where necessary (Riediger & Klipker, 2014). However, adolescents can often be unable to effectively regulate their emotions, which can result in them using inappropriate coping mechanisms on encountering negative events. For some individuals appropriate coping strategies may never develop and for others their skills may regress (Auerbach et al., 2010; Zimmer-Gembeck & Skinner, 2011). Maladaptive ER skills can then persist due to their reinforcement and the individual can be unaware of other strategies and skills which can be used for self-regulation (Aldao et al., 2010). During this period there is an increased prevalence of substance abuse, self-harm, depression, aggression, eating disorders, anxiety, accidents, suicide and high risk behaviours, and it is possible that these outcomes are impacted by factors related to development of emotional regulation (Aldao et al., 2010; Cicchetti &

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Rogosch, 2002; Forbes & Dahl, 2005; Garnefski et al., 2001; Hankin & Abela, 2011; Kessler et al., 2005; Kuppens et al., 2012).

Increased research on well-being has identified mental health difficulties as the number one cause of disability in youth (Gore et al., 2011). The importance of promoting mental health for youth has been recognised, in terms of both individual factors, such as psychological, social or academic functioning, but also in terms of factors that impact on other systems, such as the family or society with increased positive mental health leading to better outcomes for academic achievement, earning ability, parenting, relationships with others and overall quality of life (Chan, 2010). The increased interest in this area has resulted in an overall global focus on emotional well-being.

Universal well-being interventions have been used on schools with positive results, including improvements academic attainment and reduced mental health difficulties (Durlak et al., 2011). Schools can provide a setting in which to implement universal well-being interventions and this preventative approach could reduce the need for individual intervention, reducing the stigma of mental health difficulties leading to more discussion around emotions and mental health and promoting help seeking behaviour (Dooley & Fitzgerald, 2012; Gulliver et al., 2010; Rait et al., 2010). School based interventions which use a cognitive or dialectical behavioural therapy approach have been implemented with adolescents with some benefits, in terms of emotions. Research suggests that school based CBT approaches can be beneficial for adolescents with anxiety or depression. The research indicates that treatment length varies from 6 weeks up 10 weeks. The research suggests that in some cases the effects can be maintained at follow up. However, there is a lack of research on the effect of such programmes on overall emotional regulation abilities and on studies that use a dialectical behavioural therapy approach. There is also a dearth of qualitative data on such interventions, with participants reflecting a lack of active and co-operative learning approaches as the main disadvantage and area for improvement of such programmes. Previous studies which collected qualitative information on universal, school based CBT or DBT programmes relied on focus groups or questionnaires. Although these methods can provided valuable data, the use of focus groups with adolescents at a time when value is placed on peer acceptance may influence outcomes and questionnaires lack depth in terms of exploration of responses. This study sought to build on previous research by examining the effect of a modified school based, universal DBT emotional regulation module, to examine its effects on participant reported

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

difficulties with emotional regulation and explore their experience of the intervention in light of 'what works' for such school based interventions.

Design

The epistemological stance and paradigm underlying this research is pragmatism. The pragmatic approach is less concerned with the reality of knowledge and is concerned with finding what works or taking a common sense approach to the presenting research problem (Biesta, 2010; Johnson & Onwuegbuzie, 2004). "Research is designed and conducted based on what will best help answer your research question..." (Johnson & Christensen, 2010, p. 32). Pragmatism avoids the binary dualism of other paradigms. It theorizes that emerging knowledge is from both reality and the social, historical and political lived in world (Teddlie & Tashakkori, 2009). In educational research the pragmatic paradigm is focused on solving educational problems using any research method that accurately aids in describing or solving the presenting research problem (Lodico et al., 2010).

A mixed methods design was used to evaluate the effectiveness of the modified emotional regulation module on student emotional regulation and its feasibility as a school based intervention. As such collection of both quantitative and qualitative data was deemed most appropriate to answer the presented research questions (Creswell, 2013; Dunning et al., 2008). The use of both methods of data collection can provide compensation for weakness in either one in isolation, and therefore strengthen results and conclusions drawn from the emerging data (Creswell & Clark, 2011; Abbas Tashakkori & Teddlie, 2010). The use of both methods can provide greater knowledge in terms of exploring the research questions and identifying solutions. Quantitative data analysis can provide empirical evidence of intervention effect and qualitative data provides individual perspectives to aid in evaluation of the intervention (Creswell, 2013; Mertens, 2014). The use of only one method would not adequately answer the presented research questions and may lead to erroneous conclusions or the unsubstantiated notion that a solution has been found (Robson, 2002)

Procedure

This study was approved by the ethics committee at Mary Immaculate College. A list of co-educational schools in the area was compiled and schools were approached

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

individually to take part. One school, with the required class lengths agreed to take part in the study. The school was located in the West of Ireland. A contact visit was arranged with the School Guidance Counsellor who expressed an interest in the programme. A class of students was identified to take part in the programme based on their availability. Students were included as a universal class and no data was gathered on special educational needs or diagnoses. In total 27 students (Mean Age=15.49) were identified to take part in the study. They were randomly assigned, using their completed assent forms, to the intervention group or waitlist control group. Discussions were held with the principal and students to outline the project. The board of management, teacher, students and parents were provided with information sheets and consent forms. This study was underpinned by pragmatic theory and adopted a mixed methods approach, which took an experimental design. The intervention was delivered by a Trainee Educational Psychologist to an intervention ($n=13$) and delayed intervention group ($n=14$). In total 23 participants completed the intervention and returned outcome questionnaires. Quantitative data was collected from parents and through self-report at three time points (Baseline, Time 1 and Time 2). Qualitative data was collected at time two and involved semi-structured interviews with a group of students ($n=7$).

The Intervention

This study aimed to build on previous research into the DBT-Steps A intervention by modifying the module to include multimedia support and more active and co-operative learning components and deliver just one module of the intervention. This study was not widely reviewed with only one identified research paper evaluating the intervention (Flynn et al. 2017). The programme was delivered by a Trainee Educational Psychologist. This study built on the Flynn et al. (2017) pilot by evaluating participant experiences of the intervention using semi-structured interviews which provided further information on what aspects of the intervention were beneficial and what works for such school based interventions with adolescents. The outline of the module is provided in Table 1.

Table 1

Emotional Regulation Module of the DBT Steps-A Programme (Mazza, Dexter-Mazza, Miller, Rathus, & Murphy, 2016, p.185-263)

Session	Main Points
---------	-------------

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

1: Emotional Regulation: Goals of Emotional Regulation and Functions of Emotions	Aims to enable participants to understand emotions, decrease unwanted emotions, decrease emotional vulnerability and suffering. Teaches participants the function of emotion in terms of organising action, motivating, communicating to ourselves and communicating and influencing others. Explores myths about emotions and regulation of emotions.
2: Emotional Regulation: Describing Emotions	Participants are encouraged to identify emotional responses as a full system response occurring neurologically for a short period of time. Participants learn about the model of emotions, looking at triggers, biological changes, thoughts, expressions, behaviours and physiological changes.
3: Emotional Regulation: Checking the Facts and using Opposite Action	This session covers the checking the facts skill which aims to teach participants how beliefs and interpretations of events can influence emotions Once participants have learned to appraise their thoughts in relation to emotions they then identify skills which can be used to cope with the situation. Participants learn about opposite action, how each emotion has a behaviour or urge to act in a certain way. Opposite action promotes use of an opposite behaviour or action to reverse or change the emotion.
4 Emotional Regulation: Problem Solving	In this session participants are encouraged to identify solutions for when they are experiencing an emotion that does not fit the facts. They are encouraged to identify the problem to be solved and work through the process of identifying multiple solutions, appraising and identifying the pros and cons of each solution before selecting one.
5 Emotional Regulation: The A of ABC PLEASE	This session covered the A in ABC PLEASE and encouraged participants to accumulate positive experiences. The aim of this is to reduce vulnerabilities to emotions by engaging in pleasant activities on a daily basis. Participants are also encouraged to identify values and long term goals, along with the steps necessary to achieve these goals.
6 Emotional Regulation: The BC of ABC PLEASE	Participants cover the building mastery skill which involves engagement with challenging activities to build confidence. They were also encouraged to develop skills for coping ahead, which included the identification of situations which may incur emotional responses and planning ahead for these situations, through checking the facts, visualisation and problem solving. Participants also cover the PLEASE skills which relate to treating physical illness, balanced eating, avoiding stimulants and getting exercise.
7 Emotional Regulation: The Wave Skill Being Mindful of Current Emotions	The last session includes revision of all the skills covered in the module. It also covers distraction from certain emotions at certain times but also highlights the importance of sitting and allowing ourselves to feel emotions.

Several changes were made to the intervention based on feedback from the study by Flynn et al. (2017) which suggested that students found the programme boring with too much talk and not enough activity. Modifications were made to the emotional regulation module of the intervention based on developmental and educational literature. Table 2 outlines changes made to the intervention along with rationale for these changes.

Table 2.

Emotional Regulation Module of the DBT Steps-A Programme (Mazza, Dexter-Mazza, Miller, Rathus, & Murphy, 2016, p.185-263)

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Session	Main Points
1: Regulation: Goals of Emotional Regulation and Functions of Emotions	Aims to enable participants to understand emotions, decrease unwanted emotions, decrease emotional vulnerability and suffering. Teaches participants the function of emotion in terms of organising action, motivating, communicating to ourselves and communicating and influencing others. Explores myths about emotions and regulation of emotions.
2: Regulation: Describing Emotions	Participants are encouraged to identify emotional responses as a full system response occurring neurologically for a short period of time. Participants learn about the model of emotions, looking at triggers, biological changes, thoughts, expressions, behaviours and physiological changes.
3: Regulation: Checking the Facts and using Opposite Action	This session covers the checking the facts skill which aims to teach participants how beliefs and interpretations of events can influence emotions Once participants have learned to appraise their thoughts in relation to emotions they then identify skills which can be used to cope with the situation. Participants learn about opposite action, how each emotion has a behaviour or urge to act in a certain way. Opposite action promotes use of an opposite behaviour or action to reverse or change the emotion.
4 Regulation: Problem Solving	In this session participants are encouraged to identify solutions for when they are experiencing an emotion that does not fit the facts. They are encouraged to identify the problem to be solved and work through the process of identifying multiple solutions, appraising and identifying the pros and cons of each solution before selecting one.
5 Regulation: The A of ABC PLEASE	This session covered the A in ABC PLEASE and encouraged participants to accumulate positive experiences. The aim of this is to reduce vulnerabilities to emotions by engaging in pleasant activities on a daily basis. Participants are also encouraged to identify values and long term goals, along with the steps necessary to achieve these goals.
6 Regulation: The BC of ABC PLEASE	Participants cover the building mastery skill which involves engagement with challenging activities to build confidence. They were also encouraged to develop skills for coping ahead, which included the identification of situations which may incur emotional responses and planning ahead for these situations, through checking the facts, visualisation and problem solving. Participants also cover the PLEASE skills which relate to treating physical illness, balanced eating, avoiding drugs and stimulants and getting exercise. The focus on this is promotion of physical well-being.
7 Regulation: The Wave Skill Being Mindful of Current Emotions	The last session includes revision of all the skills covered in the module. It also explores distraction from certain emotions at certain times but also highlights the importance of sitting and allowing ourselves to feel emotions.

Outcome Measures and Data Collection

Data was collected at baseline, time one and time two to allow comparisons to be made as to the effect of the intervention, in terms of participant and parent reported scores of emotional regulation. This study aimed to understand the changes in student emotional

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

regulation. The Difficulty with Emotional Regulation Scale-Short Form (Kaufman, 2011) was used to gather data on student difficulties with emotional regulation. The reliability of the scale was found to be high. A modified version of this questionnaire, which asked the same questions to the parents of the participants was also used to collect data from another source and increase the validity of the data. Qualitative data was collected through semi-structured interviews. This technique was selected as it is both structured and flexible to allow for the collection of rich data in relation to student and facilitator perceptions of the intervention and the real life effects of the intervention. Baseline data was collected from all participants at the beginning of the intervention. The intervention group then took part in the six week module. Following this, time one data was collected from all participants. The delayed intervention control group then took part in the intervention, with time two data and semi-structured interviews conducted at this point of the study.

Quantitative Data Analysis

The means and standard deviations for the primary outcome measure at baseline, time one and time two is presented in Table 3. The age of participants in the sample ranged from 14.9 to 16.1 years of age ($M=15.49$, $SD=.531$)

Table 3

Group Scores and Standard Deviations at Baseline, Time 1 and Time 2

Group	Baseline	Time 1	Time 2
Intervention	35.83 (SD=8.24)	31.83(SD=7.96)	30.41(SD=7.19)
Waitlist Control	34.90(SD=8.64)	33.36(SD=7.36)	31.54(SD=8.01)

The data was investigated for any differences between the groups at baseline, using an independent samples t-test and no significant differences were found between group scores. Data analysis was undertaken to identify the skewness and kurtosis of the data. There were no issues with skewness and kurtosis ($all < 1$). Data was checked for normality using histograms and plots and no extreme scores or outliers were identified. The assumption of sphericity was met in Mauchly's test of sphericity. Further analysis was undertaken using the K-S test for normal distribution, using the Shapiro-Wilks the p-value

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

is $>.05$ for the measure at baseline, time one and time two, the alternative hypothesis can be rejected and it can be concluded that the data comes from a normal distribution. The measure showed good internal consistency ($\alpha=.77$). As the assumption of normality was met across the data at all three time-points it was identified as appropriate to use parametric statistical analysis. Factorial ANOVAs were used to investigate the effect of time on self-reported difficulties with emotional regulation. The results of the statistical analysis was conducted for the outcome measures. The p value was considered significant when $p<.05$. Effect sizes were established using the partial eta-squared. Correction for multiple comparisons to prevent type I errors was done using post hoc Bonferoni.

A factorial ANOVA explored the influence of the two independent variables (IV) group and time on individual's self-reported difficulty with emotional regulation. Overall there was a significant main effect of 'Time', with a large effect sizes and both groups having a significant change in scores over time ($F(2,42)=14.485, p=.00., \eta_p^2=.386$). In addition there was a non-significant effect of 'Group' on scores of difficulty with emotional regulation, with both groups showing similar scores, with a small effect size ($F(1, 21)=.032, p=.860, \eta_p^2=.002$). There was also a non-significant interaction between 'Group' and 'Time', with a medium effect size ($F(2,42)=1.12, p=.323, \eta_p^2=.052$).

For the overall group there was a significant change in scores from baseline to time one ($p=.003$) and time two ($p=.00$), but no significant change from time one to time two ($p=.260$). Post-hoc analysis were undertaken to examine the significant change in scores over time. There were no significant differences between groups at baseline ($F(1,21)=.069, P=.796, \eta_p^2=.003$), time one ($F(1,21)=.228, p=.638, \eta_p^2=.011$) or time two ($F(1,21)=.079, p=.782, \eta_p^2=.004$). The intervention group displayed a significant change in scores from baseline to time one ($p=.001$) and baseline to time two ($p=.002$) and non-significant change in scores from time one to time two ($p=.738$). Overall, 66% of participants in the intervention group reported an above average decline in scores on the outcome measure, compared with 45% of the control group between baseline and time one. The waitlist control group displayed a non-significant change in scores from baseline to time two ($p=.463$) and time one to time two ($p=.365$), however, there was a significant change in scores from baseline to time two ($p=.045$). When comparing baseline to time two data 58% of the intervention group and 63% of the delayed control group displayed a significant decline in overall score on the DERS.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Qualitative Data Analysis

Semi-structured interview transcripts were analysed using Thematic Analysis, the six step process developed by Braun and Clarke (2006). This process involved the transcription of interview recording and analysis of the text. This involved the reading and re-reading of the data for broad themes, highlighting of quotes and refinement of themes and subthemes. Four themes were identified from the student interviews; 'Benefits of the Intervention', 'Effect on emotional Regulation', 'Relevance of the Intervention' and 'Changes and Differences'.

Theme One: Benefits of the Intervention

The first theme which emerged from the student interviews describes core areas that contributed to the effectiveness of the intervention and outlined perceived positive aspects of the intervention in terms of strategies and resources, peer learning and positive reflections. Within the first broad theme is the sub-theme 'Strategies and Resources', with participants referring to the different resources and learning strategies used during the intervention as both beneficial and enjoyable.

"I enjoyed the exercises in the booklet we had." (John)

"The different sections or steps we had" (Maeve)

From the emerging data, participants appeared to find the various resources used to support learning beneficial. Visuals, such as the emotions thermometer and the model of emotions, along with the booklet containing the concepts and activities of the intervention were identified as supportive aspects of the intervention.

"I quite liked when we learned about all the different body parts that show emotion and we did out the diagram..." (Aine)

Participants made reference to the use of active learning strategies, such as the art and craft activities and the body outline collage. The range of active learning strategies appeared to be one aspect of the intervention that participants found valuable and enjoyable. The next subtheme participants identified was 'Learning with Peers'. Participants rated highly the strategy of working with others and learning from peers with almost all students referencing this as a positive aspect of the intervention.

"I liked the group work" (Sasha)

"And we were in small groups, with people you trusted" (Maeve)

"...it was a warm environment to talk about your feelings" (Maeve)

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Participants reported that the group provided a safe and warm environment. This format also provided them an opportunity to learn from and with others, to explore emotions and learn to cope with them. There was a sense of belongingness in terms of increased trust in those in their group. For example:

“I learned stuff from other groups as well, about how other people show their emotions differently and I liked the open speaking aspect too that we weren’t all just sitting there watching a slide show and we all got to speak and if we didn’t want to we didn’t have to. I really enjoyed that part like also having a big conversation about emotions” (Aine)

“I suppose doing it with other people, was kind of good, you could see other people feel the same emotions as you and they go through the same things as you and you can learn from the way they handle their emotions and they can learn from you, just kind of suppose that bonding experience” (Jane)

The data suggests that by taking part in the group and speaking openly with one another participants developed trust in each other. The presence in the group made students feel less alone in their feelings and encouraged them to learn about one another. This seemed to reduce the stigma of talking about emotions. The use of a group format also promoted students to learn skills from one another’s experiences.

The next sub-theme emerging from the ‘Benefits of the Intervention’ theme was ‘Positive Reflections’. Participant’s reflection on the intervention was overall positive and described the intervention as both enjoyable and practical.

‘I enjoyed it...everything was overall it was good’ (John)

“It was realistic, and then doing the positive steps for yourself...I found everything to be helpful in some way” (Maeve)

“I think it was pretty beneficial” (Jane)

Participants were homogenously positive about the experience of partaking in the intervention. Students commented on the helpfulness of the programme.

“...I found it was pretty helpful.”(John,

“The skills they gave were helpful and can be brought into someone’s daily or weekly lives” (Sasha)

Participants found the different sections and steps of the intervention programme useful and reflected on the ease of its practical applicability.

“...it’s easy to implement in your own life” (Maeve)

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

“...small, simple ways you can do every day to deal with your emotions” (Maeve)

From the data it appears that students were able to implement the strategies easily in their own lives. Overall, participant reflections on the programme were positive with various outlined benefits including resources and learning strategies, group learning, the practicality of the intervention adding to their satisfaction and learning during the intervention

Theme Two: Effect on Emotional Regulation.

This theme outlined student reported effect of the intervention, in terms of understanding and coping with emotions and development and use of skills. This theme outlines how the intervention affected student's abilities to regulate their emotions. Students reported changes in their thinking, behaviour, understanding and awareness of their emotions following the intervention. This theme is made up of two subthemes: 'Changes in Understanding and Coping with Emotions' and 'Skills Development'

The first sub-theme 'Changes in Understanding and Coping with Emotions' outlines how the intervention supported students to develop their understanding of their emotions. Participants were encouraged to examine their emotions and were enabled to gain insight in terms of identifying and taking meaning from their emotions. All participants referenced how the programme impacted on their ability to understand and make sense of their emotions:

“...if your moody, it gives you a better understanding.”(John)

“Well it did give me a chance to kind of reflect on my emotions and understand how I'm feeling, to draw meaning from what my emotions were” (Jane)

The data suggests the intervention helped participants to identify and label physical feelings as emotions. It also encouraged them to evaluate their feelings and develop problem solving abilities in relation to emotional situations.

“...explain your emotions, like especially when your studying like feel like crying or screaming at someone it's good to know it's not just, there is something you can do” (Maeve)

“...thinking through emotions, why I'm feeling this way and then appraising the situation...when you don't understand how your feeling and that can be confusing and this helps you evaluate, this is what I'm feeling and why” (Jane)

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

The intervention gave participants an increased understanding of the link between their emotions and their behaviours. They also reported an increased insight into the consequences of behavioural urges activated by emotional experiences.

“...understanding the consequences of emotions and your actions depending on how your feeling, like maybe you should avoid doing certain things if you’re angry or if you’re sad” (Rob)

“...the programme helps people to understand emotions...you’re going to get them all the time and the programme helps find solutions...like how to deal with anger instead of taking it out on other people” (Becky)

Participants reported that they were more accepting of their emotions, understanding that all emotions were acceptable but acknowledged that it is important to learn to cope with them.

“...ya like its ok to be sad, happy, angry, everyone is like that sometimes, but at the same time you have to learn to deal with your emotions” (Becky)

“I think I learned how to deal with the aftermath of emotions and how to process them and think about them in a good and healthy way...think positively about them...maybe think it’s okay to feel that way but reflect on what you did” (Aine)

The intervention appeared to normalise emotions for the participants. It gave them a better understanding of emotions, in terms of their function and as a method of communicating something to themselves and to others. They also developed an awareness of emotions as universal, experienced by everyone. In light of this they were able to identify how they were feeling and why, leading them to problem solve around their emotions.

The next subtheme in this area is ‘Skills Development’; participants identified the various skills they had learned as a result of taking part in the intervention programme.

“...probably the mindfulness, I actually use that now outside of this” (John)

“Probably to kind of when I go off worrying to bring myself in and think what is the worst that is going to happen because like if you do something new and go for an interview, I’d be like oh you’re not going to get it...that was a skill I kind of learned, to pep talk myself before I’d go off and worry, you know the steps, what is the worst, basically check the facts like what I’m thinking, is it going to happen, is the worst going to happen” (Aine)

Data suggest that participants developed various skills following participation in the intervention. They referenced use of mindfulness skills outside of the group setting. Data

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

indicated that participants made use of thought challenging, positive self-talk and cognitive restructuring. This suggests that participants' abilities to cope with their emotions were enhanced by the intervention.

"...when we had to write about an emotion that we felt during the week I thought after doing it two or three times, I found myself doing it anyway...and checking how I felt previously and also when we had to write the goal we had, and I had said I wanted to spend more time with family and I did end up doing that and I thought that was helpful too" (Aine)

Students reported use of the various skills, including cognitive appraisal and monitoring emotions, covered during intervention in their lives outside of the sessions such as; during school activities or sports.

"ya I've used the mindfulness for sports, I box, and before fights sometimes people go in and they're very nervous. And so I find, I was as well when I first started, but now using this it gets me very relaxed. I think about what I need to do in the ring it's not any nervous problems, and this mindfulness gets all the other things what if away" (John)

There were a range of activities and contexts outside of the intervention group setting where students reported making use of the skills.

"Ya after work experience I would have been nervous before going in and you kind of think no it's going to be fine, they're going to be nice" (Sasha)

"emmm, ya I did a few times, we had a few important soccer matches, you'd be nervous and you'd have a good reason to be, but you'd think realistically am I going to play terribly and kind of go through the steps we did" (Jane)

The feedback from students on their application of skills to their everyday lives and varying contexts outlines the wider effects of the emotional regulation module. The module appeared to encourage students to reflect on their emotions and helped them to understand them. There was a normalisation of emotions as being acceptable but also the importance of coping with emotions was highlighted, as well as the strategies which can be used for this purpose. Participants indicated their application of various skills leading to positive effects in terms of school related activities, sports and in their general lives.

Theme Three: Relevance of the Intervention

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

This theme outlined student reported relevance of the intervention, in terms of its relevance to their age group as a school based intervention, recommendations to others and the programme as something new that they haven't covered before (Figure 11). The first sub-theme which emerged under this theme was 'Something New'. Participants reported that exploring and learning about emotions was not something they had done before:

"I would never have explored those parts of my mind. Apart from the programme I wouldn't have done it at all. It helped me look at things I would not necessarily have looked at before. I would never really have thought about it how it could be a certain way or anything like that" (John)

"...how I'm feeling I wouldn't normally have done that" (Jane)

Students reported that this was not something they would have done themselves and they would not have really taken the time to explore or reflect on their emotions. They spoke about the relevance of the intervention to teenagers, how their age group are unlikely to sit down and speak about emotions and that the intervention provided them with the opportunity to be more open about emotion and normalise speaking about emotions.

"I think as teenagers we don't sit down at lunch time and talk about emotions, we might talk about what's causing them but not really what they are or how to solve them or anything so I think that it's nice we got to sit down and actually speak about how we are feeling and explore why we feel that way" (Aine)

"Ya I probably wouldn't have done it if we hadn't spoken about it and I hadn't of written it down, I wouldn't have done it" (Aine)

"I think as teenagers we are slow to talk about our emotions anyway...I don't think it's ever talked about in depth" (Aine)

They also reported that they have not spent much time in school focusing on emotions. The data suggests that this area was absent in their education to date but it seems having an intervention to manage emotions was identified as a positive step.

"ya because you don't do that much about emotion, we do a bit but don't do it too much in school" (Aine)

"no, really we wouldn't..." (Rob)

"ya cause we don't do it" (Jane)

The second sub-theme which emerged under this theme was 'Recommendations to Others', which indicates young people's views in terms of how useful they found the

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

programme. Participants outlined that they would recommend the intervention to others of their age and would advocate for such an intervention to take place in the school setting. The period of adolescence was identified by youths as a stressful time, which can effect emotions and emotional functioning and as such they felt the intervention was relevant for their age group:

“Ya I would, to ya definitely secondary school cos yano third year, fifth and sixth year even first and second, you’ve a lot of study and it’s kind of new and when you’ve a time like that and your very stressed you can start to worry about everything and everything seems bigger and worse so it’s good to think and be able to check the facts and I’m just tired especially to explain your emotions” (Maeve)

“Ya it does relieve stress, we don’t have a stressful year, but even for exam students, it’s helpful it’s very stressful doing exams and you don’t have a chance to reflect on yourself and how your feeling and I think people should definitely have that opportunity” (Jane)

Participants were able to link the intervention skills to their own experience with challenging or stressful events such as exam years or transitioning to post-primary school. They reported feeling that such a programme would be beneficial for students during these times.

“Ya I think it would be good for other students to take part in it cause like do you know I think everyone needs to try something different” (Becky)

“I think I would recommend it to other people and I know other people have an interest in doing it” (Aine)

Adolescence was identified by the participants as a period of time where individuals have difficulties dealing with and understanding their emotions.

“I’d definitely recommend it to other students I think not a lot of teenagers know how to deal with their emotions so I’d definitely recommend it for them, it’s useful for them to have that skill” (Rob)

“Ya, ya I would I think especially our age, there’s a problem with kids, well maybe not a problem, but people don’t kind of look into things that deeply in terms of their emotions and looking into their emotions in terms of understanding their emotions and I think this would help if they wanted to do that” (John)

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Participants acknowledged that running such intervention programmes in school encouraged participation and encouraged students to take part in the intervention.

“...it was a pretty helpful programme and we did it in school so that was more of an incentive to do the programme as starting out it didn't take time, if it was outside school I'd probably be less likely to do it. But because it didn't take time outside of school. So that helped me and got me into it and gave incentive.” (John)
“I might not necessarily try something like this if it was out of school but because it was in school I had to do it and I actually enjoyed it so I think it's good because some people might not want to do it but might actually enjoy it” (Becky)

Overall, this theme outlined the relevance of the intervention to adolescence and identified this as a time where individuals may struggle to cope and manage their emotions. Participants reflected that they would recommend the intervention to others as it increased ability to understand, explore and cope with emotions. The deliverance of the intervention in the school setting also provided incentive for students to take part and learn skills related to emotions. Generally, participants felt exploring emotions and coping strategies were lacking in terms of school focus and in terms of their own abilities to understand and speak about their emotions.

Theme Four: Changes and Differences

The sub-themes which make up this theme are ‘Personal Preferences’ and ‘Areas for Improvement’ and these highlight personal preferences and difficulties students had with the programme and areas students felt could improve the intervention. The first subtheme, which emerged under this broad theme, was ‘Areas for Improvement’. The majority of participants reported that there was nothing which could improve the intervention and were content with it in its current format.

“emm no I don't think so everything was pretty good...” (John)

“Ya there was nothing really needed to be changed it all was ok” (Maeve)

“I liked it all...” (Sasha)

The majority of the interviewed participants reported that the intervention was overall positive and did not identify any areas for improvement for the programme. A minority of participants identified areas for improvement:

“emmm, (silence) I suppose you probably noticed yourself when we were most interactive was when we were playing the games, so even if there was a way to

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

incorporate more games or a range of other games and explain the significance after to get us to think through during what we had done” (Jane)

“I think...emmm...(silence)...hmm...I think maybe it could be slightly more updated and maybe bring in social media and mobile phones, like how to take a step back from that and remember to be present...I know we did talk about it, but I don't think it was part of the course, it kind of came up in conversation as an example and we did speak about it but I think maybe it would be more interesting to go into depth...maybe teach yourself to take a break and teach yourself that you don't need to compare yourself” (Aine)

The data which emerged from the interviews suggest that the games were a particular strategy enjoyed by the students and that the inclusion of more games could add to the enjoyment of the programme. There was also reflections on the use of technology to support the intervention in terms of having some focus on social media, as it was felt that social media is so intertwined in their lives.

The second subtheme which emerged from this broad theme was ‘Personal Preferences’, which outlines aspects of the intervention which some participants found personally unsuitable for their own use. It appeared that there were many skills identified as valuable by the students, however, some students found particular skills less advantageous for themselves.

“emmm, not really, sometimes if we had to go home with the homework, I mean and kind a, you'd have to come up with stuff on the spot and you'd have other stuff to do, so maybe having a time allotted to do the work maybe...cause if you forgot to do it one day you'd have to catch up on the last day and you'd already moved onto the next day, that kind of thing” (Jane)

“I didn't like the homework, it was fine, but you still had to do it, I know a bit of homework is good...I think the stuff we had to do was good but finding the time to do it” (Sasha)

The students identified that they did not enjoy the homework and found it challenging to find the time to complete this task, however, they accepted that the outlined homework activities were valuable. Participants acknowledged that they found particular skills more beneficial than others, however they recognized that skills they found unsuitable may be beneficial for others.

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

“..I don’t think I’d have the presence of mind to check the facts there, but I don’t think I’d be doing that there...but I mean even if a skill didn’t work for me it could work for someone else I don’t think it would be valuable to take it out” (Aine)

“I suppose there was nothing I disliked...sometimes it’s hard when you’re actually in the situation to think of the stuff we talked about to stop and think it’s hard when you’re in that situation in my opinion...I don’t know if I could do that but maybe I should start” (Becky)

Overall, data emerging on the student experience of the intervention identified the active learning aspects of the intervention as enjoyable and beneficial. In terms of area for improvement, participants enjoyed the games aspect and felt more of this strategy could increase enjoyment and interaction. Participants were satisfied with the components of the programme, with comments reflecting more personal areas for improvement or responses to specific strategies as opposed to a generally emerging trend.

Discussion

Participants identified various aspects of the intervention that were beneficial. Similar to the previous studies, the intervention was regarded in an overall positive manner (Garmy et al., 2015; Taylor et al., 2014). Participants identified various resources used throughout the intervention as helpful and enjoyable, such as visual supports, workbooks and practical activities. The inclusion of active learning components was a factor which encouraged student learning and was agreeable to participants, this was similar to the findings by Taylor et al. (2014) and concurs with research on active learning approaches on emotional learning programmes (Jones, 2017). Participant reflections of this study were more positive, as in previous studies participants reflected more negative experiences of less interactive approaches and overly didactic delivery (Garmy et al., 2014; Flynn et al., 2017; Taylor et al., 2014). When compared to the previous study of the DBT Steps-A intervention undertaken by Flynn et al. (2017) the modification of the module to include multimedia, visuals, discussion, co-operative learning appeared to increase participant enjoyment, positive attitudes in terms of the intervention (Chickering & Gamson, 1987; De Witte & Rogge, 2012; Susskind, 2005; Yueh et al., 2012).

The group format of the intervention was identified as a positive aspect of the programme. Students learned from one another, bonded and felt safe in their group, felt less alone with their emotions and difficulties and learn about emotions in a trusting

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

environment. This result was similar to previous research on school based, universal, CBT or DBT interventions, with participants enjoying working with others, learning from them and feeling less alone (Flynn et al., 2017b; Garmy et al., 2015). This study suggests that conversing about emotions was an enjoyable a novel experience which appeared to reduce stigma in relation to discussing feelings and emotional experiences (Chisholm et al., 2016; Patel et al., 2008). Participants learning from others in the group is related to social learning theory, whereby participants learned skills through interaction with one another (Garnefski et al., 2001; Grusec, 1992). The skills covered in the intervention were deemed practical and easily applied to participants' everyday lives, outside of the session, leading to an overall positive view of the module and the ease of real-world use of skills. The intervention was not overly negative or problem focused and reported that it was relevant to their lives and situations, unlike the study by Garmy et al. (2015) which students found negative in focus and the study by Taylor et al. (2014).

Although quantitative data suggests the intervention group displayed significant within group decline in DERS scores, lack of between groups effects meant it was not possible to conclude that the intervention led to changes in participant reported emotional regulation difficulties. However, from the student interviews it appears that the intervention did lead to changes in participant emotional regulation. There was a reported change in participants thinking and behaviour, with similar outcomes to the reviewed studies, including an increased ability to appraise situations, identify feelings and identify causes of emotions (Garmy et al., 2015; Taylor et al., 2014). This is a positive effect of the intervention as higher emotional intelligence and awareness of emotions has been linked to increased well-being, including more positive affect and increased self-esteem (Schutte et al., 2002). Participants reported that they became more aware of physiological symptoms of emotions,, enabling them to cognitively identify the emotions they were feeling. There was an increase in participants' recognition of their control of emotions, identifying that they could take action when they experienced certain emotions. Research suggests that individuals who have a greater understanding of emotions and believe in their ability to control their emotions tend to use more adaptive emotional regulation strategies (Nyklíček et al., 2010). Similar to the study by Garmy et al. (2015) and Taylor et al. (2014) participants in the study reported an increased insight into the link between their emotions and behaviours and appeared to consider alternative behavioural responses to emotions. Participants were more accepting of emotions, highlighting the importance

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

of acknowledging them but also using adaptive coping strategies. This suggests that participants may have had an increase in the more adaptive emotional regulation strategy of emotional acceptance (Stoeber & Janssen, 2011).

There was evidence of development of various skills following student participation in the modified, emotional regulation module. This study concurred with previous research by Garmy et al. (2015) and Flynn et al. (2017) with students developing skills in mindfulness and increased positive thinking. There was indication that participants reported using adaptive emotional regulation strategies based on the skills learned during the intervention, including visualisation, positive self-talk and cognitive reappraisal (Depape et al., 2006; Stoeber & Janssen, 2011). There was also evidence of goal setting and engagement with positive experiences, which in turn can decrease vulnerability to emotions and promote well-being (Tugade et al., 2004). The results reflect previous research on school based CBT with participants generalising skills to their daily lives outside of the intervention setting (Garmy et al., 2015). There was use of learned skills at sports activities, extracurricular activities and in employment settings. It appeared that participants were able to down regulate emotions in these contexts in times of stress or anxiety (Carthy et al., 2010).

It was evident from the student interviews that participants experienced changes in their emotional regulation abilities with an increase in their emotional awareness and understanding and reported application of use of different emotional regulation strategies in different environments (Gratz & Roemer, 2004). Participants demonstrated increased use of antecedent focused strategies and reported use of more adaptive emotional regulation strategies, such as problem solving, cognitive restructuring and cognitive reappraisal (Gross, 1998; Kring & Sloan, 2009; Leahy et al., 2011). The reported use of thought challenging and positive thinking also suggests participants became aware of more antecedent and adaptive strategies for negative thinking (Aldao et al., 2010; Gross, 2002). Cognitive behavioural therapeutic approaches (CBT) aim to encourage more adaptive processes of emotions and the increased use of understanding of the link between thoughts, feelings and behaviours and more it appears that participants became aware of such strategies to perceive and appraise emotions and in turn influencing their feelings and behaviours (Roberts, 2018).

Data from the student interviews suggests that emotional regulation, school

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

-based interventions are relevant for the adolescent populations. The interviews reflected an appreciation for the opportunity to be open and normalise speaking about emotions. Students in the current study stated that exploring emotions at school was not something they had done before and reflected that their own age group are unlikely to sit down and examine their emotions. This was surprising considering the recent governmental focus on well-being, with emotional well-being playing being a core focus for development (Department of Children and Youth Affairs., 2015). Participants also reported that adolescence is a time when people need support to look at, understand and cope with their emotions (Dooley & Fitzgerald, 2012; Government of Ireland, 2018a).

Running such an intervention in school was identified as beneficial, encouraging engagement and participation, participants emphasised the importance and appropriateness of such an intervention for their age group and would be inclined to recommend such an intervention to others (Garvey et al., 2015; Taylor et al., 2014). They acknowledged the adolescents, at times, experience difficulties coping with emotions, as outlined in literature, and that the programme was relevant to this stage of their lives (Auerbach et al., 2010; Steinberg, 2005). Participants also made reference to the period of adolescence as a time of transition for them and made reference to the stresses they experience, particularly in relation to moving through post primary school and in terms of state examinations (Sportel et al., 2013). The students in this expressed the importance of having such a programme in schools in terms of accessibility and increased motivation to attend. This is reflected in the research into universal school based interventions, with the provision of such programmes reducing stigma and leading to greater accessibility to information for youth (Chisholm et al., 2016; Patel et al., 2008).

Recent governmental legislation and policy has also outlined the emotional development of students as a focus of the education system and acknowledges the core role of emotional regulation and coping strategies in overall well-being (Department of Children and Youth Affairs., 2015). Although this recent focused is welcomed, the students in this study outlined that they had not had time to look at emotions or learn skills for managing emotions in school, up to this point. This suggests a lack of intervention targeting this area and the need for schools to be equipped with curriculum and class material to promote such skills for the betterment of the students in their care and the realisation of the aims of the Irish education system (Government of Ireland, 2018a; National Council for Curriculum Assessment., 2018).

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

Overall, participants' reflections of the intervention were positive, with minimal feedback on areas for improvement. Participants reported that they enjoyed the active learning components of the intervention, with the only feedback on this area being the inclusion of more games, as this appeared to be a particularly enjoyable pedagogical approach. This was in contrast to previous research which outlined various areas for improving for content and delivery, challenging language and heavy material (Flynn et al., 2017b; Sawyer et al., 2010). Data from the semi-structured interviews also suggested that different strategies were preferred by different participants, with students acknowledging that they individually found some skills less beneficial for them. However, they acknowledged that different skills were valuable for different people. It is evident that individual factors also impact on responsiveness to intervention, and it is not surprising that students would be more affected and influenced by differing skills. Contrasting with other studies, participant feedback on this intervention offered no definite area for improvement, unlike the studies by Flynn et al. (2017), Taylor et al. (2014) and Garmy et al. (2015) participants were content with the overall format and learning methodologies used throughout the intervention.

Generally, qualitative findings from the student semi-structured interviews indicated that participants experienced development in their emotional regulation abilities, becoming more aware of emotions and making use of new coping strategies, both during classroom sessions and in their real life. Such skills as mindfulness, visualisation, cognitive restructuring, cognitive reappraisal, goal setting, problem solving and accumulating positive experiences were identified as practical and applied by participants in their lives, following the intervention. When compared to previous research, the modification of this module to include more active and co-operative learning approaches resulted in more positive reflections by participants and increased enjoyment and engagement of the programme (Flynn et al., 2017; Taylor et al., 2014; Garmy et al., 2015). The universal, group delivery of the intervention was positive, with students learning from one another and a reduction in stigma when conversing and exploring around feelings. The stressful period of adolescence reflected the necessity and relevance of such interventions in the school setting and the lack of focus on this area to date.

Limitations

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

The sampling method used somewhat undermines the external validity of the study as the research relied on a convenience sampling method. The school was interested in taking part in the intervention, this may have meant they were more interested in improving mental health outcomes for their students in general, this was a common limitation in the reviewed research studies, which also heavily relied on convenience sampling. This study employed a small sample size ($n=7$) which limits the generalisability of the study. Statistical tests can work better with a larger sample size. Due to the scope of the research, the timeline and other researcher engagements it was not possible for the researcher to undertake the research with a larger sample or across schools and groups. Demographic information was not collected on participants so this also does not make it possible to generalise the data to students of other ages, genders, socio-economic status or other cultures, with all participants being white Irish and having English as a first language. There was also a minority of males in the sample ($n=7$).

The sub-sample of participants who took part in the interview were those who had returned parental consent forms. It is possible that this population were more likely to report positive aspects of the intervention due to demand characteristics. However, when scores were examined those who took part in the interviews showed a range of scores over time. Also data was collected from participants in both the intervention and the delayed intervention group. Semi-structured interviews were also used as part of this research. Semi-structured interview are both a strength and limitation of the study. There are several strengths added to the research through the use of semi-structured interviews. Interviews add to the validity of the study, particularly in relation to intervention research. The use of semi-structured interview also allowed the researcher to probe or clarify questions to get a more in depth response. Interviews can be a source of weakness in that they are susceptible to researcher bias, participant bias, flexibility may lessen reliability.

Recommendations for Future Research

This study employed the method of convenience, purposive sampling and was limited in the sampling available. Although the students in the school differ across socio-economic backgrounds, the race and ethnicity of the children who attended the intervention was predominantly white Irish. Further studies of the intervention could include participants from different demographics and ethnicities. Another

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

recommendation is the need for further studies of other modified modules of the DBT Steps-A intervention programme. This intervention comprises of four modules which could, potentially, be delivered over a longer period of time. Further research should be undertaken as to the stand alone effects of these modules, with systematic modifications.

The duration of the intervention was six weeks and the intervention was completed within the time frame, delivering the course over a longer time frame could consolidate learning and be beneficial. Furthermore, follow up data could be collected over a longer time frame to establish any long term effects. This small scale study focused on one school, future research could include numerous schools, participants from different demographics and a greater balance of gender to gain a greater understanding of student perceptions of the intervention. It was predicted that the intervention would result in student changes in reported difficulties with emotional regulation, however this was not the case, future research could use a different measure with greater sensitivity to change. A larger sample may also increase the statistical power of the study leading to more significant findings. Future research should look at changes in emotional regulation in more detailed, as this is implied from the qualitative research and not empirically proven. Future research could make use of more sensitive outcome measures which focus more explicitly on coping strategies.

Conclusion

This school based emotional regulation programme was, overall, perceived as beneficial and valuable by student participants. Students described improvement in their emotional regulation abilities and the development of various skills. The modification of the intervention to include more active learning strategies resulted in participants reporting minimum feedback in terms of changes for the intervention. The intervention led to students generalising such skills to other areas outside of the intervention, suggesting that conducting such interventions in naturalistic settings (such as school or community) can aid with generalisation of developed skills in such settings, increased accessibility for participants and reduce stigma in terms of exploring emotions.

Conducting such interventions in group formats is also beneficial as it enables students to learn from each other and feel less isolated in their own emotions. Such interventions must have active learning and social learning approaches at their core, research supports active learning approaches, and participants in the study reported active

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

learning approaches such as group work, discussion, games, and hands on activities, art and craft and pair work as some of the active learning strategies which appealed to them. It must also be considered that as part of such a group, participants are individual, and certain skills appeal to certain individuals and so all participants may not find every skill useful. It is important to run such programmes for individuals in schools as participants reported the relevance of such an intervention for their age group and acknowledge the stressful time of adolescence which involves changes, school transition and examinations. Such intervention programmes can support students to set and achieve goals, teach them relaxation skills and enable them to engage in cognitive restructuring or alter their thinking style.

The current study suggests that modifying such interventions can make them more enjoyable and engaging for participants, whilst also aiding with skills development. Universal school based interventions could be considered for psychologists if the aim is to promote students understanding of emotions and provide them with coping skills. Educational Psychologists (EP) could be involved in supporting schools to deliver such interventions and supporting them to adapt such interventions for their students. EPs should be aware of difficulties faced by schools in adopting such intervention programmes and support them to facilitate such programmes, this could involve co-facilitation of groups with teachers to ensure intervention can provide appropriate support to all pupils and advice to staff in terms of what works for such interventions with youth. EPs could also provide support for teachers in terms of training for components of such CBT interventions for students.. Such intervention occurring in schools also ensure that the intervention is accessible to participants. EPs can also provide support to staff when delivering such interventions to youth in schools. This research also provides support for the delivery of such intervention in a group format, in terms of participants learning from others and finding a support in such a group. The use of a group format also reduced stigma in terms of emotional difficulties and participants felt less isolated. In terms of the modifications made to the programme, these modifications and inclusion of active learning strategies resulted in majority positive feedback on the intervention and in terms of contrasts with the study by Flynn et al. (2017b) the inclusion of active learning strategies, visuals, PowerPoints, increased pair and group work, appeared to result in an increase in positive reflections from students, with students and facilitators reporting no major changes necessary to the programme. Therefore, it is important for EPs and

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

teachers to consider flexibility in terms of school based interventions. It may be necessary to modify aspects of the content, pace, format, supporting resources for different populations and groups of students to encourage learning.

Previous research looked at between and within group differences for children following their participation in universal, school based, cognitive and dialectical behavioural therapy interventions, regarding changes in emotions, such as anxiety and depression and reports of internalising or externalising problems. This study aimed to build on this research and examine the effect of a school based dialectical behavioural therapy module on student reported difficulties with emotional regulation. In terms of quantitative data, lack of significant effects may be due to the fact that this is a typical trend for universal intervention or may have been due to the choice of questionnaire and limited sample size. In addition to quantitative data this research study also collected qualitative data to explore this phenomena and gather further information on ‘what works’ for school based emotional regulation interventions. To the author’s knowledge, this is the first study to use semi-structured interviews to investigate student’s reflections of this intervention. Qualitative data suggests that this type of brief intervention may act in a preventative nature and provide youth with the opportunity to develop emotional regulation strategies and generalise them to settings outside of the classroom. Participants reported using cognitive restructuring, thought challenging, problem solving and accumulating positive experiences as strategies to cope with their emotions and reduce their vulnerabilities to emotions. Developing more adaptive coping strategies has been linked to more positive mental health outcomes and can mediate emerging difficulties. This research suggests that providing such interventions in a group format can reduce stigma and normalise discussions about emotions, something the government seeks to promote, but apparently is not doing according to the participants of the study. Compared with previous research and from the student interviews it appears that such interventions should incorporate a range of active learning and co-operative approaches to promote student engagement, social learning and engagement.

This is the first studies to examine the effect of a module of the DBT Steps-A intervention. Furthermore, this is one of the first studies to use semi-structured interviews to research participants’ experience of a modified module of this intervention programme. Finally, this research provides a unique understanding of what works for older youth for

WHAT WORKS: SCHOOL BASED, UNIVERSAL EMOTIONAL REGULATION FOR ADOLESCENTS

emotional regulation interventions and the barriers to feasibility of these interventions in Irish post-primary school settings.

This study examined the effect of a universal, school based, modified emotional regulation module of the DBT-Steps A intervention, exploring ‘what works’ for school based cognitive behavioural therapy and dialectical behavioural therapy interventions for adolescents. It is hoped that further research will be conducted into this intervention programme and the effects of other modified modules will be studied. Continued evaluation of evidence based intervention by educational psychologists is essential, they are in a key position to assume the role of the scientist practitioner, systematically evaluating interventions and supporting schools and the education system to meet the well-being needs of their students.