

**Fostering Well-being with Secondary Students
Through a Mindfulness and Yoga Program:
A Mixed Methods Study of Emotion Regulation
and Perceived Stress**

by

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Abstract

Mindfulness in schools has emerged over the past few years as an intervention strategy for increasing emotional awareness and emotion regulation and managing student stress. However, in the literature, the affordances and constraints of introducing mindfulness in schools to improve youth well-being has received little attention. This research aims to address this gap by exploring the feasibility and benefits of using mindfulness and yoga to foster well-being (i.e., greater emotion regulation and less perceived stress) among secondary school students. For the purposes of this study, mindfulness is defined as a present-moment, non-judgmental attention and awareness of the ongoing activity of internal and external stimuli. Two phases of this study focused on developing action initiatives for a Youth Wellness Program (YWP) and examining the effects of youth participation on emotion regulation and stress using a mixed-methods convergent design. A collaborative approach to fostering well-being combined participant feedback with mindfulness education to inform the development of a relevant and effective program. Twenty-nine secondary students participated in eight 45-minute mindfulness sessions and eight 45-minute yoga sessions during lunch and after school hours over eight weeks. Four additional weeks of 45-minute sessions that combined mindfulness and yoga were optional and attended by 23 participants. Participants completed measures at three points in time: pre-intervention, during the intervention and post-intervention. It was expected that participation in the mindfulness- and yoga-based program would yield an increase in emotion regulation and a decrease in perceived stress among participants. Quantitative results indicated that an improvement in emotion regulation, perceived stress, self-regulation, mindfulness and perceptions of well-being was observed as a result of participation in the YWP for all participants. There was a negative correlation between mindfulness and emotion regulation indicating that as mindfulness increased difficulty in emotion regulation decreased. The baseline measure of positive youth development (i.e., measures of self-confidence and empathy) revealed that the junior grade level participants had higher than average empathy prior to the YWP while self-confidence was similar between the two grade levels (junior and senior) in terms of comparison. Qualitative analyses of the participants' feedback yielded eight categories with 21 themes and 107 sub-themes that reflected and provided a deeper understanding of the improvements found in the quantitative data. The implications of these findings for education and future research are discussed.

Keywords: mindfulness; emotion regulation; stress; yoga; adolescence; perceived stress; well-being

Dedication

I dedicate this thesis

To my parents Frank and Iris,

To my siblings Jan Marie, Jennifer and Anthony

To my Nana (Giovanna)

and

To all of the amazing people who have guided me, and have given me the strength to face adversity and to forge on through life's difficulties.

It has been through challenging life experiences that I have found a desire to live a life without chaos. I am so grateful for the support of many loved ones, both living and passed. Without these experiences, this thesis would not have been possible; my quest for peace began as a result of many losses and hardships that I overcame as a young person.

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Table of Contents

Approval	ii
Ethics Statement	iii
Abstract	iv
Dedication	vi
Acknowledgements	vii
Table of Contents	viii
List of Tables	xv
List of Figures	xvi
List of Acronyms	xviii

Chapter 1. Introduction	1
1.1. Overview	1
1.2. Research Context.....	4
1.3. Research Questions.....	5
1.4. Structure of the Thesis	6

Chapter 2. Literature Review	8
2.1. Part 1 – The Problem	11
2.1.1. Stress	11
2.1.2. Self-Regulation	12
2.1.3. Emotion Regulation.....	13
Modal Model of Emotion	13
The Process Model of Emotion Regulation	15
Situation Selection	16
Situation Modification.....	17
Attentional Deployment (Distraction & Rumination)	17
Cognitive Change (Reappraisal)	18
Response Modulation (Expressive Suppression).....	18
Emotion Regulation in Adolescence	19
Summary	22
Emotion Regulation and the Practice of Mindfulness	23
Attention to the Present	24
Non-Judgment	24
2.2. Part 2 – The Solution.....	27
2.2.1. Fostering Well-being through Positive Youth Development and School-Based Mindfulness and Yoga Programs.....	27
2.2.2. Well-Being.....	29
2.2.3. Positive Youth Development	30
2.2.4. Mindfulness	32
A Model of Mindfulness.....	33
Axiom I - Intention.....	34
Axiom II - Attention	34
Axiom III - Attitude	35
Mindfulness Programs in Clinical and Non-Clinical Settings	36
Clinical Programs	36
Mindfulness Based Stress Reduction (MBSR)	36
Mindfulness Based Cognitive Therapy (MBCT)	39
Mindful Awareness and Resilience Skills for Adolescents (MARS-A)	40

Non-Clinical (School-Based) Mindfulness Programs for Youth	41
Stressed Teens (MBSR-T)	41
Learning to Breathe (L2B)	41
Summary	42
2.2.5. Mindfulness for Teachers.....	42
Mindfulness-Based Wellness Education (MBWE)	44
Cultivating Awareness and Resilience in Education (CARE)	44
Stress Management and Resiliency Techniques in Education (smartEducation)	45
Summary	45
2.3. Current Research on the Effects of Clinical and Non-Clinical (School-Based) Mindfulness and Yoga Programs for Adolescents	46
Clinical Settings.....	47
Substance Abuse and Sleep Problems	47
Behaviour Disorders	48
Developmental Disabilities	49
Mental Health Outpatient.....	50
HIV	50
Summary	51
Non-Clinical (School-Based) Settings.....	52
Disadvantaged Youth	52
Learning Disabilities.....	52
Typically Developing Youth	53
Limitations in the Research	55
Yoga as a School-Based Intervention.....	56
Summary	57
Chapter 3. Research Methods	59
3.1. Program.....	59
3.1.1. Objectives	59
3.1.2. Learning Outcomes.....	60
3.1.3. Program Development (pilot)	60
3.1.4. Program Structure.....	61
Materials.....	61
Details of the Program	63
3.2. Study	63
3.2.1. Study Aims	63
3.2.2. Research site	64
3.2.3. Participants	64
3.3. Pedagogy	67
3.4. Procedure: Ethics and Reciprocity	67
3.5. Procedure: Data Collection	68
3.5.1. Quantitative Measures	70
Emotion Regulation.....	70
Perceived Stress (10).....	71
Self-Regulation.....	71
Mindfulness	72
Self-Reported Perceived Stress Scale (Pre- and Post- Session).....	72
Post-Pre- Retrospective Assessment	72
Positive Youth Development.....	73
3.5.2. Qualitative Measures	74
Semi-structured Interviews	74
Participant Post Session Reflections (Mindfulness & Yoga).....	74

Vignettes	75
Parent Observations	75
Researcher Field Notes	76
3.6. Analysis: Research Methodology / Design	76
3.7. Trustworthiness and Teacher as the Researcher	77
3.7.1. Trustworthiness.....	77
3.7.2. Teacher as the Researcher.....	77
Chapter 4. Research Findings	78
4.1. Part 1 Quantitative Data	78
4.1.1. Forward.....	78
4.1.2. Attrition and Missing Data	78
4.1.3. Overview of the Data.....	79
Independent Variables	79
Grade Level and Divorce	79
Grade Level and Non-Clinical Mental Health.....	79
Grade Level and Substance Use/Abuse.....	80
4.1.4. Quantitative Measures and Independent Variables	80
Difficulty in Emotion Regulation Scale (DERS).....	80
DERS and Independent Variables.....	81
Perceived Stress Scale (PSS)	82
PSS and Independent Variables	82
Self-Regulation Questionnaire (SRQ).....	84
SRQ and Independent Variables.....	84
Mindfulness Attention and Awareness Scale (MAAS).....	85
Grade Level	86
Non-Clinical Mental Health.....	86
Divorced Parents	86
PSS and MAAS	86
Post-Pre Retrospective Assessment	87
Mindfulness Session Stress (MSS).....	89
Grade Level	90
Non-Clinical Mental Health	90
Divorced Parents	90
Yoga Session Stress (YSS)	90
Grade Level	91
Non-Clinical Mental Health	91
Divorced Parents	91
Positive Youth Development (PYD)	91
Grade Level	92
Non-clinical Mental Health	92
Divorced Parents	93
Summary.....	93
4.2. Part 2A: Qualitative Data.....	94
Frequently Used Terms.....	96
4.3. Category 1: Stress.....	97
4.3.1. Theme 1 – Experiencing Awareness of Stress	98
Identification of Stress.....	99
Causes of Stress.....	100
Impact of Stress	101
4.3.2. Theme 2 – Building Capacity for Stress Management.....	102
Managing Stress	102
Strategies to Manage Stress.....	103
Summary of the Category Stress.....	105

4.4.	Category 2: Emotion Regulation	105
4.4.1.	Theme 1 – Awareness of Emotions	107
	Realize	107
	Recognize	107
4.4.2.	Theme 2 - Managing Emotions	108
	Handle Emotions.....	108
	Control.....	109
	Dealing with Emotions.....	110
4.4.3.	Theme 3 - Strategies for Managing Emotions.....	110
	Removing Oneself.....	110
	Working through the Situation.....	111
	Using a Distraction.....	112
	Summary of Category Emotion Regulation	112
4.5.	Category 3: Yoga and Mindfulness	113
4.5.1.	Theme 1 - Mind/Body Connection.....	114
	Complementary Practice.....	115
	The Physical Body - YOGA.....	115
	The Mind - Mindfulness.....	116
4.5.2.	Theme 2 - Benefits	117
	Integration of Skills.....	117
	Balance	118
	Summary of the Category Yoga and Mindfulness	119
4.6.	Category 4: Individual Benefits.....	120
4.6.1.	Theme 1 - Acquired Skills	121
	Breathing Exercises	122
	Visualizations	123
	Present Moment Awareness.....	125
4.6.2.	Theme 2 - Impact on Mental Health.....	125
	Change in the Occurrence and Intensity of Anxiety Attacks.....	126
	Improvement in Symptoms Related to Depression	126
4.6.3.	Theme 3 – Understanding the Impact of Stress on Well-being.....	127
	Physical.....	127
	Mental	128
	Emotional	128
	Summary of the Category Individual Benefits.....	129
4.7.	Category 5: Social Impact	129
4.7.1.	Theme 1 - Impact of Peer Involvement during the YWP	131
	Influence on Participation.....	132
	Building Community Through a Common Experience.....	133
4.7.2.	Theme 2 - Impact on Relationships	134
	Family/Partner Relationships	134
	Peer Relationships	135
4.7.3.	Theme 3 - Change	135
	Observable Change	136
	Impact Beyond Our Community - Changing the World.....	136
	Summary for Social Benefits.....	137
4.8.	Category 6: Insights into Curriculum Development	137
4.8.1.	Theme 1 - Challenges.....	139
	Attending Sessions	140
	Difficulty Focusing	140
	Yoga	141
4.8.2.	Theme 2 - Noteworthy.....	142
	Researcher & Session Availability/Flexibility	142
	General Suggestions.....	143

Combination Classes.....	143
The YWP as a Credit Course	143
Longer Yoga Sessions.....	144
Session Space.....	144
4.8.3. Theme 3 – The Recommendation of the Program to Others	145
Grateful for the Experience	145
Beneficial to Others.....	146
Expand the Target Audience	146
Summary for the Category Insights Into Curriculum Development	147
4.9. Category 7: Educators Role in Fostering Well-being	148
4.9.1. Theme 1 - Teacher Expectations	149
Pressure.....	150
Workload	150
4.9.2. Theme 2 - Suggestions	151
Offer Programs.....	151
Improve Communication	152
Summary of the Category Educators Role in Fostering Well-being	152
4.10. Category 8: Insight into the Value of Well-being from the Perspective of Youth	153
4.10.1. Theme 1 – Obstacles	154
Too Busy	154
Socially Inconvenient	155
4.10.2. Theme 2 - Priority.....	156
No Time.....	156
Don't Think About It.....	157
4.10.3. Theme 3 - Lack of Knowledge and Limited Life Experience	157
Never Taught	158
We Are Too Young to Appreciate Well-being	158
Living in the moment.....	158
Distorted Perspective	159
Summary of the Category Insight into the Value of Well-being	159
4.11. Summary Thematic Analysis.....	160
4.11.1. Part 2 B -Thematic Analysis (Parent Observations Data)	161
4.12. Category 1: Stress.....	163
4.12.1. Theme 1 – Observed Navigation of Stress	164
Manage Stress	165
Dealing with Stress	165
Coping with Stress	165
4.12.2. Theme 2 – Observed Impact of Skill Application	166
Calm/Relaxed.....	166
Being Present.....	166
Improved Self-Awareness.....	167
Summary of the Category Stress.....	167
4.13. Category 2: Emotion Regulation	167
4.13.1. Theme 1 - Ability to Regulate Emotions.....	168
Manage Emotions	168
Improved Emotional Reactivity	169
4.13.2. Theme 2 - Awareness of Emotions	169
An Awareness of the Escalation of an Emotional Response.....	169
The Implementation of Strategies Improving the Awareness of Emotions	170
General Awareness.....	170
Summary of the Category Emotion Regulation	170
4.14. Category 3: General Feedback	171
4.14.1. Theme 1 – Program Appreciation	171

Benefited from Participation.....	172
Timing	173
4.14.2. Theme 2- Program Continuation.....	173
Early Intervention	173
Expand the Target Audience	173
Summary of the Category General Feedback	174
4.14.3. Summary of Parent Observations	174
4.15. Part 2C - Vignettes	174
4.15.1. Junior Grade Level.....	175
Lee	175
Quantitative Data.....	177
Summary of Quantitative Data	180
Qualitative Data	182
Summary of Mindfulness Reflections	182
Summary of Yoga Reflections	182
Summary of Post-Program Interview.....	183
Summary of Qualitative Data.....	183
Converging the Data – Quantitative and Qualitative	184
Overall Observations and Conclusions	187
Charlie	188
Quantitative Data.....	189
Summary of Quantitative Data	192
Qualitative Data	194
Summary of Mindfulness Reflections	194
Summary of Yoga Reflections	194
Summary of Post-Program Interview.....	194
Summary of Qualitative Data.....	195
Converging the Data – Quantitative and Qualitative	195
Overall Observations and Conclusions	198
Dakota.....	199
Quantitative Data	201
Summary of Quantitative Data	204
Qualitative Data	205
Summary of Mindfulness Reflections	206
Summary of Yoga Reflections	206
Summary of Post-Program Interview.....	207
Summary of Qualitative Data.....	207
Converging the Data – Quantitative and Qualitative	207
Overall Observations and Conclusions	211
4.15.2. Senior Grade Level	212
Sky	212
Quantitative Data.....	214
Summary of Quantitative Data	217
Qualitative Data	218
Summary of Mindfulness Reflections	219
Summary of Yoga Reflections	219
Summary of Post-Program Interview.....	220
Converging the Data – Quantitative and Qualitative	221
Overall Observations and Conclusions	224
Taylor	224
Quantitative Data	226
Summary of Quantitative Data	229
Qualitative Data	230
Summary of Mindfulness Reflections	231
Summary of Yoga Reflections	231

Summary of Post-Program Interview.....	232
Summary of Qualitative Data.....	233
Converging the Data – Quantitative and Qualitative	234
Overall Observations and Conclusions	237
Dale.....	237
Quantitative Data.....	239
Summary of Quantitative Data	243
Qualitative Data	244
Summary of Mindfulness Reflections	244
Summary of Yoga Reflections	245
Summary of Post-Program Interview.....	246
Summary of Qualitative Data.....	246
Converging the Data – Quantitative and Qualitative	247
Overall Observations and Conclusions	250
4.16. Convergence of Findings: Qualitative and Quantitative Data.....	250
4.16.1. Emotion Regulation.....	253
4.16.2. Stress	254
4.16.3. Self-Regulation	256
4.16.4. Mindfulness	257
4.16.5. Post- Pre- Retrospective Assessment - Perceptions of Well-being	259
4.16.6. Positive Youth Development.....	259
4.16.7. Summary.....	262
Chapter 5. Discussion	263
5.1. Purpose and Significance.....	263
5.1.1. The Impact of the YWP	264
Strengths and Limitations of the Research.....	272
Strengths	273
Limitations.....	278
Future Directions.....	292
Final Thoughts	294
References	298
Appendix A. Parent Information Letter	312
Appendix B. Student Assent.....	313
Appendix C. Student Questionnaire	316
Appendix D. Difficulty in Emotion Regulation Scale (DERS)	319
Appendix E. Perceived Stress Scale 10 (PSS)	322
Appendix F. Self-Regulation Questionnaire (SRQ)	323
Appendix G. Mindfulness Attention and Awareness Scale (MAAS)	326
Appendix H. Post-Pre- Retrospective Assessment	328
Appendix I. Positive Youth Development Questionairre (Short Version)	330
Appendix J. Mindfulness Sessions	337
Appendix K. Reflective Questions - Mindfulness	338
Appendix L. Yoga Sessions	339
Appendix M. Reflective Questions – Yoga.....	340
Appendix N. Optional Sessions	341
Appendix O. Reflective Questions – Optional Sessions	342
Appendix P. Post-program Interview Questions	343
Appendix Q. Amended Student Assent	344
Appendix R. Amended Parent Letter	345

List of Tables

Table 3.1.	Attendance table.....	66
Table 4.1	Frequency of Reported Parental Divorce by Grade Level.....	79
Table 4.2	Frequency of Reported Non-Clinical Mental Health by Grade Level	80
Table 4.3	Frequency of Reported Substance Use/Abuse by Group	80
Table 4.4	Difficulties in Emotion Regulation Scale Pre- vs Post-Program Scores	81
Table 4.5	Difficulty in Emotion Regulation Median Split Difference.....	81
Table 4.6	Total Participant Pre-Program and Post-Program Mean (SD) for the Perceived Stress Scale	82
Table 4.7	Perceived Stress Scale Median Split Difference	83
Table 4.8	Self-Regulation Questionnaire Pre- vs Post-Program Scores.....	84
Table 4.9	Self-Regulation Questionnaire and Median Split Difference.....	84
Table 4.10	Mindfulness Awareness and Attention Scale Pre- vs Post-Program Scores	85
Table 4.11	Mindfulness Attention and Awareness Median Split Difference	86
Table 4.12.	The Frequency of Participant Responses Overall Means Before and After the YWP	88
Table 4.13	Mindfulness Session Stress	90
Table 4.14.	Yoga Session Stress	91
Table 4.15.	Lee's Quantitative Scores.....	178
Table 4.16.	Charlie's Quantitative Scores	190
Table 4.17.	Dakota's Quantitative Scores	202
Table 4.18.	Sky's Quantitative Scores.....	215
Table 4.19.	Taylor's Quantitative Scores.....	227
Table 4.20.	Dale's Quantitative Scores	241
Table 4.21.	Convergent Data Points	261
Table 5.1.	A visual representation of the tensions between quantitative and qualitative paradigms.....	275

List of Figures

Figure 2.1	A visual representation outlining the problem and the solutions/strategies proposed by this research.	9
Figure 2.2	A visual representation of the literature review for the problem as proposed by this research.	9
Figure 2.3	A visual representation of the literature review for the solution as proposed by this research.	10
Figure 2.4	A visual representation of the modal model of emotion taken from p. 5 of James Gross's Handbook of Emotion Regulation (2014).....	14
Figure 2.5	A visual representation of the process model of emotion regulation from p. James Gross's Handbook of Emotion Regulation (2013, p. 10).	16
Figure 2.6	A visual representation of well-being.....	30
Figure 2.7	A visual representation of the three axioms of mindfulness Intention, Attention and Attitude.	34
Figure 3.1	A visual representation of the quantitative data collection measures.....	69
Figure 3.2	A visual representation of the qualitative data collection procedure.....	70
Figure 4.1.	A visual representation of the process of thematic analysis for qualitative inquiry.....	95
Figure 4.2.	A visual representation of the themes created to separate data into categories prior to coding and analysis.	96
Figure 4.3.	A visual representation of the thematic analysis of stress according to participant's post-YMP interview.....	98
Figure 4.4.	A visual representation of the thematic analysis of emotion regulation according to participant's post-YMP interview.	106
Figure 4.5.	A visual representation of the thematic analysis of yoga and mindfulness according to participant's post-YMP interview.....	114
Figure 4.6.	A visual representation of the thematic analysis of the category individual benefits according to participant's post-YMP interview.	121
Figure 4.7.	A visual representation of the thematic analysis of the category social impact according to participant's post-YMP interview.	131
Figure 4.8.	A visual representation of the thematic analysis of the category insights into curriculum development according to participant's post-YMP interview.....	139
Figure 4.9.	A visual representation of the thematic analysis of the category educator's role in fostering well-being according to participant's post-YMP interview.....	149

Figure 4.10.	A visual representation of the thematic analysis of the category insight into the value of well-being from the perspective of youth according to participant's post-YMP interview.....	154
Figure 4.11.	A visual representation of the categories created from parent observations to separate data prior to coding and analysis.	162
Figure 4.12.	A visual representation of the categories and themes that emerged from the parent observations.....	163
Figure 4.13.	A visual representation of the thematic analysis of the category stress according to parent observations.	164
Figure 4.14.	A visual representation of the thematic analysis of the category emotion regulation according to parent observations.	168
Figure 4.15.	A visual representation of the thematic analysis of the category general feedback according to responses from the parent observation post-YMP survey.....	171
Figure 4.16	A visual representation of the convergent design timeline	252

List of Acronyms

BCAHS	BC Adolescent Health Survey
BCCH	British Columbia Children's Hospital
DERS	Difficulty with Emotion Regulation Scale
LFAS	Langley Fine Arts School
MAAS	Mindfulness Attention Awareness Scale
PSS	Perceived Stress Scale
SEL	Social Emotional LEARNING
SFU	Simon Fraser University
SRQ	Self-Regulation Questionnaire
YWP	Yoga Wellness Program

Chapter 1. Introduction

1.1. Overview

Austin, a 13-year old male, began complaining to his mother each morning on the way to school about the stomach-aches he was suffering from; each day it was a battle to get Austin to attend school. The anticipation of these conflicts became so overwhelming that Austin's mother began to allow him to stay home. Austin missed foundational instruction, and the initially spotty absences became subsequently more consistent, which concerned his teacher. After two months of consistent absence, Austin's teacher referred him and his mother to the counseling department, in an effort to determine the cause of his absences. During the interview, Austin's mother portrayed Austin as a willful child, prone to tantrums when he did not get his own way. She described these intense outbursts as "total melt downs," replete with threats of suicide if he was forced to return to school. In response, Austin pulled his hoodie over his head and eventually erupted in anger, screaming at his mother to "shut up" at which point he abruptly got up and ran out of the building to the car. He did not return to the school; instead, he finished the year being home schooled by his mother.

Lisa is a seventeen (17) year old female who, as Valedictorian of her class was highly involved in school clubs and voted Class President. After the school day and on weekends, Lisa works at a local drug store, which limits her social life with friends and family. She suffers from debilitating migraine headaches, flu like symptoms and what appears to be anxiety attacks while alone at night, which she has kept secret. These accumulated issues resulted in her missing school; her work both there and at her job has suffered. Due to her absence from school and her sudden inconsistency in academic performance, Lisa was referred to the school counselor to inquire about these concerns from an educational perspective. Lisa scheduled an appointment that was cancelled and rescheduled on four occasions due to her illness or conflicts in her over-scheduled life. When Lisa finally arrived at her counseling appointment late, she initially

presented stoic and without emotion, but within several minutes of discussion Lisa broke down, crying hysterically, hyperventilating and disclosing that she had many deadlines. Lisa reported that the counseling appointment was creating added stress due to her lack of time and long list of commitments.

Throughout this thesis, I refer to the targeted age group as youth, students, adolescents and teens. Both of these students exemplify the struggle to regulate emotions adaptively; Austin has difficulty controlling the intensity of his reaction to the thought of attending school (under controlling), while Lisa controls her emotional state, making it difficult for her to recognize the trajectory of her emotions at any given time (over controlling). Both Austin and Lisa are using maladaptive strategies, which, over time, could put them at risk of persistent utilization of poor emotion regulation, eventually impacting their ability to reach future development stages. In my work as a school counselor, these scenarios have become all too familiar. Over the course of my career, I have observed the developmental period between the ages of 13 and 17 to be a high-risk period in terms of susceptibility to stress and the difficulty in regulating emotions during these times. In 2008, during the most difficult year of my professional career, I became very interested in the concept of emotion regulation. I began to observe a disturbing number of secondary students who were unable to manage the smallest everyday hassle, reaching for destructive and unhealthy ways of coping. Coincidentally, it was during this time that I was inundated with referrals from a variety of sources for secondary students who were experiencing unmanageable stress, reported suicide ideation, anxiety attacks, episodes of depression, cutting and other forms of self-injurious behavior. Similarly, at this time, I began to notice the development of some concerning classroom trends in the elementary and middle school population; these included complaints of general illness, such as headaches or stomach-aches, all seemingly with the unconscious goal of avoiding school and the torment that school represented to them. Consequently, I decided to teach about anxiety using mindfulness techniques geared towards younger students with a parent education component. The results were uplifting and encouraging, as daily attendance of the students targeted for intervention improved. I provided weekly sessions in mindfulness to students with a summary of the practice sent to parents by email. The students were also given homework assignments to complete with their families. During the course of the year both parents and students began to report changes in their quality of life as they employed the learned techniques

of slowed thought and attention to body sensations when experiencing anxiety induced symptoms and their corresponding challenges. Although I was the Grade 1 to 8 counselor, I consistently developed frequent interaction with students from the high school. It was at this time that I observed that high school students were also experiencing great difficulty in managing emotions and were displaying poor coping strategies and increases in self-reported panic attacks and recurrent thoughts of suicide. To address these ongoing issues, I decided to partner with a local mental health professional to develop interactive workshops for the high school students on topics such as stress, anxiety, suicide ideation, conflict resolution, problem solving and emotion management. After attending the workshops, many students reported their appreciation that topics such as mental health were being addressed and that they had the opportunity to learn about skills, knowledge and the resources that could assist them during emotionally challenging situations. Consequently, in an effort to improve my own professional practice, I sought out and attended a number of mindfulness-based workshops and teacher education sessions including an 8-week Mindfulness Based Stress Reduction (MBSR) program which will be described at length in Chapter 3. In 2008, I became a yoga teacher, and in 2015 I studied Deep Meditation (a form of Transcendental Meditation), to enhance my personal practice. These rich experiences ignited my interest in finding an approach that would implement mindfulness and yoga education within the school setting with the hope of improving secondary students' ability to regulate emotions and manage stress.

Recently, the Ministry of Education in British Columbia has also recognized a gap in social emotional learning and launched an initiative with the aim to revise curriculum for the prioritization of all learners. Over the past 6 years, advisory groups, comprised of teachers from across British Columbia worked collaboratively to collect and provide relevant feedback in order to develop equitable curriculum. In September 2016, newly designed curriculum was implemented throughout the education system in B.C. that included the consolidation of physical education with health education for Grade 1 to 12, replacing the traditional physical education model. This new physical and health education curriculum (PHE) provides students with an opportunity to know and understand the physical aspects of sport, as well as the resources and information to stay healthy throughout their lifespan. The introduction of curricular competencies such as physical literacy, healthy active living, social and community health and mental

wellness have been expanded on throughout the curriculum for physical and health education. The B.C. Ministry of Education has suggested that, as educators, we have an opportunity to provide students with effective skills to assist them in choosing a path toward improved health and well-being. A key component of this thesis entailed the design of an effective program consisting of mindfulness and yoga education curriculum; its design was, in part, assisted by the feedback received from youth throughout the development of the program.

The aim of the present study is to investigate the perceptions, benefits and effects of attending an 8-week mindfulness and yoga education program referred to as the Youth Wellness Program (YWP) on emotion regulation and perceived stress among 29 secondary students. This research merges two philosophical approaches to managing emotion regulation and stress: (a) the implementation of a school-based mindfulness education program in combination with (b) a school-based yoga program. The objectives of this research were: (a) to identify how secondary students regulate emotions and manage stress, (b) to understand which approaches to emotion regulation and stress are most effective in fostering youth well-being, and (c) to explore the potential of integrating YWP into the school curriculum. To address these aims, a mixed methods convergent design was used to analyze data (Creswell & Poth, 2017). Creswell and Poth conceptualize this method as the merging of quantitative and qualitative data analyses to provide a more insightful depiction of the problem. This approach enables the data to be viewed from multiple perspectives and provides an opportunity to increase understanding of how stress affects a secondary student's ability to regulate emotions and how a school-based mindfulness and yoga program and positive youth development assists in the fostering of well-being. Before describing the study and presenting the results and discussion, a literature review based on a comprehensive search of the main areas of focus for the thesis (e.g., emotion regulation, stress, mindfulness and yoga programs in schools and positive youth development) is presented.

1.2. Research Context

The majority of academic research on the impact of a school-based mindfulness and yoga program on emotion regulation, perceived stress and well-being among youth

is relatively limited. The literature on this topic tends to focus on special populations, such as incarcerated or homeless youth, marginalized teens or those with clinical disorders or psychosocial disadvantages. This study focused on what might be described as ‘typically developing’ youth having no clinical diagnosis. The intention was to help transform how young people engage with stressful events by helping them learn how to identify both their ability and inability to manage their emotions. Further, this goal of stress awareness was coupled with new strategies that help to manage stress and to regulate emotions with the aim of living a happier, healthier and more balanced life. A further intention was to use the study as an example of how educators might approach key components of the recently imposed physical education curriculum. British Columbia’s guidelines for curriculum development for physical and health education require educators to implement curriculum practices that promote health and well-being throughout the school year. It is hoped that the information from this study will provoke further inquiry and dialogue into how educators can encourage youth to value their well-being, while similarly providing both youth and educators with the tools to support this area of development.

1.3. Research Questions

The present study brings together four main areas that have not yet been researched together in a school context: (a) the implementation of a school-based mindfulness and yoga education program and the impact on secondary school students’ (b) emotion regulation, (c) perceived stress, and (d) perceptions of well-being.

The primary research question of this study is: “To what extent does the implementation of a secondary school-based mindfulness and yoga program (YWP) result in improvements in participants’ emotion regulation, perceived stress and sense of well-being?” This study aims to address the following questions in order to guide the research at all stages of the process:

To what extent does the YWP influence participants’ ability to become aware of and attentive to their emotional responses to stress?

In what ways did the participants apply the strategies and skills introduced through participation in the YWP to regulate emotions and manage stress?

How were these skills and strategies transferred to daily life by each student participant?

How were youth able to reflect critically on how to foster well-being as a result of participating in the YWP?

Which findings from the YWP might help to inform curriculum development in the area of well-being in education? How might they serve the purpose of well-being education?

Using a mixed methods approach, other more focused questions related to the students' experiences in the program and their perceptions of how the program impacted on their sense of well-being are also explored and discussed Chapters 4 and 5.

The Yoga Wellness Program (YWP) was designed with the following goals in mind:

- Drawing awareness and attention to the physical, mental and emotional response to stress.
- Introducing and encouraging the development of skills/strategies to regulate physical, mental and emotional responses to stress.
- The acquisition and application of skills to manage intense emotion and stress that can be generalized to daily life.
- Encouraging critical reflection by youth on how they cope with stress by learning to attend and focus through mindfulness and yoga practices, and by developing awareness of habitual responses that may be unhelpful or unhealthy.

1.4. Structure of the Thesis

This thesis consists of six chapters, including this introduction chapter. This section outlines the contents of each chapter describing the literature review, research methods, research findings (quantitative and qualitative), and discussion with implications for education.

Chapter 2 provides a two-part review of the literature and theoretical basis of the research. This chapter focuses on literature related to the concepts, theories and

research on stress, self-regulation, emotion regulation, well-being, positive youth development, mindfulness and school-based mindfulness research with adolescence.

Chapter 3 outlines the research methods for the program and the study including: objectives, learning outcomes, program development, program structure, study aims, research site, participants and data collection. Procedures and issues related to ethics, reciprocity, trustworthiness and teacher as the researcher.

Chapter 4 provides an analysis and summary of the research data including the results from the quantitative and qualitative data. The thematic analysis and convergence of the qualitative data included (a) post-program semi-structured interview data (with eight categories, twenty-one themes and 107 emergent sub-themes), (b) parent observations post-program survey data, (c) six participant vignettes, and (d) convergence of quantitative and qualitative findings.

Chapter 5 provides a discussion and implications such as purpose and significance, program impact, implications, strengths and limitations, a summary and conclusion of the main findings and the connection with the literature, considerations of the research suggesting future directions and final thoughts.

Chapter 2. Literature Review

The purpose of this literature review is to provide a comprehensive examination of the research field in order to identify evidence-informed research related to emotion regulation in adolescence and mindfulness. This chapter includes a review of relevant published reports, and an examination of theoretical models related to the exploration and investigation of emotion regulation in adolescence and mindfulness. The scope of this review considered research and professional documents from both Canadian and international literature. Criteria for the inclusion of literature included: theoretical literature, professionally reviewed or juried research documents, summary and literature review articles. This chapter has been separated into two sections: Part 1 - The Problem includes stress, self-regulation and emotion regulation and Part 2 - The Solution includes well-being, mindfulness, yoga and positive youth development. The three figures below were designed to orient the reader as to how the literature review has been structured. Figure 2.1 outlines the problem and the suggested solutions of this research. Figure 2.2 is a visual representation the approach to the literature for Part 1 of this review. The Problem and Figure 2.3 is a visual representation of the suggested solutions to the problem presented in Part 2 of the literature review.

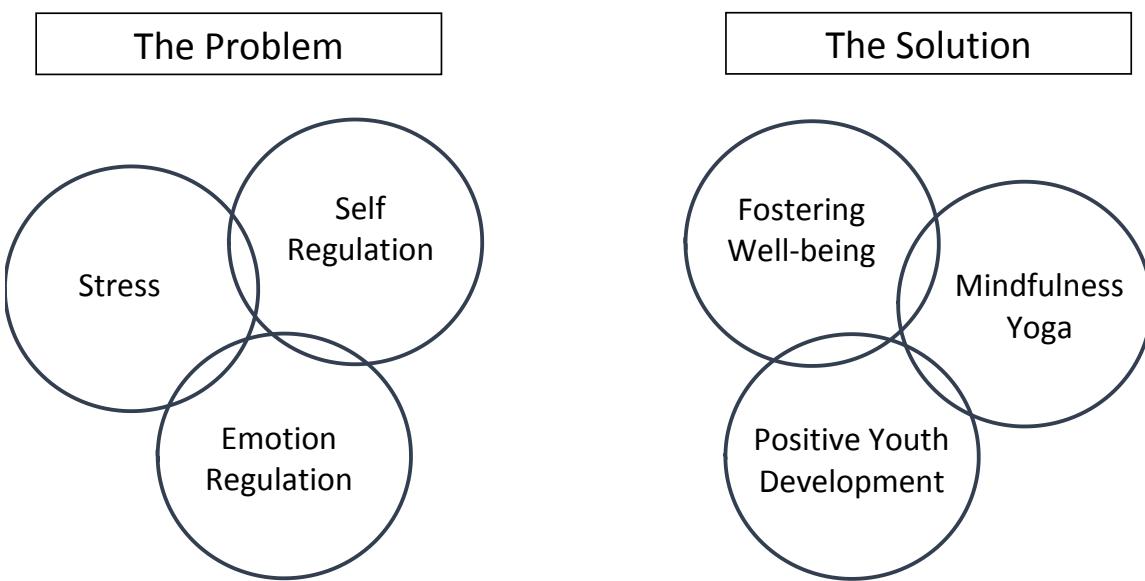


Figure 2.1 A visual representation outlining the problem and the solutions/strategies proposed by this research.

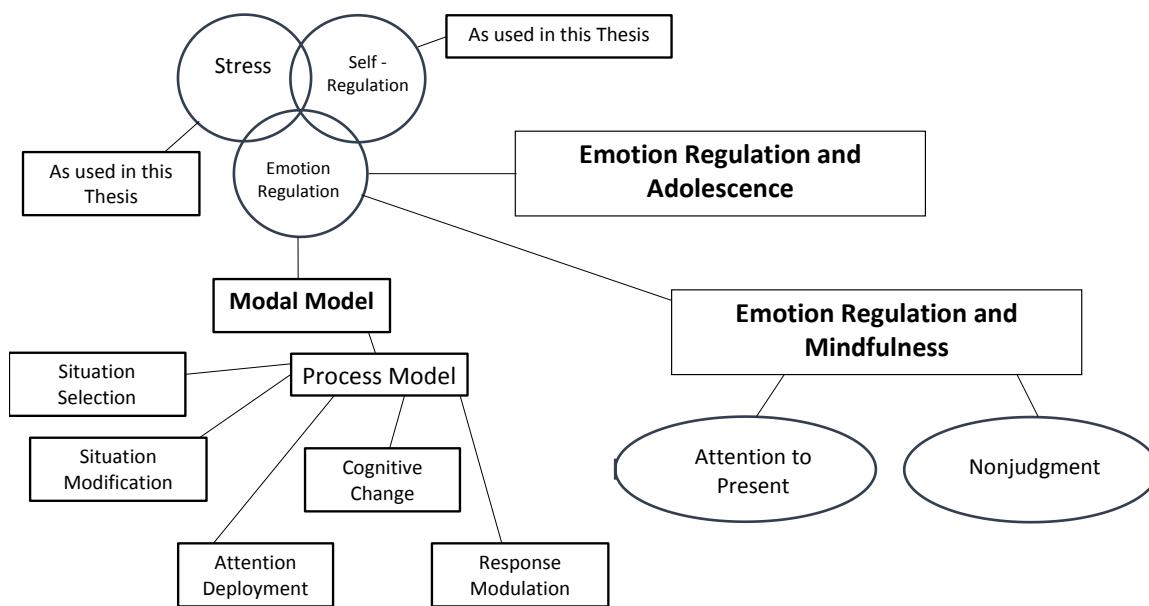


Figure 2.2 A visual representation of the literature review for the problem as proposed by this research.

Part 2: The Solution

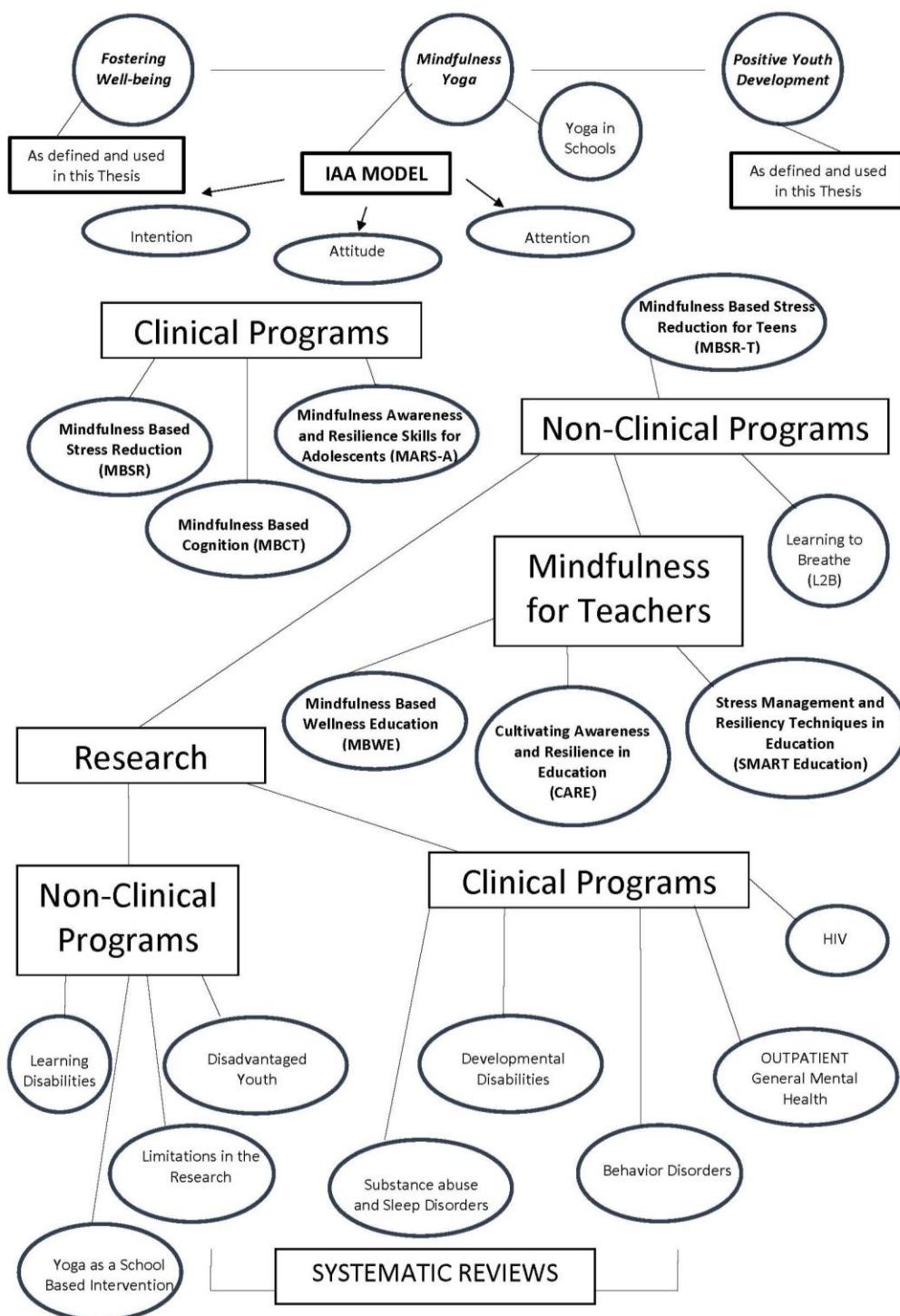


Figure 2.3 A visual representation of the literature review for the solution as proposed by this research.

2.1. Part 1 – The Problem

Part 1 of the literature review begins with defining the problem being addressed throughout the thesis. Initially stress and self-regulation is defined with a focus on the theoretical constructs of emotion regulation according to James Gross's Theory of Emotion Regulation. Part 1 also includes emotion regulation in adolescence and the influence of mindfulness on emotion regulation.

2.1.1. Stress

Adolescence is a phase of life between childhood and adulthood often involving a tremendous amount of stress for the developing youth in multiple domains of functioning (Riediger & Klipker, 2014). According to the Provincial Injury Prevention Program, (Alberta Health Services, 2015), among the many stressors mentioned by adolescents, the most common includes: time pressures, cultural differences, lack of money, responsibilities, sexual identity, sexual orientation, aggression or violence, divorce or separation, worrying about the future, bullying and abuse, parents losing their jobs, relationships with parents, homework deadlines and tests, pleasing parents, teachers, and friends, relationships and dating, appearance and self-esteem, death or illness in the family, friends, peer pressure, and teasing. Understanding the ways in which adolescents respond to stress is important in understanding their development, including their mental, physical and emotional health. Stress responses include involuntary or automatic reactions as well as voluntary attempts to manage stress.

As a school counselor, youth consistently report to me a number of common stressors that they confront: the breakdown of relationships with friends and/or family, education and work stressors, parent divorce, death of a loved one, and recurrent thoughts of suicide. Barnes, Bauza and Treiber (2003) argue that exposure to chronic stress has resulted in youth exhibiting intense emotional reactions such as anger or violence, which reportedly correlates with an increase in anxiety and depression. Compas, Connor-Smith, Saltzman, Thomsen and Wadsworth (2001) suggest that in order for an individual to be successful in adapting to stress, they must learn how to control their autonomic arousal, to think constructively, to regulate their behaviour, to

manage emotions and to act on the social and non-social environments that may alter or decrease sources of stress.

Involuntary stress responses and voluntary coping efforts are related to internalizing and externalizing emotional-behavioral problems (Compas et al., 2001) suggesting deficits in emotion regulation. The subject of emotion regulation is varied and well-researched, extending to limitless discussions of its origins and its nature. For the purpose of this thesis, I will introduce the concept of self-regulation and its association with emotion regulation. Emotion regulation will be explored in order to provide the broadest and most useful concepts for analyzing the theories on emotion regulation and mindfulness in youth.

2.1.2. Self-Regulation

The concept of self-regulation has been included in this thesis given its relevance to emotion regulation. As stated in Roy Baumeister and Kathleen Voh's (2011) "Handbook of Self-Regulation: Research, Theory and Applications", self-regulation is the ability to: (a) attain, maintain and change one's level of arousal appropriately for a task or situation, (b) control one's emotions, (c) shift and sustain one's attention and ignore distractions when required, (d) manage social interactions with understanding of how to engage in them in a sustained manner (co-regulate) and (e) to be aware of how others are feeling and thinking and adjusting behaviour to provide connection and empathy.

Stuart Shanker's (2013) model of self-regulation explores five domains: biological, emotional, cognitive, social and reflective thinking. Shanker's five domain model helps us understand self-regulation's relationship to emotion regulation. Shanker (2013) describes the emotional domain as one of the most challenging of the five domains of self-regulation, reporting a close connection between states of arousal, such as intense emotions including anger, fear, sadness, anxiety and frustration, and the ability to learn within the classroom (p. 23). Similarly, Koole, Van Dillen and Sheppes (2011) suggest that "self-regulation and emotion regulation are often so intertwined it is difficult to say where one ends and the other begins" (p. 22).

Although the focus of this thesis centers on the emotional domain of the self-regulation model, self-regulation is also referred to throughout this thesis primarily in the vignette and quantitative results section.

2.1.3. Emotion Regulation

In the past century, psychological investigations of emotion regulation have focused on psychoanalytic traditions (Freud, 1926; 1959), stress and coping (Lazarus, 1966), attachment (Bowlby, 1969), and self-regulation (Mischel et al., 1989). Gross (2002) proposes that “these pioneering theoretical efforts have laid the ground work for contemporary empirical work on emotion regulation” (p. 281). It wasn’t until the 1990s that scholarly articles describing the concept of emotion regulation began to emerge. This literature appears to have been spearheaded by James Gross’s conceptualization of emotion regulation rooted in the perspective of social psychology (Aldao, 2013). Developmental literature was the first to introduce the construct of emotion regulation as part of a framework that evolved from investigating the differences among discrete emotions and moved toward exploring the process dynamics that affect all emotions. The field of emotion regulation maintains two perspectives; a “one-factor” perspective and a “two-factor” perspective (von Scheve, 2012). According to von Scheve (2012), the “one factor” perspective assumes emotion and regulation are one, while the “two factor” perspective assumes one set of processes related to the elicitation of emotion (first factor) and the second set directed at the regulation or control of an existing emotion (second factor) (p. 2). I will be exploring the “two-factor” perspective as developed by Gross (1999), expanding on the modal model of emotion and the process model of emotion regulation. The modal model of emotion is outlined below.

Modal Model of Emotion

The modal model of emotion developed by Gross and Thompson (2007) involves “person-situation transactions that compel attention, have meaning to an individual in the light of currently active goals, and give rise to coordinated yet flexible multisystem responses that modify the ongoing person-situation transaction in crucial ways” (Gross, 2014, p. 5). This model indicates that the process of emotion generation occurs over time in a particular sequence. The sequence includes a process for emotion generation:

(a) situation; (b) attention; (c) appraisal; (d) response. Figure 2.4 is a visual representation of the modal model of emotion regulation.

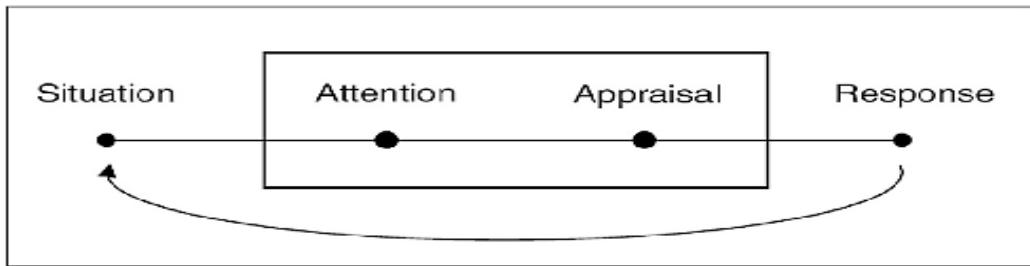


Figure 2.4 A visual representation of the modal model of emotion taken from p. 5 of James Gross's *Handbook of Emotion Regulation* (2014).

The sequence of the modal model is initiated by an internal (e.g., I will never be successful) or external (e.g., the bear circled my tent) relevant psychological situation, according to Gross (2014). Attention is directed towards the situation and brings about an appraisal (interpretation or evaluation of the situation) and the appraisal generates an individual's emotional response (Gross, 2008). The emotional response generated affects the experiential, behavioral, and physiological response systems of the individual (Gross, 2014). The response loops back to the initial internal or external situation and often changes the perspective judgement of the situation that initiated the emotional process. The following is an example of this looping process that outlines an argument between two friends.

Ava was not invited by Emily to attend a party (initial situation). As a result, Ava is angry because this has previously occurred and Emily promised she would not let it happen again. As a conversation between Ava and Emily begins to escalate, Emily begins to cry because she found out earlier that day that her parents are getting a divorce. The new information about the divorce and Emily's reaction changes Ava's response from anger to empathy, which then alters the interpersonal experience eliciting further emotions between the friends (new situation). This process is considered dynamic and ongoing due to the feedback loop generated by unfolding appraisals of emotional responses (Gross et al., 2007).

Emotion research has shifted its focus from an emphasis on discrete emotion states to the examination of the features of emotion regulation (Zeman et al., 2006). The process model of emotion regulation was developed from the modal model of emotion in

order to find a way to organize the potentially limitless number of emotion regulation strategies and show how specific strategies can be differentiated along a continuum of unfolding emotional responses (Gross, 1998; 2001). The process model is described in the next section of this chapter.

The Process Model of Emotion Regulation

Gross's (2001) conceptual framework of emotion regulation is depicted in the process model of emotion regulation. The process model "emphasizes that emotions unfold over time and distinguishes between different forms of emotion regulation on the basis of when they have their primary impact on the emotion-generative process" (Butler, Egloff, Wilhelm, Smith, Erickson & Gross, 2003, p. 49). The process model has been described as "all of the conscious and nonconscious strategies we use to increase, maintain, or decrease one or more components of an emotional response" (Gross, 2001, p. 215). The process model contends that each of the four features in the emotion generation process can be subjected to regulation and is organized along a time axis moving from left to right and analytically represents distinct phases in the elicitation of an emotion (von Scheve, 2012). The process model is a representation of moving through an ongoing process and extends beyond a single episode looping back to the initial situation from a response (Gross, 2014, p. 8). This information-processing model of emotion regulation specifies the sequence of five families in the emotion generative process, a sequence that drew its starting point from the modal model. The sequence occurs in the following order: (a) situation selection, (b) situation modification, (c) attentional deployment, (d) cognitive change, and (e) response modulation (Gross, 2014), as depicted in Figure 2.5 below.

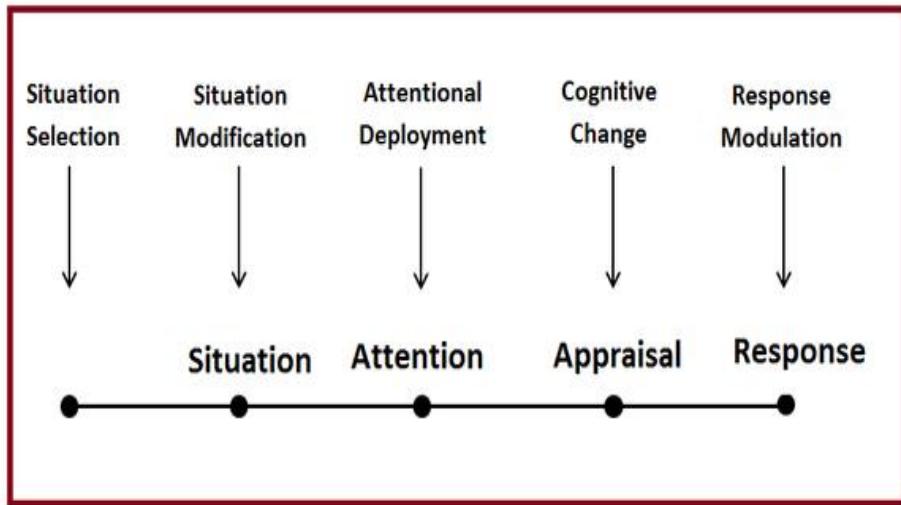


Figure 2.5 A visual representation of the process model of emotion regulation from p. James Gross's *Handbook of Emotion Regulation* (2013, p. 10).

This model divides the five families of the emotion generative process into two categories: antecedent-focused strategies and response-focused strategies. Antecedent-focused strategies include: situation selection, situation modification, attentional deployment, and cognitive change. According to Gross (2002), "antecedent-focused strategies refer to things we do before the emotion response tendencies have become fully activated and have changed our behavior and peripheral physiological responding" (p. 282). These four families of the emotion generation sequence occur before an emotional response is fully generated. The response-focused strategy includes response modulation and "refers to things we do once an emotion is already underway after the response tendencies have been generated" (Gross, 2002, p. 282). This framework suggests that if an individual activates strategies early in the emotion generative process a different profile of consequences would be the result as opposed to strategies that are implemented later in the process (Gross, 2002, p. 281). The five families involved in the process model are described below, along with the emotion regulatory strategies for attentional deployment (distraction and rumination), cognitive change (reappraisal) and response modulation (expressive suppression).

Situation Selection

Situation selection appears on the information process model first because it shapes the emotion trajectory from the earliest point possible (Gross, 2008, p. 501).

Situation selection involves “taking actions that make it more (or less) likely that one will end up in a situation that one expects will give rise to desirable (or undesirable) emotions” (p. 9), and making the choice to approach or avoid a situation of emotional relevance (Gross, 1998). Gross (2008) suggests that our daily decisions have implications for how we will feel while situation selection refers to the sub-set of how these decisions are viewed in terms of consequences. Gross believes that we are aware of our emotional trajectory and it is this awareness that motivates us to avoid or seek situations (p. 501). An example of situation selection might be one’s avoidance of a party where an estranged ex-partner will be attending in order to evade an unpleasant emotional situation.

Situation Modification

Situation modification refers to “directly modifying a situation so as to alter its emotional impact” (Gross, 2014, p. 9). According to Gross (1999), when a person is in an emotion-eliciting situation, it is still possible to regulate emotions without actually changing the environment. Gross (2008) argues that “both situation selection and situation modification help to shape the situation to which an individual is exposed” (p. 502). An example of situation modification is to glance at your notes during a speech to calm your nerves.

Attentional Deployment (Distraction & Rumination)

Attentional deployment, according to von Scheve (2012), refers to the “focus on selected aspects of a situation or actively disregarding others to regulate emotions” (p. 3). Gross (2008) considers attentional deployment to be an “internal version of situation selection, in that attention is used to select which of many possible internal situations are active for an individual at any point” (p. 502). Examples of attentional deployment include: distraction, rumination, worry and thought suppression (Gross, 1998). The most often researched forms of attentional deployment include distraction and rumination. Distraction involves the use of selective attention to minimize the degree to which an emotionally challenging event is attended to and appraised (Gross, 2014). Visualization of a pleasant event during an emotionally charged situation would be considered a similar form of distraction. Rumination refers to “a perseverative focus on thoughts or feelings associated with an emotion-eliciting event” (Gross, 2008, p. 503). Gross (2008) states that “the difference between distraction and rumination is that rumination involves

an inflexible inner-directed attention and sustained focus on emotion-eliciting stimuli while distraction can take the form of attention directed outwards, to competing stimuli or inwards to thoughts” (p. 503). For example, rumination occurs when an individual dwells or focuses on a sad or angry event that increases the intensity of the negative emotion.

Cognitive Change (Reappraisal)

According to Gross (2014), “cognitive change refers to modifying how one appraises a situation so as to alter its emotional significance, either by changing how one thinks about the situation or about one's capacity to manage the demands it poses” (p. 10). Examples of cognitive change include: reappraisal, distancing and humor (Gross, 1998; Ochsner & Gross, 2008; Samson & Gross, 2012). The most common type of cognitive change is reappraisal, most generally accessed to promote cognitive change by both increasing and decreasing positive and negative emotions. For example, cognitive reappraisal is considered an adaptive strategy by altering how one thinks about a negative emotion that encourages the management of the situation which initially elicited the emotion (Gross, 2012).

Response Modulation (Expressive Suppression)

Response modulation “occurs late in the emotion-generative process after response tendencies have already been initiated, and referred to directly influencing expressional, behavioral, or physiological components of the emotional response” (Gross, 2013, p. 10). Examples of response modulation include: expressive suppression, substance use, sleep and exercise. The most common type of response modulation is expressive suppression, which Butler et al. (2003) describe “as the process of consciously inhibiting emotional expressions while emotionally aroused” (p. 48). Butler et al. (2003) suggest that “expressive suppression may be a particularly costly form of emotion regulation that disrupts multiple aspects of social exchange, creating stress for both the regulator and the interaction partner alike” (p. 48). Expressive suppression is seen as a type of response focused emotion regulation in the process model of emotion regulation “because it selectively down-regulates the behavioral component of an emotional response after the emotional response is already underway” (Gross, 1998). It has been suggested that “suppression decreases behavioral expression, but fails to decrease the experience of emotion, and actually impairs memory. Suppression also increases physiological responding in both the

suppressors and their social partners" (Gross, 2001, p. 214). For example, expressive suppression includes a situation when a person tries to suppress their outward response of anger from their spouse while they figure out how to resolve the problem to prevent further conflict.

Today, emotional regulation is seen as one of the fastest-growing areas in the field of psychology with a specific focus on the developmental phase of adolescence. Emotion regulation is thought to play an essential role in one's ability to endure the challenges of developmental changes taking place during adolescence (Gross & Muñoz, 1995). Those who have witnessed a boy who is hitting himself in the head as a result of frustration, or a girl who is cutting her arm to deal with anxiety is likely to wonder why they cannot manage their emotions in a more productive way. The main focus of this thesis is to understand how mindfulness and yoga education can assist in the process of emotion regulation. In the next section, I will explore emotion regulation during adolescence.

Emotion Regulation in Adolescence

With the multitude of challenges youth face today, the study of emotion regulation is crucial in understanding this developmental phase (Riediger & Klipker, 2014). Adolescence is a stage characterized by immense changes in various domains of functioning and has been defined as "beginning with the physical changes of puberty and ending with the assumption of adult social roles" (Riediger & Klipker, 2014, p. 187). The combination of hormonal changes, sexual maturation, changes in body size and composition along with the psychological adjustments in cognitive functioning and moral reasoning provides a perfect storm for poor emotion regulation. John and Gross (2004) point out that emotion regulation skills develop over time and are critical to the development of temperament, social development, maturational development, mental health, relationships and academic success. Emotion regulation has been defined as "the ability to respond to the ongoing demands of experience with the range of emotions in a manner that is socially tolerable and sufficiently flexible to permit spontaneous reactions as well as the ability to delay spontaneous reactions as needed" (Cole, Michel & O'Donnell, 1994, p. 76). Emotion dysregulation has been described by Macklem (2007) as "the failure to regulate emotion and is entwined with many psychological disorders found in young people" (p. 13). Emotion dysregulation has been linked to

diverse clinical problems and maladaptive behaviors (Weinberg & Klonsky, 2009) while it has been suggested that intensity of emotion is not necessarily what leads to a maladaptive response; rather, it is the ability to regulate the response by accessing the skills of emotion regulation (Cole, Hall & Hajal, 2008). Temporary dysregulation or poor regulation of emotions can cause anxiety, poorly controlled behaviour and intense discomfort while constant emotion dysregulation can manifest into disorders seen in children and youth (Macklem, 2007, p. 13). Dysregulation is considered to be at the root of maladjustment and emotional disturbance, which contributes to depression, substance abuse, cutting, poor academic performance, aggressive behavior and childhood disorders such as ADHD and a common dimension of most categories of psychopathology and a defining feature of many (Cole et al., 1994, p. 77). The diagnostic and statistical manual DSM-5 (2013) lists a number of childhood mental health disorders such as attention deficit and hyperactivity disorder (ADHD), pervasive developmental disorder (PDD), disruptive mood dysregulation disorder, depression and bipolar disorder that outline criteria around difficulties in regulating emotion or dysregulation. The DSM-5 (2013) describes Disruptive Mood Dysregulation Disorder as having observable severe recurrent temper outbursts that are manifested verbally and are inconsistent with developmental level. The outbursts occur three or more times per week and are present for 12 or more months and occur in at least two of three settings such as at home, school or with peers (p. 156). Beauchaine et al. (2015) suggest that emotional dysregulation in children can be associated with both internalizing and externalizing behaviours. Internalizing behaviours may include: difficulty calming down, displaying emotions that are not warranted by a situation, perseverating on negative emotions, unable to distinguish between emotional experiences, becoming aggressive or avoidant in a situation involving negative emotions and experiencing more negative emotions than average. Externalizing behaviours in children experiencing emotional dysregulation may include: difficulty recognizing or identifying their own emotions, exhibiting more extreme emotions, difficulty controlling attention, impulsivity, and difficulty decreasing negative emotions (Macklem, 2007, p. 16).

Zeman et al. (2006) state that in the past 20 years there has been considerable interest generated in emotion regulation in younger populations. According to MacDermott et al. (2010) “despite the more limited research focus on later childhood and adolescent periods, significant developments in emotion functioning and understanding

during these years have been documented” (p. 301). Southam-Gerow et al. (2002) argue that these significant developments include a gradual awareness of emotions and an increased ability to respond and convey with control over external responses to internal experiences. Developmental research on emotion regulation has predominantly focused on the periods of infancy and early childhood (Thompson, 1994). John and Gross (2004) suggest that the development of emotion regulation in the early stages of life is crucial and that learning to manage emotions such as anger and frustration is an important skill to develop during childhood to encourage a decrease in the intensity and duration of angry outbursts or temper tantrums. As skills develop, most children learn to respond to emotional situations in more adaptive ways, while others may experience difficulties such as low frustration tolerance, outbursts of temper and general irritability are characteristics of difficulties in emotion regulation (Gross, 1998; 2014). The leap from childhood to adolescence can be a difficult transition for some and can generate an inability to regulate emotions in a healthy way. The newly experienced combination of environmental stress and emotional incompetency may foster poor academic outcomes, social difficulties, and behaviour problems.

Riediger and Klipker (2014) argue that internal factors such as neurophysiological development combined with external factors such as familial context significantly contribute to the development of emotion regulation skills during adolescence. Advances in neuroimaging technologies have been able to identify regions in the brain which are activated during emotion regulation which are similar to those utilized in cognitive control operations asserting the notion that cognitive control is essential for effective emotion regulation (Ochsner & Gross, 2005). Best and Miller (2010) suggest that cognitive control is responsible for maintaining memory or shielding from distraction when pursuing a goal (e.g. intentional emotion regulation). Studies regarding cognitive control and emotion regulation from a variety of age groups show that high working memory can be beneficial to emotion regulation due to easily accessed reappraisal and ability to suppress negative emotion expressions (Schmeichel, Volokhov, Demaree & Heath, 2008). According to Riediger and Klipker (2014), neurophysiological maturation undeniably plays a central role in emotion regulation during adolescence, but external influences such as familial context is also significant when considering external influences on emotion regulation.

Similarly, Riediger and Klipker (2014) write that emotion regulation skills are also influenced by our experience with parental relationships. During the developmental stage of adolescence, youth experience a magnetic attraction toward peers and away from parents. “Emotion regulation abilities are fundamentally shaped by the continual interactions between individuals and their social environments” (Riediger & Klipker, 2014. p. 190), suggesting that adolescents derive many of their abilities from their social networks and friends, above those of their parents. Research suggests that a secure emotional parental relationship permits both positive and negative emotions assisting in the development of emotion regulation (Cassidy, 1994). Davies and Cummings (1994) found consistent correlational links between exposure to marital conflict and problematic functioning in children. This is further showcased consistently in and out of educational settings. Riediger and Klipker (2014) suggest that the observation of a parent’s emotion regulation, coaching, and the emotional climate within the family will influence the development of emotion regulation during childhood and adolescence. Broderick (2014) proposes that the foundation of distress tolerance is developed as children experience longer periods of predictable responsive care by caregivers. Broderick (2014) also proposes that children learn to endure discomfort for longer periods of time, which in turn provides the opportunity to develop the ability to self soothe and become tolerant of stress or distressful situation. Emotional resilience reflects the ability to handle both pleasant and unpleasant states of emotion without requiring self-destructive or risk-taking behaviors to cope. Over time a securely attached child will develop a desired response to an experience of discomfort by becoming aware of their feelings and deliberately accessing strategies to cope in a healthy and effective way (Broderick, 2015).

Emotion regulation has been referred to as “the processes by which we influence which emotions we have, when we have them and how we experience and express them” (Gross, 1998, p. 275). According to Thompson (1994), emotion regulation is defined as the intrinsic and extrinsic processes that are responsible for monitoring, evaluating and modifying emotional reactions to reach one’s goals.

Summary

Phillips and Power (2007) suggest that people may be inclined to utilize familiar types of regulatory practices which may result in an emotional regulatory style that may

be functional or dysfunctional. Suppressing, avoiding, repressing and distraction are all forms of behaviors that tend to reinforce emotional avoidance (Gross, 2014). Gross (2014) argues that avoidance behavior such as drugs, alcohol, cigarettes and food may modify emotional experiences by providing an immediate, albeit temporary, relief from the intensity of unpleasant feelings (response modulation). Conversely, rumination can increase depression and or anxiety (Broderick et al., 2012). Reliance on extreme avoidance or rumination disrupts one's emotional balance and flexibility, which is the goal of emotion regulation (Broderick et al., 2012). Given this goal, "emotion regulation consists of the extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions, especially their intensive and temporal features, to accomplish one's goals." (p. 27-28). According to Gross (1998), the processes involved in emotion regulation may become controlled or enacted automatically, conscious or unconscious, and come into effect at various points of the emotion generation process. Southham-Gerow et al. (2002) suggest that some regulatory strategies may serve a function or assist the individual to adapt depending on the circumstances while other strategies may not. "The goal of emotion regulation is not to eliminate 'maladaptive' emotions and replace them with 'adaptive' ones but rather to influence the dynamics of each emotion in order to produce adaptive responses to the environment" (Aldao, 2013, p. 155). For example: if a person has a fear of public speaking and has to give a speech in front of a large group of people, they may experience heightened anxiety which activates the sympathetic nervous system (fight or flight) interfering with the person's ability to follow through with the task. Conversely, according to Aldao (2013), if the same person is not experiencing any anxiety whatsoever about the presentation, he or she might have difficulties staying on task and engaging the audience. In each situation described above, the individual is experiencing emotional extremes creating an imbalance. Broderick (2013) describes the goal of emotion regulation as the understanding and balancing of emotions in a skillful manner. For purposes of this thesis, I have included Gross's (1998) process model of emotion regulation to describe how the practice of mindfulness can be an effective method of learning to skillfully balance emotions.

Emotion Regulation and the Practice of Mindfulness

Zeman et al. (2006) describe the essence of emotion regulation as the "ability to identify, understand and integrate emotional information while simultaneously managing

behavior in accord with intrapersonal (personal) and interpersonal (social) goals (p. 155). In order to understand how mindfulness interventions affect emotion regulation, Gross expands on the theoretical model developed by Bishop and colleagues (2004) in describing how mindful attention directly supports adapted emotion regulation based on two major principles: (a) attention to the present with an emphasis on body sensation rather than cognitive deliberation; and (b) non-judgment which requires the suspension of judging experience to be liked or disliked, to promote acceptance as opposed to rejection (Gross, 2012, p 554). According to Gross (2012), “these principles mutually support the gradual process of reconfiguring attention and cognition extinguishing maladaptive patterns of reactivity and introducing cognitive flexibility in the response to stress” (p. 554). Attention to present and non-judgment are briefly described below.

Attention to the Present

Paying attention to the present through mindful attention encourages the development of introspection which is the awareness of sensations from inside the body. According to Gross (2012), the process of understanding one’s reactions to situations as they occur rather than reacting or predicting responses encourages individuals to explore and recognize responses at the moment in which they are experiencing them, allowing the individual to become more in tune with their habitual responses and therefore encourage the development of adaptive responses. It is suggested that without habitual evaluation the amount of time in the appraisal stage is longer therefore “reducing the need to quickly map events on a pre-existing conceptual field, thereby disempowering deeply entrenched dysphoric interpretations” (Gross, 2012, p. 555). Another benefit of introspection is a participant’s ability to recognize the body’s reactions physiologically through awareness of sensations or tension within the body which encourages awareness and allows for insight into emotional appraisal of situations that activate habitual responses.

Non-Judgment

“The cultivation of present moment attention is complemented by an intention to refrain from judgment and cognitive reactivity” (Anderson, Farb, Irving, & Segal, 2013, p. 555). Through the practice of non-judgment, a participant is able to focus on noticing experiential changes rather than reacting to them. Scher, Ingram, and Segal (2005) suggest that when an individual focuses on changes in the experience rather than

formulating a reaction between the association of the initial appraisal of difficulty, failure or challenge is limited. Acceptance and decentering are capacities developed through the practice of non-judgment (Anderson et al., 2013). According to Kabat-Zinn (2013), “acceptance means seeing things as they actually are in the present” (p. 27). When we are not judging our experience we allow ourselves the opportunity to see things as they are. Decentering, according to Anderson et al. (2013), “involves reducing reliance on conceptual self-appraisal as the primary determinant of well-being” (p. 556). Recent research suggests that the ability to view one’s emotional reactions from a more objective viewpoint is a critical determinant of whether reflection on emotion can be constructive or degenerate into maladaptive rumination” (Anderson et al., 2013. p. 556). I have personally observed how transforming the practice of decentering can be effective for adolescents. Suggesting to them that *our thoughts are just thoughts and not facts and that we can observe them without clinging to them* is a very powerful experience that some even refer to as ‘freeing’ — encouraging them to let go of situations that were emotionally unpleasant.

Arch and Landy (2015) suggest that “mindfulness can be conceptualized as a form of attention deployment that impacts emotion generation early, influencing downstream appraisals and emotional responses” (p. 217). Specifically, mindfulness may reduce the threat value of aversive experiences (modify appraisal), alter the generation of emotional response to aversive experience (modify emotional response) or increase the capacity to tolerate, regulate, and recover from negative emotions triggered by aversive experiences (e.g. enhance coping). Mindful attention appears to impact the downstream of cognitive appraisals and particularly emotional responses. Gross’s Process Model (1998) describes antecedent and response-focused regulation as occurring before and after emotional awareness. Moore, Zoellner, Mollenholt and Niklas (2008) suggest that when we experience stress the sooner we activate emotion regulation strategies (e.g., antecedent-focused strategy of cognitive appraisal) the less stress related symptoms we will experience. Mindfulness promotes exploratory attention to present moment experiences regardless of their unpleasantness, and encourages acceptance rather than avoidance of the experience through non-judgmental awareness (Kabat-Zinn, 1990). Anderson et al. (2013) suggest that focused attention on a situation discourages the progression to appraisal and response processes. Therefore, drawing from cognitive resources to encourage attention deployment, mindfulness hinders the

recruitment of habitual secondary appraisals and reactions. The process model developed by Gross (1998) distinguishes antecedent focused strategies (cognitive reappraisal) which are activated before the emotional experience as opposed to response focused strategies (expressive suppression) which are utilized to modifying emotional responses after they've been elicited. As an antecedent – focused strategy mindful attention deployment represents an early and therefore highly efficient approach to regulating emotions.

According to Anderson et al. (2013), mindfulness “introduces novel regulatory intentions, facilitates novel appraisals of emotional experience and promotes expression rather than suppression of emotional responses” (p. 550). Mindfulness presents three unique contributions to emotion regulation: (a) promoting meta-awareness of emotion regulation strategies; (b) detecting and disrupting rumination; and (c) creating a trajectory for self-change” (p. 551). The first unique contribution of mindfulness to emotion regulation is promoting meta-awareness (meta-strategy). These meta-strategy acts as an initiator of awareness of our pattern of habits and when we recognize these patterns mindfulness allows for the delineation between regulatory and novel strategies. The second unique contribution of mindfulness to emotion regulation is the ability to detect and disrupt rumination through widening attention to focus on the evolving nature of the emotional experience while also disrupting the cognitive processes centered on negative events (Anderson et al., 2013). The practice of moment-to-moment experience, encouraged in mindfulness training, disrupts the rehearsal of negative emotions or upsetting memories, allowing them to subside. The third unique contribution that mindfulness maintains for emotion regulation is the ability to promote a trajectory for self-change through daily practice. A program such as Mindfulness Based Stress Reduction (MBSR) encourages independent daily practice along with the guided sessions.

The acknowledgment of positive possibilities allowing for space in the mind affords adolescents the opportunity to recognize that thoughts and feelings change as time passes. This acknowledgement deeply empowers adolescents by recognizing their potential to overcome emotionally difficult experiences (Broderick, 2013). Broderick and Jennings (2012) suggest that promoting resilience during adolescence may promote favorable mental health while reducing risk factors for those who are vulnerable to

choosing strategies that may promote dysregulation. Teaching adolescents to become resilient is one of the goals of social emotional learning. This thesis explores the extent to which this is achievable by fostering well-being through a school-based mindfulness and yoga program with a focus on positive youth development as outlined in the next section.

2.2. Part 2 – The Solution

The purpose of this review is to provide a comprehensive literature review to identify evidence-informed research describing promising practices for the fostering of well-being among youth to encourage an existence of harmony and balance. Part 2 of the literature review begins with defining well-being and positive youth development as it is referred to throughout this thesis. The remainder of this chapter includes a review of relevant published reports, and an examination of a theoretical model for mindfulness and corresponding services or program applications related to the exploration and investigation of both clinical and non-clinical (school-based) mindfulness and yoga programs.

2.2.1. Fostering Well-being through Positive Youth Development and School-Based Mindfulness and Yoga Programs

Miller and Shields (1980) describe adolescence as “often regarded as one of the most emotional phases of life” (p. 587). As a school counselor I have observed that today’s youth are faced with rapid changes at rapid speeds, simultaneously undergoing stress levels of crisis proportions. The early onset of puberty, peer influence, break-up of the nuclear family, increased expectations of academic success, technological advancement, media saturation, the inundation of information and uncertain futures are among many of the challenges experienced by those growing up in this millennium. For many others, the stress of challenging and traumatic home environments makes academic expectations unachievable, while the expectation from our post-modern society is to acclimate to all of these stressors both quickly and efficiently. The emotional lives of adolescents are viewed as a distinct phase of development with strong emotional reactions to emotion eliciting situations according to Kilpker et al. (2014). It is

suggested that these conditions will inevitably negatively impact the social-emotional development essential for the well-being of youth (Saltzman, 2011).

According to Wright (2014), during the late 1960's and early 1970's the aims within the education system shifted from the acquisition of knowledge to the development of the individual causing the integration of therapeutic education as a holistic approach to curriculum and well-being. In 1994, the Fetzer Institute introduced the term social emotional learning (SEL) which referred to the process and methods used to promote social and emotional competence. The emergence of social emotional learning aims to effectively teach skills in school settings that have been guided by a framework which draws from a variety of fields including: child and adolescent development, health promotion, principles of instruction, affective neuroscience, positive psychology, cognitive therapy, behavioral therapy an application and prevention science. Research in the field of SEL has revealed that this type of programing boosts academic performance, reduces conduct problems and promotes positive development in students (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger 2011). It has been suggested that an ideal SEL program is to be taught in a coordinated manner over the course of students' academic experience for example preschool through high school using strategic planning, regular evaluations to gauge outcomes, and ongoing implementations point (Greenberg, Weissberg, O'Brian, Zins, Fredricks, Resnik, & Elias 2003). According to Payton, Weissberg, Durlak, Dymnicki, Taylor, Schellinger, and Pachan (2008) the Collaborative for Academic, Social and Emotional Learning (CASEL) conducted an extensive review of the research on SEL programs from preschool to high school. As a result of this review CASEL which is the leader of SEL research policy and implementation promotes five domains and interrelated competency areas that are essential for development from a cognitive social and emotional perspective. The five domains include: self-awareness, self-management, social awareness, relationship management and responsible decision making. Theoretical and empirical literature supports the social and emotional competence perspective in which children with positive social and emotional skills demonstrate resiliency when confronted with stressful situations (Greenberg, Weissberg, O'Brien, Zins, Fredericks, Resnik, & Elias, 2003). Research has consistently found a positive correlation between measures of children's social and emotional skills and measures of later psychological health (Greenberg, Domitrovich, & Bumbarger, 2001). This information highlights the effectiveness of

interventions targeting children's social and emotional skills as early intervention for mental health challenges (Broderick, 2013). Recently there has been an emergence of programs and training that has become readily available to teachers and administrators to address the issue of well-being and emotion-regulation in education including mindfulness, yoga, positive youth development and other approaches to social and emotional learning.

2.2.2. Well-Being

Over the past five decades, an emphasis on the importance of schools fostering well-being from a psychological and emotional perspective has become an integral part of education. Mcleod and Wright (2015) suggest that "calls to address well-being are so commonplace and widespread that they can mean both everything and nothing" (p.13). This research defines well-being as experiencing greater emotion regulation and lesser perceived stress. In order to experience improved well-being, identification of the mental, physical and emotional aspects of how one is affected by stress must be examined. Figure 2.6 provides a visual representation of the aspects of mental, physical and emotional well-being that are explored in this research.

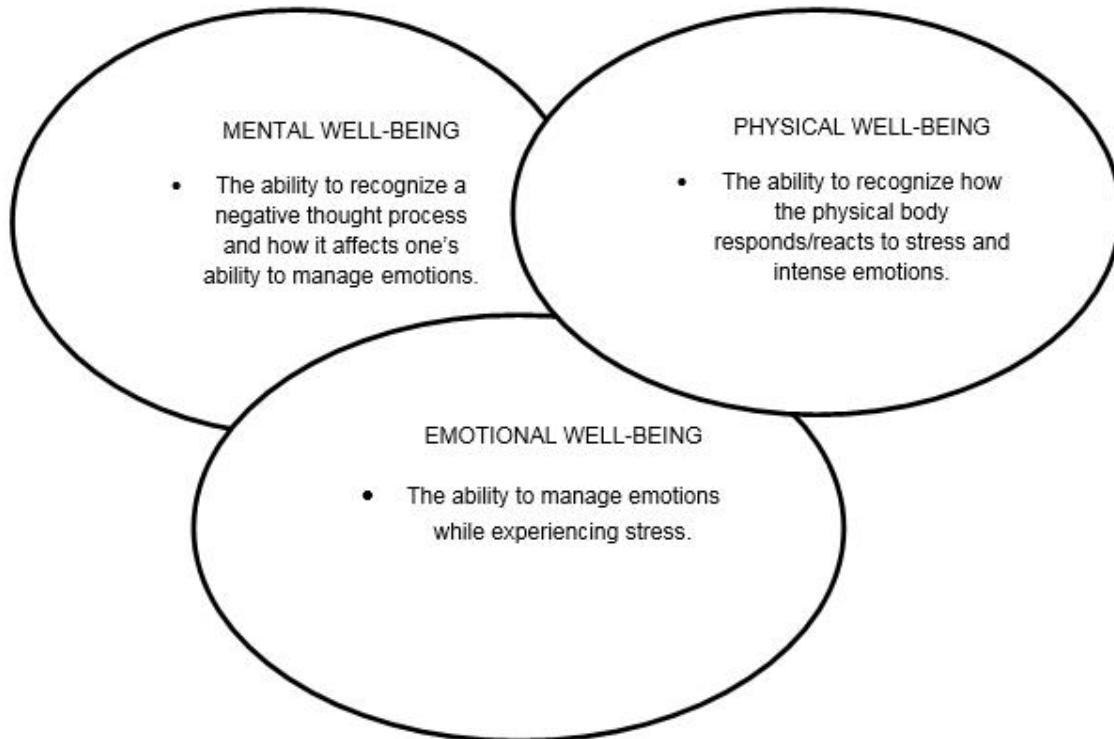


Figure 2.6 A visual representation of well-being.

2.2.3. Positive Youth Development

In recent years the concept of positive youth development (PYD) has become more commonly used in opposition to traditional deficit models in adolescent development research. According to Catalano, Berglund, Ryan, Lonczak and Hawkins (2004), positive youth development refers to the intentional efforts of the entire community to provide youth with opportunities to explore and improve skills, interests and abilities. Richard M. Lerner and colleagues describe positive youth development as a focus on enhancing the Five C's: *caring, character, competence, confidence and connection* of youth as opposed to a focus on the prevention of risk taking behaviours (Lerner, Lerner, & Benson, 2011). A sixth C, *contribution* was proposed to represent the merging of the Five C's to encourage positive contribution toward society, self, community and family (Lerner, 2011; Lerner et al., 2003).

In contrast with interventions or approaches that attempt to solve mental health concerns or problems, an underlying purpose of youth development programs is the promotion of healthy child and adolescent development. Positive youth development

refers to ecological, asset or strength-based approaches that promote healthy child and youth development through supportive community environments and connections. Approaches to encourage positive youth development include structured programs that provide opportunities to explore, to apply and to build upon young people's strengths and capacities, as well as those assets in their immediate social environment and communities (Bradshaw, Brown, & Hamilton, 2008; Damon, Bronk, & Menon, 2004; Hamilton, Hamilton, & Pittman, 2004).

In their systematic review of the literature on school-based positive youth development programs, Curran and Wexler (2017) explored 711 PYD programs outlining 3 approaches to program delivery including: curriculum-based, leadership development and student-based mentorship programs. The research outlining curriculum-based program approaches to positive youth development was of particular interest given its pertinence to the delivery of the YWP. The review indicated that formats to program delivery varied while the intention to improve mental and social well-being and healthy behaviour was a clear goal. Common to the YWP all 12 of the approaches included education on topics such as setting social emotional goals including: cooperation, empathy, fairness, social competence and self-awareness. Curran and Wexler (2017) state that expanding upon youth positive assets, as opposed to focusing on the reduction of potential risks, will increase the likelihood that youth will positively develop with increased health.

One of the intentions of the present research was to examine the relationship between two aspects of PYD, namely *confidence* (self-confidence) and *caring* (empathy) and emotion regulation and perceived stress (well-being). *Confidence* is defined in PYD as the sense of positive identity and self-worth while *caring* is exemplified by the expression and comprehension of sympathy and empathy towards others (Lerner, Lerner, Almerigi, Theokas, Phelps, Gestsdottir et al., 2005b). These concepts are examined later as part of the Positive Youth Development Short Version Questionnaire (PYD) developed by Lerner, Almerigi, Theokas, and Lerner (2005).

Vimpani (2000) suggests that positive youth development approaches to the health of youth provides adolescents with the tools to promote their own strengths and assets by utilizing all facets of their life, including family, faith, media, businesses and school. Research also suggests that mindfulness-based training may impact a youth's

ability to tolerate stress (Shapiro, Oman, Thoresen, Plante, & Flinders, 2008). One of the goals of this research is to empower and support students in managing stress by accessing their strengths and skills through mindfulness and yoga education, which provides the skills and strategies to encourage youth to become independent in regulating their emotions and managing stress. Mindfulness training is an effective, non-invasive and affordable way of addressing mental health, behavioral, learning and attentional problems that are related to stress among youth that focuses on strengths as oppose to weaknesses of practitioners.

Throughout the next section, the concept of mindfulness, current research for clinical mindfulness programs, non-clinical (school-based) mindfulness and yoga programs, and mindfulness for teachers will be explored.

2.2.4. Mindfulness

Over the past three decades, the study of mindfulness, in both clinical and non-clinical populations, has been extensive. Multiple interpretations of the concept of mindfulness exist, including distinct definitions outlined by Jon Kabat Zinn (1994), Brown and Ryan (2003) and Bishop, Lau, Shapiro, Carlson, Anderson, Nicole, & Velting (2004). Kabat Zinn (1994) describes mindfulness as “paying attention in a particular way: on purpose, in the present moment, nonjudgmentally” (p. 4). Brown and Ryan (2004) define mindfulness as “the state of being attentive to and aware of what is taking place in the present moment non-judgmentally” (p. 822) while Bishop et al. (2004) refer to mindfulness as “non-elaborative, nonjudgmental, present centered awareness in which each thought, feeling, or sensation that arises in the attentional field is acknowledged and accepted as it is” (p. 232). From a positive psychology perspective, Ellen Langers (1992) asserts that mindfulness is a "flexible state of mind and openness to novelty, a process of actively drawing novel distinctions. When we are mindful, we become sensitive to context and perspective; we are situated in the present" (p. 289).

The term mindfulness comes from the ancient Pali word, *sati*, which means “to remember” and signifies the presence of mind (Bodhi, 2000; Nyanaponika, 1973). Although mindfulness has its roots in eastern meditative practices, the westernization of mindfulness has been utilized in both clinical and non-clinical settings by way of secularizing the concept of mindfulness (Keng, Smoski & Robins, 2011). The difference

between mindfulness meditation and traditional meditation concerns the practices of mindfulness where increased awareness of the present moment must be learned, whereas traditional meditations aim to achieve a higher state of consciousness (Shapiro et al., 2006). Westernized mindfulness practices suggest maintaining a moment-by-moment awareness of one's thoughts, feelings, bodily sensations, and surrounding environment (Teasdale et al., 2000). The intention of mindfulness meditation is the awareness and observation of one's constantly changing internal and external stimuli (Baer, 2003).

Bishop et al. (2004) suggest that mindfulness encompasses two components: self-regulation of attention, and the adoption of a particular orientation towards one's experiences. The first component of mindfulness, self-regulation of attention, refers to non-elaborative observation and awareness of sensations, thoughts, or feelings from moment to moment without judgment (Rueda et al., 2005). This form of self-regulation requires both the ability to anchor one's attention to what is occurring, and the ability to intentionally switch attention from one aspect of an experience to another (Posner et al., 2009). This practice encourages the experience of sensing the present moment as opposed to ruminating in the past or worrying about the future (Burg et al., 2011). Mindfulness involves present attention that maintains the potential for increased awareness of experiencing the present moment (Bishop et al., 2004). The second component, the adoption of a particular orientation toward one's experiences in the present moment is characterized by curiosity, openness and acceptance.

Finally, there continues to be significant interest in creating a common framework and theoretical model of mindfulness. Hozel et al. (2011) suggest that "existing research on mindfulness includes few theoretical accounts describing the mechanisms of mindfulness meditation" (p. 538). For purpose of this thesis, I will briefly describe a model of mindfulness designed by Shapiro et al. (2006), which mobilizes Jon Kabat-Zinn's (1994) definition in order to outline the mechanisms of mindfulness through the Intention, Attention and Attitude Model (IAA).

A Model of Mindfulness

Shapiro et al. (2006) developed the IAA Model of Mindfulness to describe the components of mindfulness to embody three axioms: "(a) intention; (b) attention; and (c)

attitude” (p. 374). These three axioms were developed in order to reflect the core components of mindfulness in a simple, comprehensible construct. The three axioms are not considered separate stages or processes; rather, they work together simultaneously and are represented below in Figure 2.7.

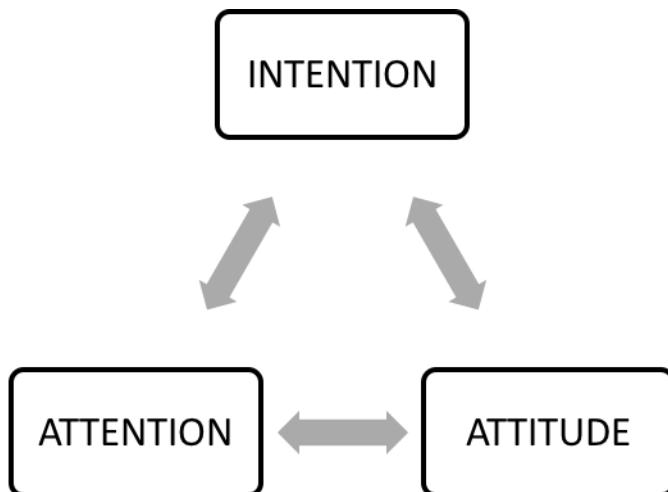


Figure 2.7 A visual representation of the three axioms of mindfulness Intention, Attention and Attitude.

Axiom I - Intention

The first axiom of the IAA model of mindfulness is *intention*, otherwise referred to as an *individual's vision*. According to Albrecht et al. (2012) intention is “regarded as an integral first step in mindfulness practice” (p. 4). Shapiro et al. (2008) suggest that “intention of one’s practice is instrumental in knowing why one is paying attention. It involves motivation; a conscious direction and purpose” (p. 842). For example, if a person chooses to practice mindfulness with the expressed intention to address the physiological effects of anxiety, the possibility of relief from these effects will be greater. Through mindfulness, the anxious person learns to identify emotions, to be aware of them and to accept them, whether they are positive or negative.

Axiom II - Attention

The second axiom is *attention*, which is described as “paying attention in the moment to your internal and external experience” (Albrecht et al., 2012, p. 4). Similarly, Shapiro et al. (2008) detail attention as “direct moment to moment knowing of what is happening as it is actually happening.” (p. 842). Attention is at the core of mindfulness practice; the Gestalt Therapy perspective of mindfulness has been suggested to be

“curative” in and of itself (Shapiro et. al, 2006). Mindful attention is not analogous to the attention associated with cognition. According to Brown et al. (2007), mindful attention does not organize, plan, categorize or ruminate based on cognitive memory; instead, it is one’s attending to the experience of the present moment. Shapiro et al. (2006) suggest that mindful attention involves “suspending judgment and observing the changing field of thoughts, feelings and sensations as they occur in the mind and body” (p. 4). For example, our minds often tend to ruminate into the future or reflect upon past events, particularly when we are at rest. Mindful attention may include the practicing the memorization of a mantra, or saying, which may help to restore balance and encourage present moment awareness. Using phrases such as “just focus on your breathing” or “become aware of one’s thinking, and then allow the thoughts to pass through without clinging to them” are helpful in redirecting one’s attention to the present moment.

Axiom III - Attitude

The third axiom is *attitude* and is described by Shapiro et al. (2006) as essential in the practice of mindfulness while “involving the qualities a person brings to their attention” (p. 376). Attitude “describes how one pays attention, and refers to the accepting, caring, and discerning qualities of mindfulness” (Shapiro, 2008, p. 842). For example, Kabat-Zinn (2003) suggests that “attention could have a cold, critical quality or it can include an affectionate compassionate quality a sense of open hearted, friendly presence and interest” (p. 145). Bishop et al. (2004) similarly describe attitude as “orientation to experience” that involves curiosity, non-striving and acceptance.

Summary

The IAA provides an easily understood approach to how mindfulness works. This theory was constructed to encourage a dialogue between professionals to gain insight to the mechanisms of action underlying mindfulness-based interventions and informs the current research. While most of the research in mindfulness has been focused on clinical studies in order to evaluate the efficacy of mindfulness based interventions, non-clinical settings have recently become of interest to the field. Both settings have been supported by the development of customized interventions accessible to clinicians and educators. The available programs aim to address the needs of a wide spectrum of populations from the healthy child to the later in life

chronically ill. Clinical and non-clinical (school-based) mindfulness programs are outlined in the next section.

Mindfulness Programs in Clinical and Non-Clinical Settings

The theoretical framework of many mindfulness programs tends to be linked to previously successful programs such as MBSR (Mindfulness-Based Stress Reduction), DBT (Dialectical Behaviour Therapy) and MBCT (Mindfulness-Based Cognitive Therapy). Other interventions are referenced to positive psychology or are a combination of mindfulness based intervention and social emotional learning (SEL) created as a school-based program to target special populations. This section outlines the most widely used clinical and non-clinical (school-based) interventions of mindfulness including: Mindfulness-Based Stress Reduction (MBSR) and Mindfulness-Based Cognitive Therapy (MBCT), Mindful Awareness and Resilience Skills for Adolescents (MARS-A), Stressed Teens (MBSR-T) and Learning to Breathe (L2B).

Clinical Programs

Mindfulness Based Stress Reduction (MBSR)

Jon Kabat-Zinn developed MBSR in 1979 at the University of Massachusetts Medical School for the purpose of assisting chronically ill patients who required help in managing pain which had proved difficult to treat in a medical setting (Kabat-Zinn, 1990). MBSR is an 8-week outpatient clinical program developed to assist patients with out of hospital pain management, and includes mindfulness practices. For Kabat-Zinn (2003), mindfulness practices include “the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experiences moment by moment” (p. 145). The practice of mindfulness, as a “way of being,” is considered as a dynamic rather than static technique, allowing for flexibility in use. This practice involves attending to both the internal and external landscape, while using one’s senses to observe, accept and allow these experiences to pass in order to attend to the present moment experience (Kabat-Zinn, 2003).

Goldin et al. (2010) describe MBSR as “an established program shown to reduce symptoms of stress, anxiety, and depression.” (p. 83). MBSR has been proven significantly effective in assisting patients to alter their affective appraisal of pain through an open mindful state (Perlman, Salomons, Davidson, & Lutz, 2010). Chambers,

Gullone and Allen (2009) report that literature suggests that MBSR addresses these negative symptoms by modifying emotion regulation abilities. According to Anderson et al. (2013), “through the cultivation of attention to present moment sensation, mindfulness presents patients with a task that does not require the deployment of cognitive evaluation and elaboration” (p. 558). In the past three decades, MBSR has been proposed as a treatment for many diseases, proving efficacious for many mental and physical disorders. MBSR has provided a foundation of theoretical concepts that has assisted in the development of interventions addressing specific mental health conditions.

MBSR was designed to develop one’s awareness of both one’s thoughts and feelings, and purposes that awareness in order to recognize the relationship between one’s thoughts and feelings, and to minimize the judgment of or the urge to change the experience (Teasdale, 1995). The essence of this state is to be in the present moment, without judging or evaluating it, without reflecting on the past, without anticipation of the future, and without attempting to change anything in order to avoid any unpleasant experiences (Kabat-Zinn, 2003). The main feature of MBSR is the cultivation of mindfulness through techniques such as breath awareness, body scan, mindful meditation as well as meditations promoting kindness and self-compassion described below.

Breath Awareness

Breath awareness is one of the many techniques included in mindfulness practices; according to Kabat-Zinn (2013) “the easiest and most effective way to begin cultivating mindfulness as a formal meditative practice is to simply focus your attention on your breathing and see what happens when you keep it there” (p. 44). It is suggested that focusing on the air entering and exiting the nostrils will encourage one to watch one’s breath and allow for focusing on the feeling of the breath as it flows past the nostrils (Kabat-Zinn, 2013). The torso is another body part to focus on and allows one to become aware that as the breath moves through the body, the chest and belly expand and retract with each breath. Broderick (2013) suggests that the controlling of the breath is not the goal; in fact, controlling the breath is counterproductive and may create anxiety. Kabat-Zinn (2013) argues that “no matter which location you choose the idea is to be aware of the sensations that accompany your breathing at that particular place and

hold them in the forefront of your awareness from moment to moment” (p. 44). Redirecting the awareness to the breath will allow for deeper self-reflection and the ability to respond differently to challenging situations while remaining in the present moment creates the possibility of becoming more reflective and less reactive.

Body Scan

Kabat-Zinn (2013) describes the body scan exercise as a “somatic experience that can be an effective method for developing both concentration and flexibility of attention simultaneously” (p. 77). The body scan is a 45-minute guided exercise most commonly practiced in a seated position or lying on your back and focusing attention progressively throughout the body, from the toes to the top of your head (Baer, 2003). Sensations within the body are observed sequentially throughout this exercise and help to build stronger awareness of how the body responds to stress and tension.

Mindful Meditation (Sitting Meditation)

Kabat Zinn (2013) describes sitting meditation as “the heart of the formal meditation practice” (p. 56). Mindful meditation requires focusing on the present moment experience and bringing awareness to the body by giving full attention to the feeling of the breath as it flows into and out of the body. As attention starts to wander, participants are encouraged to “note the experience and gently escort their attention back to the breath and the rising and falling of the belly” (Kabat-Zinn, 2013, p. 60). Meditation, according to Kabat-Zinn (2013), is really a non-doing that emphasizes being where you already are” (p. 55). It is suggested that the practice of mindful meditation is more effective when sitting erect in a chair or cross-legged on the floor with your spine straight but not stiff, self-supported in the meditation posture. Inevitably, participants experience discomfort, and Kabat-Zinn (2013) suggests to “resist the first impulse to shift your posture in response to bodily discomfort and instead direct your attention to these very sensations of discomfort and mentally welcome them” (p. 61). The practice of resistance encourages participants to “observe their automatic reactions and at the whole process of what happens as the mind loses its balance and becomes agitated as it is carried off and gets lost in the thought stream in one way or another, far away from any awareness of breath” (Kabat-Zinn, 2013, p. 62).

Meditation for Self-Compassion (Loving Kindness)

Self-compassion or loving kindness meditation is a contemplative practice which focuses attention to cultivate positive emotions into oneself and for others (Hutcherson et al., 2008). Much like sitting meditation, loving kindness meditation requires sitting with an erect spine in a chair or on the floor. According to Broderick (2013), “loving-kindness practice involves the use of phrases and images to evoke and cultivate friendliness toward yourself and others. Generally the practice starts by evoking a time when you felt truly loved by someone (a parent, friend, peer, teacher or even a stranger or favorite animal)” (p. 92). An example of this meditation utilized by the MBSR program includes the following phrases to be repeated, “may I be happy...may I be healthy...may I ride the wave of my life...may I live in peace no matter what I am given.”

Other Exercises Used in MBSR

“Knowing what you are doing when you are doing it is the essence of mindfulness practice” (Kabat-Zinn, 2013, p. 16). Kabat-Zinn (1994) suggests that mindfulness can be incorporated into everyday living such as washing dishes, doing laundry, walking and eating. Mindful eating is an exercise in the appreciation of an ordinary everyday activity becoming extraordinary in its experience. The “raisin experience” was an example developed as part of the MBSR program to encourage participants to experience eating through activation of all of the senses and giving them the opportunity to slow down and learn to take in every moment (Kabat-Zinn, 2003). Participants are given three raisins to eat and directed to observe all aspects of the raisin prior to consuming it. Kabat-Zinn (2013) suggests that this exercise promotes “clear seeing” that opens up the possibilities to recognize the connections between impulses that arise in the mind and how individuals react to those impulses.

Mindfulness Based Cognitive Therapy (MBCT)

MBCT was developed by Segal, Williams and Teasdale in 2000 and uses cognitive behavioural therapy methods along with mindfulness and MBSR trainings. MBCT has been effective when treating chronic illness, such as depression; similarly, it is the expansion on the framework of Cognitive Behavior Therapy (CBT). Mindfulness based therapies can be utilized to interrupt the normal processes and teach participants to be less focused on the reaction to incoming stimuli and to accept and observing these

processes without judgment (Felder, Dimidjian, & Segal, 2012). MBCT was designed intentionally as a therapy that maximized long-term prophylactic effects as a cost-effective group skills training approach for the prevention of relapses and recurrences of chronic mood disorders such as depression (Teasdale et al., 2000). Research suggests that “long term anti-depressant use involves problems with drug tolerance and side effects and does not target the dysphoric cognition that contributes to risk of relapse in response to future stressors” (Anderson et al., 2014, p. 559). According to Teasdale et al. (2000), “the focus of MBCT is to teach individuals to become more aware of their thoughts and feelings and to relate them to a wider decentered perspective as mental events rather than aspects of the self or as necessarily accurate reflections of reality” (p. 616). The goal of MBCT is to interrupt automatic responses and teach the participants to focus less on reacting to incoming stimuli, and instead on accepting and observing them without judgment.

Mindful Awareness and Resilience Skills for Adolescents (MARS-A)

Mindful awareness and resilience skills for adolescents (MARS-A) is a skill based teen friendly and developmentally appropriate outpatient group for 15–19-year-old adolescents. MARS-A was developed by Dr. Dzung Vo and Dr. Jake Locke and is being currently offered at British Columbia Children’s Hospital (BCCH) to assist youth between the ages of 15 and 19 to develop skills in order to manage stress and pain that are commonly associated with chronic medical conditions. The MARS-A program is based on MBSR (Mindfulness Based Stress Reduction) and two adaptations of MBSR, including MBCT (Mindfulness Based Cognitive Therapy) and MBSR-T (Mindfulness Based Stress Reduction for Teens). The combination of all three approaches to mindfulness were modified to reflect the developmental concerns of adolescents experiencing co-occurring chronic pain or another chronic health conditions. Dr. Dzung Vo, an adolescent pediatrician, author of the Mindful Teen (2015) and student of Thich Nhat Hanh facilitates the program. The program is designed to assist in the prevention of a relapse of depression as well as to develop better self-regulation and attentional control. This 8-week outpatient mindfulness-based intervention consists of 90 minute sessions with a 3-hour half day component. Referrals are mainly through the BCCH pediatric department or psychiatric outpatient programs as well as local child and youth mental health agencies (MCFD).

Non-Clinical (School-Based) Mindfulness Programs for Youth

Stressed Teens (MBSR-T)

The Stressed Teens (MBSR-T) program was initially developed for high school aged adolescents (13-18 years of age) and is closely related to the traditional MBSR program created by Jon Kabat-Zinn. The program is eight weeks in duration with sessions that are 1.5 hours in length without the retreat component. The program can be adapted for both clinical and non-clinical populations and the formal practice is shorter than the traditional adult practice. MBSR-T specializes in implementing age-relevant language, stories and references to engage youth (Zoogman, Goldberg, Hoyt, & Miller, 2014). The program emphasizes mindful qualities of living, encouraging informal practice and recognizing the thought process through awareness (Meiklejohn, Phillips, Freedman, Griffin, Biegel, Roach, Frank...& Soloway, 2012). MBSR-T was designed to develop mindfulness skills with a mind-body approach focusing on the whole person (Biegel, Brown, Shapiro, & Schubert, 2009). A study with adolescent psychiatric outpatients conducted by Biegel et al. (2009) demonstrated a reduction in "self-reported symptoms of anxiety, depression, and somatic distress, and increased self-esteem and sleep quality as a result of participation in a mindfulness based stress reduction program" (p. 855). Zoogman et al. (2014) described MBSR-T as a flexible program that addresses the unique challenges of adolescents with a focus on social stress.

Learning to Breathe (L2B)

In 2009, Patricia Broderick developed mindfulness-based curriculum for adolescents titled "Learning to Breathe (L2B)" to assist in the cultivation of emotion regulation, as well as attention and performance, through an integration of themes from MBSR. L2B differs from the adult program MBSR, according to Broderick (2015), given the program's universal prevention design that includes Broderick's personal philosophy of empowerment at every level of the program. The L2B program is a mindfulness-based training program designed to facilitate the development of emotion regulation and attentional skills for middle and high school students (Broderick, 2013). L2B integrates many of the themes found in MBSR and specifically addresses two of the five social emotional learning (SEL) domains outlined by CASEL (2011), self-awareness and self-management. L2B also addresses social awareness, relationship management and responsible decision-making more generally through the curriculum. Teachers, along

with students, are encouraged to rest in present moment awareness in order to develop the skill of paying attention (Broderick, 2013). The lessons allow for flexibility and openness to explore ideas and concepts as they arise. Instruction consists of either 6 or 18 sessions depending on specific needs of the group. Broderick (2013) suggests the six sessions at 45 minutes each may be appropriate for more mature groups while younger participants may benefit more from eighteen shorter sessions (p. 17).

Summary

In summary finding effective methods to strengthen the emotional competency of youth in clinical and non-clinical settings can be a difficult task. The application of mindfulness-based practices with youth and schools is still developing; yet, because mindfulness has been demonstrated to affect key aspects of SEL for example emotional awareness and regulation it theoretically and logically fits into in SEL model (Felver et al., 2013; Weare, 2013). In my opinion, it is critical that an approach involve commitment to a philosophy and personal buy in when implementing an approach to a social emotional intervention such as mindfulness. Kabat-Zinn (2013) suggests that in order to understand the experience of mindfulness we need to practice it ourselves to provide best practice to students in the education setting. Many of the challenges of successful programs noted in the literature involve teacher competency. Shonin, Van Gordon, and Griffiths (2012) suggest that there is a growing concern related to the credibility and aptitude of teachers delivering programs in the educational setting. Segal, Williams, and Teasdale (2002) suggest that facilitating the development of mindfulness in others appears to be more effective through demonstration of mindfulness in oneself. Elias, Zins, Graczyk, and Weissberg (2003) described the key ingredients for successful program implementation may include, but are not limited to, a focus on the teacher and ongoing professional development, quality program implementation, and continued evaluation of program effectiveness which is outlined below.

2.2.5. Mindfulness for Teachers

From an educational perspective, current conditions and systemic realities are creating barriers in the mitigation of negative behaviors among students, making it difficult, if not bordering on impossible, to teach the prescribed subject matter and concepts dictated by the education system. According to Broderick et al. (2009),

“schools now function under a set of pressures that creators of our school system could hardly have imagined” (p. 35). Elias et al. (2003) suggests that “academic success rests on a foundation of social-emotional competencies that must be nurtured as a part of mainstream education” (p. 304). According to Tregenza (2008), national education systems should be expected to actively implement programs that address the importance of nurturing a student’s social, emotional, mental, spiritual and cognitive well-being. According to Macklem (2014), as student populations become more diverse it is critical that the implementation of school-based social-emotional learning be seriously considered. Mindfulness education has become a valuable tool in teaching and learning, engaging students in moment to moment experiences which enhance learning in the classroom (Schonert-Reichl et al., 2010).

There are many different evidence-based and promising educationally based programs addressing social emotional learning available for both teachers and students. These programs are expected to forge a path for individuals, with the provision of effective strategies and coping skills, to deal with the unforeseen challenges in life. According to Meiklejohn et al. (2012), mindfulness can be integrated into the classroom using one of three approaches: indirect, direct or a combination of both. The direct approach is when the classroom teacher explicitly provides instruction that includes mindfulness skills and exercises to students, while students are not necessarily expected to practice the concepts in their daily lives. The indirect approach involves the development of a more personal practice in mindfulness where teachers foster mindfulness through modeling the concepts in the classroom. Thirdly, a combination of both direct and indirect approaches involves personal practice along with direct teaching instruction.

Kabat-Zinn (2012) suggests that personal practice is a key element to success in fostering mindfulness and providing authentic instruction. Albrecht (2012) reports that mindfulness practices have been shown to help teachers reduce stress, improve behaviour management techniques in the classroom and increase self-esteem. Roeser et al. (2013) conducted a study that suggested that teachers who participated in mindfulness training showed “greater mindfulness, focused attention, and working memory capacity, and occupational self-compassion, as well as a reduction in occupational stress and burnout, and symptoms of anxiety and depression” (p. 1). The

following section will address programs developed for teachers to develop their own personal practice as well as classroom-based interventions for students including: The Mindfulness-Based Wellness Education (MBWE); Cultivating Awareness and Resilience in Education (CARE), and Stress Management and Resiliency Techniques in Education (smartEducation).

Mindfulness-Based Wellness Education (MBWE)

The Ontario Institute for Studies in Education of the University of Toronto (OISE/UT), along with by Dr. Corey Mackenzie, Dr. Geoffrey Soloway, and Dr. Patricia Poulin, created the Mindfulness-Based Wellness Education program in 2005 in response to increased reports of teacher stress (Meiklejohn et al., 2012). The MBWE, also known as MindWell, was created to “teach formal mindfulness practices as a foundation for cultivating an awareness of one’s health or ill-health in the physical, social, emotional, ecological, vocational, mental and spiritual domains of human existence” (Poulin et al., 2008). The MBWE program is modeled after the MBSR program and promotes the regulation of attention, emotion and mind-sets through curiosity, empathy and compassion for self and others. MBWE consists of a 9-week course at OISE/UT as part of new teacher education. Poulin et al. (2008) reported that “teachers who participated in a Mindfulness Based Wellness Program (MBWE) as part of their academic training experienced significantly greater increases than the control group in mindfulness, satisfaction with life and teaching self-efficacy” (p. 35). Many participants described sharing the knowledge they learned with their students and observed that this approach was an effective and beneficial response to the needs of their classrooms.

Cultivating Awareness and Resilience in Education (CARE)

The Cultivating Awareness and Resilience in Education (CARE) program developed by the Garrison Institute and was designed for teachers in the pre-K-Grade 12 age range. The program is based on the Prosocial Classroom Model (Jennings & Greenberg, 2009) and has four intervention aims which include: (a) to improve teachers’ overall well-being; (b) to improve teachers’ effectiveness in providing emotional, behavioural and instructional support to students; (c) to improve teacher-child relationships and classroom climate; and (d) to increase students’ prosocial behaviour. In order to achieve these interventional aims, three instructional components are suggested: (a) emotion skills instruction; (b) mindfulness/stress reduction practice; and

(c) compassion listening practice (Jennings, 2011). The training is available in a variety of formats which include four 1-day training sessions, two 2-day training sessions or a 5-day intensive retreat. Studies conducted by Jennings (2011) found promising results in relation to well-being, levels of mindfulness and more self-regulated orientation in the classroom setting.

Stress Management and Resiliency Techniques in Education (smartEducation)

The Stress Management and Resiliency Techniques in Education Program (smartEducation) was originally developed in the United States and is now managed by smartUBC, coordinated through the Faculty of Education at the University of British Columbia. The SMART program was designed to address the needs for K-12 teachers and support staff. The program involves: secular meditation, emotional awareness, self-regulation, and movement. The eight weekly meetings include presentations and group discussions and accommodate 12 to 25 participants per program. An additional 4-hour silent retreat is included the final week of the program. This non-religious and non-sectarian program trains educators to: manage stress, cultivate resilience, increase emotional awareness, improve overall health and build a repertoire of skills to manage challenging situations.

Summary

Jennings et al. (2009) suggest that empirical evidence shows a strong connection between student outcomes and teacher well-being. Fleming et al. (2013) note that if the well-being of the educator is promoted through training and support, that well-being will create a climate of change. Research suggests that a teacher's promoting of mindfulness for students through living mindfully, teaching mindfully and modeling mindfulness increases a teacher's social emotional competencies therefore improving the quality of teacher-student relationships and consequentially student learning outcomes (Jennings et al., 2009). According to Baer (2005), "you need to be able to non-judgmentally observe your own cognitions, emotions physiological responses and behaviour and respond from personal experience" (p. 161). When a teacher builds their own practice, their ability to relate directly to the experiences of the students may help foster relationships through mutual understanding. Building one's practice through the creation of a community of practice brings together individuals who share a common

passion for mindfulness teaching. According to Streat (2016), colleagues that participated in a Community of Practice (CoP) “revealed the importance of interpersonal connection, mutual learning, and appreciation of diversity” (p. 1). Streat reported that by working with a community of like-minded individuals through the sharing of resources, through reflective practice, peer feedback and discussion of challenges and celebrations all may enhance one’s practice.

2.3. Current Research on the Effects of Clinical and Non-Clinical (School-Based) Mindfulness and Yoga Programs for Adolescents

This literature review has examined the research concerning the delivery of clinical and non-clinical (school-based) mindfulness and yoga based interventions. The review used multiple electronic databases, which were searched between July 2015 and October 2017. The search was conducted to identify peer-reviewed, published studies in which mindfulness and yoga were taught to adolescents in clinical and non-clinical settings. The search included articles published from the year 2000 to present in order to provide the most up to date research on mindfulness and yoga programs in both clinical and non-clinical settings. The search strategy only considered articles that were published in English; the main search terms were “mindfulness”, “yoga”, “school”, “education”, and “programs”, “clinical”, “school-based”, “youth” and “adolescents” in various combinations as needed. The journal *Mindfulness* published by Springer Link provided many peer reviewed papers of the most recent research in mindfulness from a variety of sources. Google Scholar identified more than 100,000 articles most of which were citations and repetitive articles. Education Source provided the most relevant articles related to mindfulness studies conducted in clinical and non-clinical settings.

Many studies were considered useful for the research purposes of this thesis to gain a sense of my focus in the area of mindfulness and yoga with adolescents. The majority of mindfulness research with adolescents has been conducted within clinical settings or with special populations in schools. During the research process, and prior to developing the YWP, I examined studies conducted with youth in both clinical and non-clinical settings for the purpose of discovering what was effective in creating positive change while relevant to the current areas of interest. The information gathered was

compiled and used to inform the development of the YWP. Most of the research tended to focus on the following issues in clinical settings: substance abuse, sleep difficulty, behaviour disorders, developmental disabilities, general mental health conditions and HIV. In non-clinical settings, the main focus of research was oriented for disadvantaged/marginalized youth and youth with learning disabilities. Further research analysis uncovered newly conducted research that reflected the characteristics of the population currently being studied, such as typically developing youth with self-reported elevated levels of stress and difficulties regulating emotions. Studies were organized and grouped into clinical and non-clinical program reviews for mindfulness. Studies involving yoga were discussed only in relation to the research pertaining to school-based programs. Systematic reviews of mindfulness, yoga and a combination of the two approaches for use in school settings were reviewed throughout the research process.

Clinical Settings

This section reports on the most relevant studies conducted with adolescents who have diagnosed mental health or medical conditions, disabilities, addiction or poor coping skills. Further, these studies have taken place in clinical settings such as outpatient clinics, hospital treatment or mental health centers.

Substance Abuse and Sleep Problems

As a counselor, many students have disclosed experiencing challenges such as sleep difficulties, substance use and various other methods of coping. Similarly, Bootzin and Stevens (2005) conducted a study to investigate the impact of mindfulness for issues of substance abuse and sleep problems. Fifty-five adolescents between the ages of 13 and 19 being treated in a clinical setting for substance abuse and sleep problems participated in a 6-week intervention of MBSR and insomnia treatment. Significant reductions in mental health challenges and improvement in quality and time of sleep were reported by those who completed the course. Although an increase in substance use was noted by participants during the intervention, it should be recognized that there was an overall decrease in use reported 12 months following the program for those who participated, while the participants who did not complete the program (quit) reported a continued increase of substance use. This research was beneficial for the development of session availability and flexibility in order to encourage attendance and participation.

Behaviour Disorders

The identification of behaviour disorders has become more prevalent within a school setting over the past few decades. In examining the research regarding the impact of mindfulness on youth, with a diagnosis of a behavioral disorder, is an important area to consider when developing a program within the context of school. One of the relevant studies informing current research was conducted by Bogels, Hoogstad, van Dun, de Schutter, and Restifo in 2008. The researchers investigated how mindfulness impacts youth ages 11-18 who were referred by their community mental health center with a diagnosis of ADHD, ODD/Conduct Disorder or Autism Spectrum Disorder or having experienced externalizing symptoms. Fourteen families participated with eleven of the parents also presenting a mental health disorder. The program included 8-week sessions of Mindfulness Based Cognitive Therapy (MBCT) with home practice encouraged. Participants experienced mindful breathing, body scan, sitting meditation and mindfulness listening. Participants reported an improvement in objective sustained attention, self-control, quality of life, social thinking, parental and adolescent goals and subjective happiness. Results were considered “remarkable” by families who reported that nothing had been as effective in the treatment of core problems in the past. Most notable was the broad range of problems, with many of the participants reporting severe diagnoses, long histories, family functioning problems and only modest improvement in relation to previous treatment approaches. The results from this study were encouraging because of the positive impact the intervention had on the participants considering the historical nature of having experienced little to no improvement in the past.

For many individuals with ADHD self-regulation, emotion regulation and paying attention can be very challenging and of interest to the current research. Zylowska, Ackerman, Yang, Futrell, Horton, Hale...and Smalley (2008) investigated how mindfulness training may improve attention and emotion regulation in adults and adolescents with ADHD. Results indicated an improvement on tasks measuring attention and cognitive inhibition. The research supports mindfulness as a self-regulation tool that offers novel and potentially useful training in a multimodal treatment of ADHD (Zylowska et al., 2008, p. 744). This study informed the current research by recognizing that an intervention with more than one mode of intervention is likely to be more effective and therefore the YWP combined mindfulness and yoga sessions to solidify the concepts introduced each week.

To further the research with individuals who have been diagnosed with ADHD, Weijer-Bergsma, Formsma, Bruin, and Bogels (2011) investigated the effectiveness of a program developed from the Mindfulness in Schools Project with students diagnosed with ADHD and their parents. Ten participants between the ages of 11 and 15 that had been diagnosed with ADHD, and were later referred to an academic treatment center for ADHD, took part in an 8-week program. Participants attended weekly sessions lasting an hour and a half. A booster session was offered to parents and students eight weeks following the program. During the program participants were taught breathing exercises, sitting meditation as well as other variations of meditation. Parents were required to participate in ‘Mindful Parenting Training’ that was separate from that of their children. Results suggested improvements in both internalizing and externalizing behaviours, as well as attention and executive functioning, which were also reported in the follow up meeting eight weeks post-program. Parent functioning was also reported as having improved as a result of participation in the parenting training; specifically, the fathers of the participants described a significant reduction in parenting stress, meta-cognitive problems and an overall improvement in behaviour regulation. This study is relevant to the current research as it illustrates that greater parent involvement can be correlated with adolescent health and well-being and this was encouraged throughout the YWP.

Developmental Disabilities

Meditation on the Soles of your Feet conducted by Singh, Wahler, Adkins, and Myers (2003) was developed to “implement a mindfulness-based, self-control strategy for an adult with developmental disabilities and mental illness whose aggression had precluded successful community placement” (Singh et al., 2003, p. 158). The intervention was a simple meditation practice designed to increase the mindfulness of the participants’ internal and external environment. Each participant was encouraged to “divert attention from an emotionally arousing event, thought or situation to an emotionally neutral part of one’s body, the soles of their feet” and focus on an emotionally neutral part of their body (Singh et al., 2003, p. 162). The idea is to calm oneself by stopping and refocusing the mind on the body. This strategy allowed for space between thinking about how to respond and reacting to an emotionally arousing situation. Singh and colleagues continued their research given the significantly positive results from the 2003 study; in 2007, the researchers conducted a further study with three conduct disordered adolescents using the Meditation on the Soles of Your Feet

model. In order to assist these at-risk youth, the researchers aimed to help these adolescents learn to focus and to attend to the conditions that gave rise to their maladaptive behavior. Results indicated that the meditation effectively assisted the adolescents in regulating aggressive behaviour with less incidence of aggression at school. These studies relate to the current research from the perspective of emotion regulation and the implications of introducing mindfulness to adolescents. I hypothesized that the probability of an improvement in the ability to regulate emotions in a typically developing youth would be high if this intervention was effective with conduct disordered youth.

Mental Health Outpatient

One of the first randomized control trials of mindfulness meditation with youth was investigated by Biegel, Brown, Shapiro, and Schubert (2009). Thirty-nine adolescents between the ages of 14 - 18 participated in an 8 weekly Mindfulness Based Stress Reduction (MBSR) sessions as part of a mental health outpatient program. Home practice was highly encouraged as an extension of the practice. Participants experienced body scan exercises, walking and sitting meditation and were compared to a group that received regular treatment (TAU - Treatment as Usual). The MBSR group showed significant improvements over time in the area of perceived stress, anxiety (state and trait), symptoms of depression, self-esteem, quality of sleep, interpersonal challenges, and overall improvement in mental health. Biegel and colleagues noted that the participants, who regularly practiced the exercises at home, reported greater positive outcomes from participating in the program. Although the participants in the YWP were typically developing adolescents without any clinical diagnosis, this research was very influential in the development of the program.

HIV

The study by Sibinga et al. (2011) investigated the impact of mindfulness on youth with HIV who were recruited from a pediatric and adolescent outpatient clinic in an urban and under-served setting. Twenty-six African-American participants took part in one of four MBSR groups; two of the groups were specifically intended for HIV infected patients. The 8-week MBSR course included teaching and experiencing mindful yoga, body scan mindful meditation, at home practice and discussions. Quantitative results indicated that participants experienced a significant reduction in hostility and emotional

discomfort. Qualitative data included responses from in-depth interviews that were conducted on a sample of the participants. Participant responses suggested an improved sense of calm and relaxation and an increased ability to manage anger and conflict with others. Other reported benefits included better performance in school, greater confidence, improved concentration, increased awareness of stress and reduction of reactivity and hostility towards others. This study was one of the first mixed methods studies with youth in the field of mindfulness and reflects a similar approach to the current research.

Summary

According to Saltzman (2011), students are increasingly being diagnosed with a variety of mental health conditions along with self-injurious behaviours. Kovacs (1997) suggests that the rise in mental health problems in adolescence is due to the pressure associated with rapid social change and the breakdown of the family. The British Columbia Adolescent Health Survey BC AHS (2013) reports that protective factors against mental health challenges for adolescents include: school connectedness, positive family relationships, caring adults outside of the school environment and relationships offering health support. Burns et al. (1995) suggest that the majority of young people do not seek treatment for mental health problems and those who choose to access helpful services often do so within the education setting. Further, Lawlor (2014) notes that “in the past ten to fifteen years of research efforts, evaluations of the effectiveness of mindfulness approaches targeting children and youth in education have increased” (p. 85). Research suggests that mindfulness can improve self-awareness (Mendelson et al., 2010), emotional stability (Black et al., 2009), cognitive flexibility (Moore et al., 2009) and academic performance (Beauchemin et al., 2008) in children and youth. Given these benefits, there has been an increase in the secular application of mindfulness programs in schools over the last decade; mindfulness has evolved from its initial Western applications in the medical field to a variety of social services, including education (Meiklejohn et al., 2012). Jon Kabat-Zinn (2003) has described mindfulness as a mode “of being”, rather than a formal meditation practice. This allows for mindfulness to be practiced and maintained outside a formal setting and subsequently easier to implement in a school-based setting. The following section describes current research of mindfulness programs within a non-clinical or school-based setting.

Non-Clinical (School-Based) Settings

Special populations such as disadvantaged youth and youth with learning disabilities have been an area of mindfulness research that has received a great amount of attention in the past. More recently, studies involving typically developing youth have become of interest in the field. The most current studies for special populations and typically developing youth within non-clinical settings are described below.

Disadvantaged Youth

Mendelson et al. (2010) conducted a study on the feasibility and preliminary outcomes of the school-based mindfulness intervention for urban youth. The study was based on the notion that mindfulness-based approaches may improve adjustment among chronically stressed and disadvantaged youth by improving their capacity to self-regulate. Ninety-seven fourth and fifth grade students from four urban public schools participated in the study and were randomized to either an intervention or a wait list control group. Findings suggested that there was a positive impact on problematic responses to stress including interest of thinking rumination and emotional arousal. This study was significantly influential for the development of the YWP, particularly regarding the relationship between stress, self-regulation and emotional arousal.

Learning Disabilities

In 2008, Beauchemin investigated the effects of mindfulness meditation on students with learning disabilities. Thirty-four students aged 13 - 18 participated in the study all enrolled in a school explicitly educating students with diagnosed learning disabilities. Prior to the start of the program, a 45-minute meditation training session was led by the researcher and a teacher in order to establish the foundation of the program. The program lasted 5 weeks and included 5 - 10 minutes of meditation before class every day. This study conducted pre- and post-tests without the use of a control group. Improvements were reported in state and trait anxiety levels, problem behaviours, academic performance, self-reported and teacher reported social skills. Participant responses were positive; descriptions included their having enjoyed the program and their experience of increased feelings of calm, relaxation and peace. This study was influential on the current research due to the increasing number of students

with learning challenges that have no official designation and how to accommodate those students in the YWP.

The next section of this literature review examines studies that are pertinent to this research in an attempt to outline what has been investigated that is similar to that of the YWP in an education setting. The following studies were chosen for this literature review due to the similarity in experimental approach and design of the current research. The following review includes studies that involve a population of typically developing youth with no diagnosis, designation or documented challenge.

Typically Developing Youth

The Mindfulness in Schools Programme (MiSP) is similar to the YWP and was used as a model when developing the current study. Like the YWP, the MiSP intervention includes elements that apply to youth who are stressed and experiencing mental health difficulties (not diagnosed), are developmental range of mental health or are prospering. The philosophy of the MiSP suggests that teaching mindfulness as a way recognizing and working with everyday stressors and experiences, regardless of mental health status, can be potentially beneficial to all people. Similar to the YWP, the MiSP curriculum is designed to fit into the school curriculum and can be taught by school teachers once they have been appropriately trained making this MiSP sustainable in the long term. Huppert and Johnson (2010) examined the impact of the Mindfulness in Schools Project (MiSP) on well-being based on the MBSR program. Participants included 173 boys from a private school ages 14 and 15 years old. A total of 11 classes participated with six classes received mindfulness during religion class and the other five classes served as the control group with no intervention. The program included 40 minute classes once a week for four weeks with at home resources to practice outside of the session time. No significant differences were reported between the groups, which authors suggest is the result of a shorter program as compared to other studies. Though, it was noted that greater resilience and well-being was associated with the more mindfulness was practiced outside of the session time.

A more in-depth study carried out by Kuyken et al. (2013) examined the effectiveness of the Mindfulness in Schools Project (MiSP). Twelve schools with a total of 522 youth between the ages 12 to 16 were selected in the UK to participate in the

study. The MiSP was offered in place of religious studies, personal, social and health education. The program took place during summer exams, which is considered a high stress time for students. The purpose of the study was to measure acceptability and feasibility of mindfulness practice with a focus on well-being and mental health. A few months after the program 80% of the participants said they continue to occasionally use the skills learned. At the three-month follow-up, participants in the intervention group reported lower stress and lower depression scores versus the control group. These two studies informed the YWP in terms of the length of program to offer to participants for the purpose of effective and positive change.

The Learning to Breathe (L2B) program was used as the foundation for the YWP, in combination with MBSR, as well as interpretations of mindfulness in relation to personal experiences. Broderick and Metz (2009) conducted a pilot study to test the effectiveness of the L2B mindfulness-based intervention program developed for high school students. The intervention group consisted of 120 senior girls from a Catholic school and the program sessions were incorporated twice a week into an existing health class; the L2B program includes 6 lessons with at home practice resources. Significant reductions in negative affect were documented, with enhanced levels of calm, relaxation and self-accepting being noted by the intervention group. Other findings, as a result of participation, included a significant improvement in regulating emotions, emotional awareness and emotional clarity. Further, participants observed experiences of feeling more rested and lessened somatic complaints. Many participants described their participation as beneficial and reported using mindfulness techniques outside of the school setting. In 2013, a second study by Metz, Frank, Reibel, Cantrell, Sanders & Broderick was created to investigate the effectiveness of the L2B program on emotion regulation, attention and performance of adolescents. Participants included 216 high school students who were divided into 2 groups. One group participated in the L2B program while the other group continued as an instruction-as-usual group. Results indicated that the treatment group experienced lower levels of stress, psychosomatic complaints, and improved emotion regulation skills such as emotional awareness, clarity and access to strategies to manage emotions more effectively. The findings from this study provide evidence that mindfulness meditation assists in the development of social emotional learning skills, which contributes to the justification of the current study.

Rempel (2012) conducted a review of the literature on mindfulness for children and youth with an argument for school-based implementation. An evaluation of the empirical evidence related to the use of mindfulness-based activities to facilitate and enhance student learning and to support psychological, physiological and social development was conducted. The research reviewed suggests that mindfulness-based practices can have a positive impact on academic performance, psychological well-being, self-esteem, and social skills in children and adolescents. It was concluded that the potential benefits of integrating mindfulness-based training into school settings were significant regarding a focus on cognitive, emotional, interpersonal and spiritual domains. Rempel suggested looking at larger randomized controlled trials for continued research in the field.

Limitations in the Research

Felver et al. (2015) systematically reviewed the current scientific literature base of mindfulness-based interventions for youth in school settings to identify limitations in the research to inform future methods. "Twenty-eight studies were reviewed and coded across multiple domains including: methodologies employed, student characteristics, intervention characteristics, and outcome variables" (Felver et al., 2015, p.1). Felver and colleagues (2015) reported that "of the 28 studies reviewed only half used any type of comparison condition to explore the effects of the intervention and only a third of the studies randomly assigned students to conditions this lack of both comparison and random assignment represents the single largest limitation in the existing literature" (p. 8). The lack of reporting study details was also noted, such as the amount of time students engaged in the intervention or participant characteristics. Strengths and limitations of the studies in review were summarized into four categories: research design, subject characteristics, intervention characteristics and outcomes. According to Felver et al. (2015) sample size, student characteristics and ethnicity were all factors of strength in the existing literature. A strength, reported by Felver et al. (2015), is included that "most of the studies of group based interventions were conducted in a classroom environment during normal school hours which is encouraging for the generalizations of these practices in school settings as interventions delivered to students in their normal classroom are more likely to be generalized a classroom environment and skills learned may also be more likely to be used" (p. 7). A common theme for many of the studies was the use of components of mindfulness based stress reduction (MBSR) as well as

the general recommendation that the mindfulness facilitators have extensive experience teaching mindfulness skills. It was concluded by Felver et al. (2015) that although the application of mindfulness-based interventions in school settings has great potential for improving educational and psychosocial outcomes for today's youth there were significant limitations. It was noted that most studies depended on questionnaire measures to assess the effects and did not include full of assessments or included objective data which was described as a major limitation in this literature (p. 8).

Yoga as a School-Based Intervention

This section was included as justification and current research supporting the addition of yoga as a secondary intervention alongside mindfulness in the YWP. It should be noted that the majority of the research available for yoga examines therapeutic interventions of adults rather than adolescents. Yoga is an intervention that an individual can find for their own unique direction of change and implications. Yoga has traditionally been the incorporation of a series of movements breathing exercises and meditation. Studies have shown that ongoing practice may be related to improved mood, decreased anger, decreased depression and fatigue and an improvement in the resilience of stress while reducing problematic physiological and cognitive patterns of response to stress such as rumination intrusive thoughts and emotional arousal (Serwacki & Cook-Cottone (2012). With frequent practice, research demonstrates that the benefits of practicing yoga far exceed the expectations of the practitioner.

The first published qualitative assessment of a school-based yoga program was conducted by Conboy, Noggle, Frey, Kudesia, and Khalsa (2013). The study was a randomized control trial of 9th and 10th Grade students examining the effects of a yoga program offered in place of physical education in a public high school. Post-program interviews were conducted with reports of greater kinesthetic awareness, increased respect for the body and improved self-image. Results also indicated psychological benefits such as stress reduction, the increased ability to manage negative emotions and a more optimistic outlook on life. Some participants reported that yoga could reduce the use of drugs and alcohol while improving relationships with family and peers. Results suggested that yoga programs may in fact promote healthy behaviors by focusing on interrupting negative patterns of behaviours throughout adolescences. This study was pivotal in the decision process of integrating formalized yoga sessions with the weaving

in of mindfulness practice familiar to the participants as a secondary intervention. Conboy et al. (2013) describe yoga as a comprehensive mind-body practice involving relaxation, meditation, physical postures, and breathing exercises. This practice allows for non-judgmental observations of the self through movement and breath in order to unify the self physically, emotionally, cognitively, spiritually, and socially, all which were goals of the YWP.

Research suggests that school-based yoga programs are beneficial; although, the quantitative studies had methodological limitations such as small sample size, minimal detail regarding the intervention, and poor conclusions and recommendations. Minimal research in the area of qualitative analysis on yoga programs in schools is currently available. It is through qualitative measures that we can increase understanding of how the individual experiences yoga programs within the school system and was the approach of the YWP. It should be noted that there are currently no studies known to the researcher that include mindfulness and yoga as a combined intervention to address emotion regulation and stress with typically developing youth.

Summary

Greenberg et al. (2012) suggest that the current research on mindfulness with children and adolescents in education is promising. Over the past decade the secular application of both clinical and non-clinical (school-based) mindfulness programs have increased significantly but are not without challenges. The school environment is the most accessible for the implementation of interventions that will promote healthy development and improve resiliency for adolescents. It is important to recognize that the implementation of a mindfulness program can be a challenge. In the past, the formal education system has placed a great deal of emphasis on academic achievement while neglecting an essential element for this achievement to occur—the ability to pay attention. Roeser et al. (2001) found that “adolescents’ emotional distress was negatively related to their grade point average and positively related to their involvement in problematic behaviors at school (p. 114). Macklem (2007) reports that “studies show attentional process are involved in the regulation of emotion and it is suggested that children with a stronger ability to focus attention have lower distractibility and are more likely to experience positive rather than negative emotions” (p.22). Broderick (2013) suggests that “learning to channel attention to productive tasks, to sustain motivation

when work becomes demanding, and to handle the frustrations of sharing, learning and communicating with peers are skills that depend on the ability to understand and manage emotions" (p. 6). Broderick (2009) states that she believes that "mindfulness skills could be important for facilitation of emotion regulation skills and for well-being in the general adolescent population" (p. 37). In 2009, Patricia Broderick stated that the literature did not contain any school-based mindfulness curriculum for adolescents. Broderick suggests that mindfulness "offers the opportunity to develop hardness in the face of uncomfortable feelings that otherwise might provoke a response that could be harmful (such as 'acting out' by taking drugs or displaying violent behavior, or 'acting in' by becoming more depressed) (p. 37).

Albrecht et al. (2012) describe mindfulness education programs as "a topic that was once considered a fringe activity is now experiencing mainstream acceptance" (p. 11). Weare (2013) suggests that mindfulness is likely to have "beneficial results on the emotional well-being, mental health, ability to learn and even the physical health of students and staff" (p. 23). According to Macklem (2014), "as educators we need to become advocates for change, using knowledge of the trajectories of the risky behaviors in which some adolescents engage, as well as the factors influencing externalizing disorders and internalizing disorders that students may develop" (p. v). Mindfulness training is an effective, non-invasive and affordable way of addressing mental health, behavioral, learning and attentional problems that are related to stress among youth. Greenberg et al. (2012) suggest that the current research on mindfulness with children and adolescents in education is promising.

Chapter 3. Research Methods

3.1. Program

3.1.1. Objectives

This research includes a program development component as well as a study. In this section I will describe the program component by describing the development of the pilot program. Although the outline of the program was initially broad allowing for participant input to guide the process, specific topics were foundational topics to guide the process succinctly.

Resources for the program were assembled in preparation for the pilot as follows:

- Video recording equipment to document sessions and record pre- and post-program participant interviews
- A designated space for mindfulness and yoga sessions
- Yoga mats and blocks for modifications of postures
- Singing bowl to use for the beginning and end of each mindfulness and yoga session
- Journals for participant reflections post yoga sessions
- Duo tangs for participant reflections post mindfulness sessions
- Speaker and calming music for yoga sessions
- Prizes to use for incentives to attend both mindfulness and yoga
- Snacks for participants to enjoy after each session
- Post-program wrap up lunch and take away books

3.1.2. Learning Outcomes

Four key learning outcomes (goals) formed the basis of the YWP, with the aim of encouraging the participants to:

- Improve awareness of and attend to the physical, mental and emotional response to stress.
- Introduce and encourage the development of skills/strategies to regulate physical, mental and emotional responses to stress.
- Encourage the acquisition and application of skills to manage intense emotion and stress that can be generalized to daily life.
- Critically reflect on how they cope with stress by learning to attend and focus through mindfulness and yoga practices, and by developing awareness of habitual responses that may be unhelpful or unhealthy.

3.1.3. Program Development (pilot)

The purpose of this exploratory pilot study was to develop an effective and meaningful mindfulness and yoga education program aimed at fostering well-being in youth. A variety of methods were applied in order to assess the most effective approach to the topic of well-being for secondary students. Firstly, the program's development was based on an approach to mindfulness and yoga education that I have been implementing with various age groups for many years. Throughout my time as an educator and counsellor, I have come across a staggering number of young people who displayed seriously maladaptive coping strategies; this observation sparked my interest in the field of emotional coping. I began to design and implement activities, lessons and discussions with various age groups with the hope of helping them to develop specific skills that may improve stress management and the intensity of emotions both within the context of school as well as the community. In addition to this personal approach, I integrated Jon Kabat-Zinn (MBSR) and Patricia Broderick's (L2B) philosophical perspectives of mindfulness to provide variety and potential relevancy to the age group of participants. These programs provided concrete examples and lessons to assist in developing the framework for the YWP. Secondly, participants were requested to reflect upon their experience following each mindfulness and yoga session in order to provide feedback. These reflections were further used for program development for the following

week. Sessions were designed to be flexible and emergent, allowing for participants to contribute to the development of the program. Participants became active agents, encouraging the tailoring of topics to accommodate areas of interest; these suggestions were communicated through written reflection or discussion after each session of mindfulness and yoga. Field notes were also kept recording observations, participant suggestions and comments used in shaping the YWP.

3.1.4. Program Structure

The Yoga Wellness Program (YWP) was an 8-week school-based mindfulness and yoga program with the option to attend 4 additional mindfulness yoga sessions. The YWP was developed through a combination of approaches to develop an age appropriate program that would be meaningful and relevant for youth. This educationally based research program was designed to address how emotion regulation is impacted by stress in youth.

Each individual participating in the program was required to attend an introductory meeting in February/March 2015 prior to the start of the program to pick up a package containing parental consent, and student assent forms to be returned prior to commencement of the program. A second meeting was scheduled to gather pre-program data such as semi-structured videotaped interviews, self-report scales and questionnaires as well as to discuss the outline of the program and schedule times to meet week one of the program.

Materials

The Yoga Wellness Program consisted of a combination of sections of the Mindfulness Based Stress Reduction program (MBSR) (Kabat-Zinn, 1990), the Learning to Breathe Program (L2B) (Broderick, 2013) and yoga sessions designed by the principal investigator. The full MBSR program was not chosen as the basis for the current investigation due to the inability to implement the program in its entirety (e.g. there was limited time and no retreat). The L2B program contains age appropriate material and consisted of a program which fit with the length of the study.

The principal investigator is a doctoral student in education with 20 years of experience as a School Counselor/Teacher/Clinical Counselor as well as 10 years of experience as a yoga and meditation teacher/practitioner. All mindfulness and yoga sessions were by the principal investigator.

The YWP began March 30, 2015 with the final session June 17, 2015 covering topics such as: (a) breath awareness, (b) body awareness (body scan), (c) mindful eating, (d) awareness of unpleasant/pleasant events, (e) the physical, mental and emotional impact of stress (f) mindful listening, (g) sitting meditation, (h) loving kindness meditation, (i) coping skills and emotion regulation. All of the concepts delivered in the mindfulness sessions were threaded into the yoga class to encourage transferability of the skills in order to aid in the understanding of the impact of stress on our physical body and how we can relieve those effects through the mind and physical movement. The last 4 weeks combined both mindfulness and yoga into one session (additional sessions) to review all of the skills presented throughout the program and tie things together as well as introduce special topics in relation to the feedback from participants ex: surviving exams.

Participants were required to participate in a 45-minute mindfulness session and a 45-minute yoga session per week at their convenience. Mindfulness sessions took place in the counseling center at the school while yoga sessions were 45 minutes and took place initially in a portable for the first two weeks and then a fitness room on the school grounds for the remaining six weeks. During the optional four weeks a dance studio was used during the lunch time additional sessions.

The mindfulness sessions were a combination of activities found in the programs, L2B (Broderick, 2013) and the MBSR Program (Kabat-Zinn, 1990) and consisted of seven components: (a) a check-in (in which participants recorded their current level of perceived stress on a 10 point scale), (b) an opening exercise of breath awareness, (c) a discussion topic facilitated by the instructor/researcher (e.g., mindful listening) and (d) formal mindfulness meditation (usually 10–15 minutes long), (e) a check-out (in which participants recorded their current level of perceived stress on a 10 point scale), (f) written reflection, and (g) discussion.

The yoga sessions were an extension of the mindfulness session which was incorporated into the development of each class reflecting the participant's written feedback. Each 45 minute session consisted of eight components: (a) a stress check-in (in which participants recorded their current level of perceived stress on a 10 point scale in their personal record form provided before each session), (b) an opening exercise of breath awareness, (c) yoga postures, (d) final breathing, (e) relaxation, (f) post session stress check-in (in which participants recorded their current level of perceived stress on a 10 point scale), (g) reflection, (h) a snack and discussion.

Each student was provided with a mindfulness journal as well as a yoga journal which were distributed and collected prior to and at the end of each session. Participants were asked to record their experience in response to a formal question or simply reflect on their experience. This feedback was used to develop sessions throughout the study in order to address questions and topics relevant to the participants. Between each session, participants were encouraged to practice the concepts of the specific topics and to practice mindfulness as much as possible, although no formal request was made.

Details of the Program

Twenty sessions were designed, consisting of eight mindfulness, eight yoga and four optional sessions. The details of the program can be found in Appendices J thru O.

3.2. Study

3.2.1. Study Aims

There is an emerging need for active research into educational practices that contribute to current methods of fostering well-being in youth. For purpose of this study well-being is defined as experiencing greater emotion regulation and less perceived stress. Current methods of fostering well-being within the school context include programs such as "Kids in the Know", The FRIENDS Program, Planning 10 and newly developed curriculum for physical and health education implemented September 2016.

This study aims to (a) gain a greater perspective understanding of how youth regulate emotions when faced with challenging (stressful) situations; consequently, to synthesize these findings in order to identify key features and approaches that foster well-being, (b) develop an empirically-based framework for understanding a way to encourage and empower youth perspectives on the value of well-being that is sensitive to but also recognizes and acknowledges the complicated nature of each youth's daily experiences, and (c) gain perspective of how youth view emotion regulation and stress in relation to well-being.

3.2.2. Research site

Langley Fine Arts is considered a school of choice although it is a public school located in Fort Langley B.C. In order to attend LFAS students must apply in writing and attend a formal interview with the teacher and administration. In the senior grades, an interview, as well as an audition, is required along with a review of the students' academic and behavioural history and passion for the arts in order to attend the school. Parents and students are typically very motivated to attend and remain at LFAS for the duration of their school experience accommodating students from Grades 1 through 12. The focus of LFAS is on the arts, including music, drama, dance, and the visual arts. In later years, students can take photography or writing as their arts focus. The primary students receive arts education in the four core arts: music, dance, drama and visual arts, while middle years move from four to three and then three to two in junior high and finally specializing in a major once they are in Grade 9 thru 12. The population at LFAS has a tendency to experience high anxiety, depression and suicide ideation. The academics are compressed often putting a great deal of pressure on students in all areas of their lives which is evident in the data collected for this study.

3.2.3. Participants

Thirty-one typically developing (non-clinical) adolescent students from Langley Fine Arts School (LFAS) in British Columbia Canada volunteered to participate in an educationally based yoga and mindfulness program. The participants for this program were 31 (females = 28; males = 3) secondary students, 13–18 years of age from a variety of ethnic backgrounds. Participants voluntarily took part in the program due to

self-reported elevated levels of perceived stress and interest in improving coping skills. Participants that were excluded from the program included students in Grades 1 to 7. There were no other exclusions as the program can be modified to address the needs of students. Out of the 31 participants initially recruited, two withdrew from the program before it began, where unforeseen commitments and leaving the school to be home schooled prevented them to participate. Of the 29 students to participate in the study, only 25 students completed a full data set of pre- and post measures. It should be noted that there were gaps in attendance and completion of sessions, scales and interviews for many of the participants. LFAS students from Grade 8 to 12 volunteered to participate in the program from Grade 8 ($n = 1$), Grade 9 ($n = 5$), Grade 10 ($n = 7$), Grade 11 ($n = 13$), Grade 12 ($n = 3$). Participants were ages 13–18, age 13–14 ($n = 6$), age 15–16 ($n = 20$), age 17–18 ($n = 3$) (Mean age = 15.41). All participants received the weekly educational sessions on mindfulness as well as separate sessions of yoga (8×45) minutes of mindfulness plus (8×45) minutes of yoga = 720 minutes of instruction with and additional $4 \times 45 = 180$ of optional instruction. The average attendance for mindfulness was five and for yoga sessions the average was four (Table 3.1). The YWP took place outside of the academic timetable (i.e. lunch and after school). At the start of the program, the participants were informed of the nature of the research and reminded that their participation was voluntary, and that compensation in the form of weekly prizes would be given as incentives for participation in both the yoga and mindfulness components of the program. At the end of the week there was a draw for an age appropriate item chosen by the principal investigator for completion of both components of the program. Participants will be referred to with pseudonyms throughout the thesis due to the identifiable characteristics, which, if linked, will not ensure anonymity. It should be noted that three of the 29 YWP participants were male and due to possible participant identification, gender will not be referred to throughout the thesis.

Table 3.1. Attendance table

Overall Attendance		
Participant	Mindfulness (Total sessions attended)	Yoga (Total sessions attended)
1	7	7
2	7	7
3	7	5
4	6	3
5	5	5
6	6	0
7	7	4
8	2	4
9	8	4
10	6	2
11	8	8
12	8	7
13	2	4
14	6	5
15	7	2
16	6	6
17	7	8
18	7	8
19	6	6
20	5	4
21	6	7
22	4	4
23	7	4
24	8	8
25	6	1
26	3	6
27	5	1
28	3	3
29	2	4

3.3. Pedagogy

Mindfulness and emotion regulation theories were the primary influences for the pedagogy used within this study. This study was designed to be youth driven in order to provide current and relevant information to develop programing in the area of emotion regulation, stress and well-being. This approach was meant to engage participants in the creation of the Yoga Wellness Program. The students were included in the titling of the program, exemplifying the form of pedagogy employed throughout the study's program.

3.4. Procedure: Ethics and Reciprocity

The ethics of this study underwent a full review process by the Office of Research Ethics at Simon Fraser University, the educational institution overseeing this research. In addition to parental informed consent, the participants signed assent forms prior to participation in the YWP (see Appendices A, B, Q and R). Participants were recruited through information published in the school's newsletter or by word of mouth. This investigation included adolescent students from a fine arts school which provides students from Grade 1 to 12 with arts based instruction provided by professional teachers with a specialization in the arts. The pressures on the students from LFAS tend to be greater than the norm due to the outside of the timetable expectations placed upon them. The focus of this study was to examine the effects of implementing a school-based yoga and mindfulness program with a group of secondary students in order to measure the effect of the program on their ability to regulate emotions when experiencing stress.

Participants were assured that at any time if they decided to withdraw from the program that they would be able to without penalty and all their information would be removed from the data.

3.5. Procedure: Data Collection

The mixed methods convergent design included both quantitative and qualitative data. Constructs of interest included the areas of emotion regulation, perceived stress, self-regulation, mindfulness, and perceptions of well-being, self-confidence and empathy. Data collection included the following pre- and post-program self-report measures: Difficulties in Emotion Regulation Scale (DERS) (Gratz & Roemer, 2004), Perceived Stress Scale 10 (PSS) (Cohen, Kamarck, & Mermelstein. 1983), Self-Regulation Questionnaire (SRQ) (Brown, Miller, & Lawendowski, 1999), Mindfulness Attention Awareness Scale (MAAS) (Brown & Ryan, 2003), a self-reported perceived stress scale using a 10 point scale before and after each session (1 = not stressed, 10 = max amount of perceived stress), Post-Pre- Retrospective Assessment (Hiebert, Domene, & Buchanan, 2011), and sections of The Positive Youth Development Student Questionnaire Short Version (PYD) (Lerner, Lerner, Almerigi, Theokas, Phelps, Gestsdottir et al., 2005b) (see Appendices D – I). Quantitative data were statistically analyzed using SPSS and SAS. The qualitative data included pre- and post-program semi-structured interviews, participant weekly written reflections, parent observations and researcher field notes. Qualitative data were transcribed and coded for thematic analysis (see Appendices C, O and P). Transcriptions were prepared from video recordings of the previously mentioned interviews. Both quantitative and qualitative approaches to the data were converged to provide a detailed account of the experience from the perspective of youth. Figures 3.1 and 3.2 were designed to orient the reader as to how the data were collected.

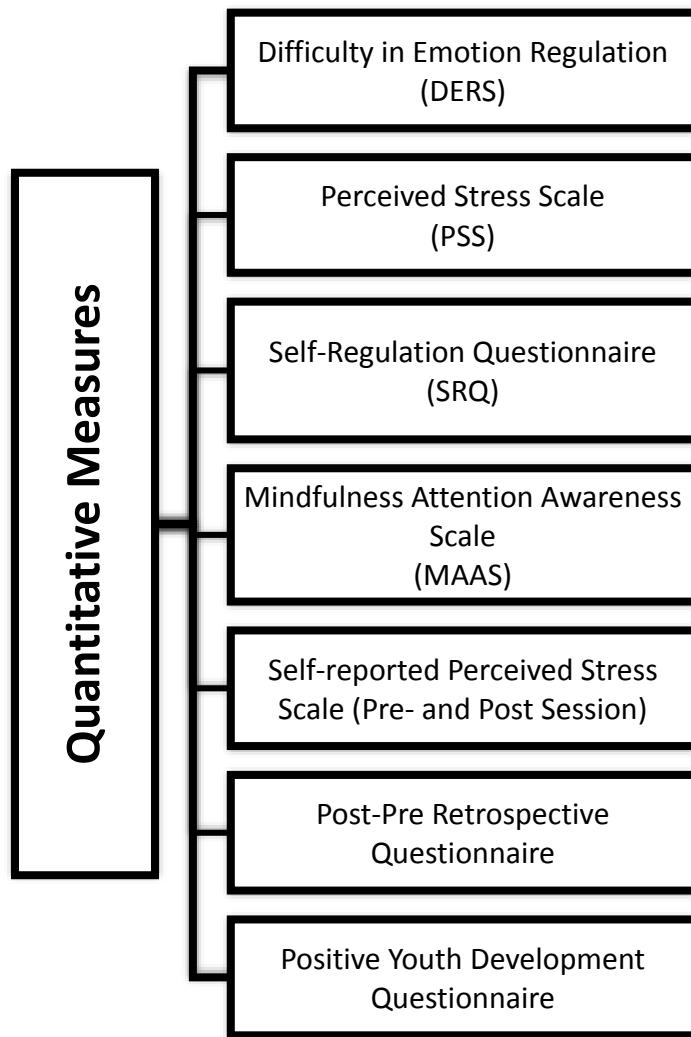


Figure 3.1 A visual representation of the quantitative data collection measures.

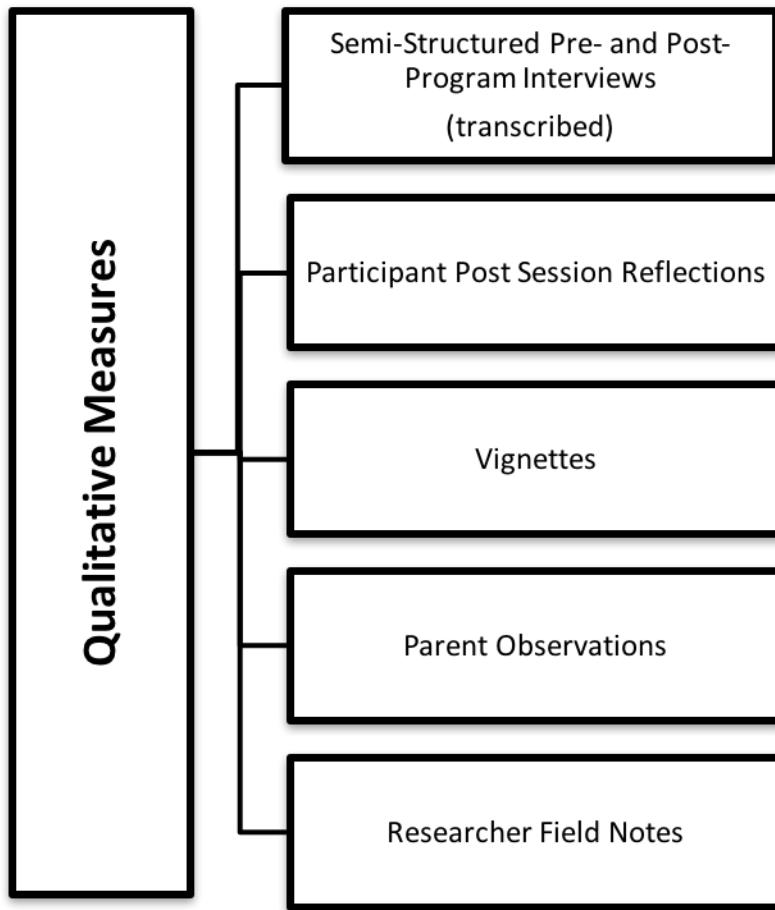


Figure 3.2 A visual representation of the qualitative data collection procedure.

3.5.1. Quantitative Measures

Emotion Regulation

The Difficulties in Emotion Regulation Scale (DERS) developed by Gratz and Roemer (2004) is a 36 item, self-report questionnaire developed to assess difficulties in emotion regulation that are considered clinically significant. According to Gratz and Romer (2004), the items for the DERS were chosen to reflect difficulties within the following dimensions of emotion regulation (a) awareness and understanding of emotions; (b) acceptance of emotions; (c) the ability to engage and goal directed behavior and refrain from impulsive behavior when experiencing negative emotions; and (d) access to emotion regulation strategies perceived as effective (p. 43). A high score indicates greater difficulties in emotion regulation or greater emotion dysregulation Average scores for men = 78 women = 80. The DERS is a measure with 6 subscales rated on a 5-point scale: 1 = almost never (0–10%), 2 = sometimes (11–35%), 3 = about

half the time (36–65%), 4 = most of the time (66–90%), 5 = almost always (91–100%). According to Weinberg and Klonsky (2009), the DERS represents the most current comprehensive measure of emotion dysregulation to date with subscales which reflect difficulties in relevant domains of emotion dysregulation. The DERS was administered both prior to the start of the program and at the completion of the program; it was statistically analyzed by comparing the total score. The DERS can be obtained through the public domain for individual use, research or educational purposes.

Perceived Stress (10)

The Perceived Stress Scale 10 item version (PSS) developed by Sheldon Cohen in 1983 is a brief self-report designed to assess the degree to which people perceive their lives as stressful. The 5-point rating scale for the PSS is used to answer each question, with ratings corresponding to the following: 0 = Never, 1 = Almost Never, 2 = Sometimes, 3 = Fairly Often and 4 = Very Often. Scores are obtained by reversing the scores of the positive items and then summing across all ten items. Scores on the PSS range from 0 to 40 with higher scores indicating elevated perceived stress. Scores ranging from 0 to 13 suggest low stress, while scores of 14 to 26 would be considered moderate stress and 27 to 40 would be considered high perceived stress. The PSS was administered two times during the course of the YWP and the data was analyzed for this thesis to provide a statistical description of how participants perceived stress before and after the program. It should be noted that the PSS is not a diagnostic instrument but was used as a measure of comparison within the sample. Finally, the PSS can be used without permission from the author if used for non-profit academic research or non-profit educational purposes (Cohen, Kamarck, & Mermelstein, 1983).

Self-Regulation

The Self-Regulation Questionnaire (SRQ) developed by Brown, Miller, & Lawendowski (1999) and is based on Brown and Miller's (1991) version of the SRQ. The SRQ is a 63 item self-report, designed to assess self-regulatory processes through self-reporting. The questions for the SRQ are answered on a 5-point scale: 1 - Strongly Disagree, 2 - Disagree, 3 - Uncertain or Unsure 4 - Agree and 5 - Strongly Agree. A score of 63–213 suggests a low or impaired self-regulation capacity, while a score of 214–238 suggests an intermediate moderate self-regulation capacity, and finally a score of 239–315 suggests high intact self-regulation capacity. The SRQ was administered

both prior to the start of the program and at the completion of the program; it was statistically analyzed by comparing the total score. The SRQ can be obtained in the public domain and may be purposed for individual use, research or educational purposes.

Mindfulness

The Mindfulness Attention Awareness Scale (MAAS) developed by Brown and Ryan (2003) is a 15-item self-report measure designed to quantify one's mindfulness attention to and awareness of one's thoughts and feelings in the present moment. Participants responded to comments such as: "I find it difficult to stay focused on what's happening in the present" and "I rush through activities without being really attentive to them.", using the corresponding 6-point scale: 1 - Almost Always, 2 - Very Frequently, 3 - Somewhat Frequently, 4 – Somewhat Infrequently, 5 - Very Infrequently, 6 - Almost Never. Scores were obtained by adding the total score and dividing the sum by 15. The maximum score for this scale is 6, which reflects a higher level of mindfulness, while the average score is 3.86 and a minimum score of 1 may be a result. The MAAS was administered as a pre- and post-program measure to obtain data as to the program's effects on mindfulness. The MAAS can be obtained through the public domain for individual use, research or educational purposes.

Self-Reported Perceived Stress Scale (Pre- and Post- Session)

Participants were asked to rate their stress prior to and after each session of mindfulness and yoga using a 10-point scale (1 = not stressed, 10 = max amount of perceived stress). This self-reported measure was included to encourage participants to become more aware of how, when and why they were experiencing stress. This identification coupled with the awareness of the effects of participation in the YWP sessions on their emotion regulation and stress was intended to increase the participants' ability to manage stress and regulate emotions.

Post-Pre- Retrospective Assessment

The Post-Pre- measure was developed based on the work of Hiebert, Domene, and Buchanan (2011). The post-pre- retrospective assessment combines decision making with a form of retrospective, or 'then and now' assessment, that is used only after a program, or unit of learning has been completed. The post-pre- retrospective

assessment measures an individual's current level of knowledge or understanding to a common measure in order to compare self-perceptions before and after a learning activity has taken place. During this research, an approach to retrospective (post-pre-assessment) was developed to measure participants' perceptions of the YWP in relation to their experience of how they identify, experience, manage and view emotion regulation, stress and well-being conceptually. The items for the YWP post-pre-measure were developed for this study based on the YWP goals and encouraged a reflective approach to what participants have learned as a result of the program. Rated on a 6-point scale, twenty questions were developed to explore the nature of the participants' understanding regarding emotion regulation, stress and well-being pre- and post-program. Scores may range from as low as 0 and as high as 80. An increase in score from pre- to post would indicate increased perception. The post-pre- measure can be found in Appendix H at the end of this document.

Positive Youth Development

The Positive Youth Development Short Version Questionnaire (PYD) was developed by Richard Lerner et al. (2005) in order to draw awareness to the assets or protective factors of youth. This measure shifts the focus from fragility or marginalization to the idea that youth have the capacity to thrive or fulfill their potential within their community. The PYD was only administered during the pre-program data collection because it was difficult to get participants to complete the lengthy form a second time. Data collected from the PYD questionnaire was separated into one of following two groups: self-confidence or empathy. These responses were of interest to this research with the goal of gaining clearer understanding of the affective roles of empathy and self-confidence and if these traits had any impact on how participation in the YWP affected participant's value of well-being. The questions used to isolate self-confidence included #8, 9 and 41 – 46 while questions pertaining to empathy included #18 – 25. The remainder of the questionnaire was not pertinent to this research study. The PYD can be obtained through the public domain for individual use, research or educational purposes.

3.5.2. Qualitative Measures

Qualitative measures consisted of semi-structured pre- and post-program interviews, participant post session reflections (mindfulness and yoga), field notes, and post-program parent observations. Semi-structured interviews were conducted both pre- and post-program to inform program development and document participant experiences. Participants' reflective journals included documented perceptions, observations and program feedback that helped to inform the research as well as aided in the development of the program from week to week. Field notes were kept throughout the study in order to document program expectations, questions, perceptions and outcomes of the program; similarly, notable observations were retained in order to supplement participant responses. Parent observations were requested as post-program to provide documented perceptions, observations and opinions of the effects of program participation from each parent's perspective (see Appendix R). Vignettes were also included in this thesis to provide a detailed viewpoint of 6 participants' experience during the YWP.

Semi-structured Interviews

Participant pre- and post-program interviews were semi-structured, videotaped, and transcribed. Prior to transcription the videotapes were reviewed on two separate occasions for familiarity with the data. Once transcribed, the data were reviewed three times prior to highlighting units of meaning. Units of meaning were categorized and double coded where applicable followed by the clustering of categories to create themes. Coding included the identifying of emergent sub-themes within themes and condensing the responses; this resulted in the collapsing of similar sub-themes into emergent themes. The thematic analysis was completed by the researcher, two doctoral students and frequent consultation with the research supervisor. Any disagreements were discussed and a consensus was reached prior to advancing the research.

Participant Post Session Reflections (Mindfulness & Yoga)

Participants were asked to reflect on their experience through open ended questions after each session of mindfulness and yoga. All participants were provided the option of responding to a focus question, the option of free writing in response to their experience of the session on that particular day or the option of opting out of the

exercise entirely. Participants were encouraged to be honest in their reflections. They were similarly reminded that this was a volunteer task, that they did not have to take part in it if they did not want to, and resulting in zero consequences academically or personally. These written reflections were useful for the writing of the 6 vignettes, as well as to inform the development of the program to address the need of the participants from week to week.

Vignettes

Vignettes are brief descriptions or illustrations designed to provide an impression. Rationale for the choosing of the participants to be reflected in the six vignettes was threefold:

- 1) All of the participants have full data sets: including pre- and post-videotaped/transcribed interviews and the pre- and post-questionnaire/survey packages.
- 2) Three participants were chosen from the junior group and three participants were chosen from the senior group.
- 3) Participants within each of the two groups (Junior and Senior) were included as: low, medium or high achievers as self-disclosed by the participant or recognized by the researcher through historical involvement or academic performance (report card).

The six participants were chosen to explore in detail to illustrate a range of observations and participant experiences as a focus of inquiry.

Parent Observations

Following the YWP, parents were sent an email containing three questions that requested feedback regarding parent observations of their child's participation in the Yoga Wellness Program. Six parents of the 29 participants responded, and provided observational information regarding their child's experience. Data from the email responses were coded for analysis and separated into units of meaning to be categorized and developed into themes. As previously mentioned, the thematic analysis was conducted by the researcher along with two doctoral students and the research supervisor.

Researcher Field Notes

Researcher field notes were kept throughout the research process to remember and record observed activities and behaviours of the participants. Field notes were reflected upon throughout the analysis to provide rich descriptive data.

3.6. Analysis: Research Methodology / Design

The present study was a mixed methods convergent design that has been described by Creswell and Poth (2017) as the merging of quantitative and qualitative data to provide a more insightful picture of a problem, which allows the problem to be viewed from multiple perspectives.

The analysis of participants' responses to the scales and questionnaires was carried out using both the SPSS version 22 (Statistical Package for the Social Sciences) and SAS (Statistical Analysis System) as a statistical approach to analyze the quantitative data. Due to the small sample size, all the quantitative data statistics are presented as exploratory with aim of emphasizing possible associations and differences that might be worth further consideration and discussion. Nonparametric tests were used to determine if there were significant differences between pre- and post-program measures. The aim was not to generalize the findings beyond the present study. The Wilcoxon signed-rank test, The Pearson chi square test of goodness of fit and the Mann Whitney were used to analyze the data. Cramers V was used to determine the strengths of association once the chi-square determined significance.

The qualitative data were thematically analyzed post-program. Semi-structured interview data, vignettes and parent observations were analyzed using a thematic analysis of the data. This approach to qualitative inquiry is based on grounded theory and constant comparative method as outlined by Maykut and Morehouse (1994). The thematic analysis was conducted for the post-program interviews, six participant vignettes and parent observations. The pre-program information and student reflections were used to provide baseline information for the vignettes, while researcher field notes were reflected upon throughout the analysis of data and in the discussion section of this thesis. The thematic analysis of data allowed for the analysis of what appears to be

unrelated data in order to make sense of it gaining knowledge through systematically discovering patterns in responses to research question. In this study thematic analysis was used as means to gain insight and understanding of data collected during the YWP that provided youth's perspectives about emotion regulation and stress in relation to well-being and the effects of a school-based mindfulness and yoga program on these factors. This analysis assisted in developing a deeper appreciation for the groups through the examination of eight categories, twenty-one themes and 107 sub-themes that emerged from the data as opposed to being imposed or pre-determined.

3.7. Trustworthiness and Teacher as the Researcher

3.7.1. Trustworthiness

Credibility was addressed by including participants in the research process as the program unfolded. Participants were encouraged to provide weekly feedback both in writing and through discussion in order to develop mindfulness and yoga sessions that provided age relevant material. I ensured to allow for transparency of my own motives and procedures as they related to the research process, but careful not to persuade or coax participants to adopt my personal beliefs about the benefits of mindfulness and yoga.

3.7.2. Teacher as the Researcher

Maykut and Morehouse (1994) describe the researcher as an instrument through which the data are collected and analyzed which requires a sensitive yet complex ability to capture the experience in its most authentic state. To safeguard against any unforeseen biases the following was implemented: (a) ongoing peer reviews from my colleagues at SFU, (b) participants were asked open ended questions, e.g., "Describe how participation in the YWP has impacted your ability to manage stress", (c) anonymity in participant responses, (d) encouraging participants to speak and respond without influence, and (e) assuring the participants throughout the program that the study is about their views. Further discussion of this phenomenon will be included in the section titled "Impact of the YWP" (5.1.1).

Chapter 4. Research Findings

4.1. Part 1 Quantitative Data

4.1.1. Forward

Findings have been presented in two interrelated sections within this chapter. Chapter 4 Part 1 reviews the quantitative component of this research while Chapter 4 Part 2 A, B and C reviews the qualitative component with a convergence of both quantitative and qualitative findings located at the end of the chapter. The quantitative data were included as a method of describing and clarifying the qualitative aspects of participant data, vignettes and parent observation data. This mixed method convergent design served as the main approach to analyzing the data for the present study. Quantitative measures can aid in assessing domains that are discovered in the qualitative work. The effects of school-based mindfulness and yoga programs on emotion regulation and stress are of recent interest and it is important that we incorporate a mixed methods approach to inform, develop and evaluate ongoing programs.

4.1.2. Attrition and Missing Data

In terms of attrition and missing data, 31 participants consented to participation in the program, and 25 completed both pre- and post-program data sets of questionnaires, scales and self-reports. Two participants did not begin the program, while five participants started the program three weeks late for various reasons. Four participants did not complete questionnaires due to leaving school early for summer break or illness.

4.1.3. Overview of the Data

Independent Variables

The independent variables for this research included: a junior group (Grades 8, 9, 10) and a senior group (Grades 11 and 12), whether parents were divorced, and whether or not students self-reported a non-clinical mental health and substance use/abuse. Gender was not included as an independent variable due to the limited number of male participants (3 male participants). The mean age for the junior group was 14.46 years ($n = 13$) and 16.19 years for the senior group ($n = 16$). Of the 29 participants, 14 (48.3%) reported having had a non-clinical mental health at some point. Twelve (41.4%) of the 29 participants reported that their parents were divorced and four (13.8%) of the 29 participants reported some type of substance use/abuse.

Grade Level and Divorce

Twelve (41%) of the 29 participants reported that their parents were divorced. The frequency of grade level and parent divorce shows a greater percentage of divorce within the junior group (24%), see Table 4.1.

Table 4.1 Frequency of Reported Parental Divorce by Grade Level

Grade Level and Divorce			
Group	Divorce		
Frequency	Yes	No	Total
Junior	7	6	13
Senior	5	11	16
Total	12	17	29

Grade Level and Non-Clinical Mental Health

The frequency of reported non-clinical mental health by junior and senior grade level is outlined in Table 4.2. In terms of the present study, non-clinical mental health can be described as self-reported symptoms of depression, eating disorders, anxiety and perceived anxiety attacks. Although none of the participants reported a mental health diagnosis, almost 50 percent of participants reported experiencing some type of mental health symptom prior to and during the program.

Table 4.2 Frequency of Reported Non-Clinical Mental Health by Grade Level

Group and Non-Clinical Mental Health			
Group	Non-clinical Mental Health		
Frequency	Yes	No	Total
Junior	6	7	13
Senior	8	8	16
Total	14	15	29

Grade Level and Substance Use/Abuse

The frequency of substance use/abuse was reported more often by senior participants (see Table 4.3).

Table 4.3 Frequency of Reported Substance Use/Abuse by Group

Group and Substance Use/Abuse			
Group	Substance Use/Abuse		
Frequency	Yes	No	Total
Junior	1	12	13
Senior	3	13	16
Total	4	25	29

Note: As the school counselor and through discussions with students and teachers I am certain that this number does not reflect the reality - I know at least 50% of the senior participants use some type of substance. Therefore, I believe that this report is inaccurate and is not reflective of the prevalence of the situation. In addition, two of the students who reported substance Use/Abuse did not complete the post-program measures. Therefore, this variable was not included in the analyses that follow.

4.1.4. Quantitative Measures and Independent Variables***Difficulty in Emotion Regulation Scale (DERS)***

To determine if there was an observed improvement in emotion regulation as a result of participating in the YWP, The Difficulty in Emotion Regulation (DERS) was administered pre- and post-program. A nonparametric test was used due to the small sample size to determine if there was a significant difference between pre- and post-program emotion regulation. A Wilcoxon signed-rank test indicated a significant improvement in emotion regulation from pre- to post-program (a higher score indicates greater difficult in emotion regulation), $Z = -2.127$, $p = .03$ (see Table 4.4).

Table 4.4 Difficulties in Emotion Regulation Scale Pre- vs Post-Program Scores

Difficulties in Emotion Regulation Scale (DERS)	N	Mean	Median	SD
DERS Pre	25	102.50	102.50	23.47
DERS Post	24	93.23	89.00	19.23
DERS Difference	24	10.58	6.00	20.90

Both pre- and post-DERS scores indicated above average difficulty in regulating emotions by participants compared to the DERS average population study scores.

DERS and Independent Variables

The DERS difference scores (post- minus pre-program) were calculated and a median split was used to categorize change responses into Lower Change in DERS (ranged from -51.00 to -7.00, N = 11) and Higher Change in DERS (ranged from -6.00 to 23.00, N = 13). Lower and higher change in DERS was then compared with the three independent variables (Grade Level, Non-Clinical Mental Health, Divorced Parents) using chi-square tests of goodness-of-fit to determine whether there was an association with DERS change scores (see Table 4.5).

Table 4.5 Difficulty in Emotion Regulation Median Split Difference

DERS Grade Level	Lower Diff N (%)	Higher Diff N (%)
Junior	3 (27.3)	9 (69.2)
Senior	8 (72.7)	4 (30.8)
Non-Clinical Mental Health	Lower Diff N (%)	Higher Diff N (%)
Yes	7 (63.6)	4 (30.8)
No	4 (36.4)	9 (69.2)
Divorced Parents	Lower Diff N (%)	Higher Diff N (%)
Yes	2 (18.2)	9 (69.2)
No	9 (81.8)	4 (30.8)

Grade Level

A Pearson chi-square test for goodness of fit for the independent variable Grade Level indicated no significant change in DERS, $\chi^2 (1, N = 24) = 4.196$, $p = .04$, with a medium effect size (Cramer's $V = .418$).

Non-Clinical Mental Health

For students' self-perceived experience of Non-Clinical Mental Health, a Pearson chi-square test for goodness of fit did not indicate a significant change in DERS, $\chi^2 (1, N = 24) = 2.593, p = .11$, with a small effect size (Cramer's $V = .329$).

Divorced Parents

A Pearson chi-square test for goodness of fit for whether students had parents who had divorced did not show a significant change in DERS following YWP, $\chi^2 (1, N = 24) = 6.254, p = .01$, with a high effect size (Cramer's $V = -.510$).

Perceived Stress Scale (PSS)

The Perceived Stress Scale (PSS) was administered to determine if there was an observed improvement in perceived stress as a result of participating in the YWP. The PSS was administered two times: pre-program and post-program. A nonparametric test was used due to the small sample size to determine if there was a significant difference between pre- and post-program perceived stress. A Wilcoxon signed-rank test indicated a significant decrease in perceived stress from pre- to post-program, $Z = -2.283, p = .02$ (see Table 4.6).

Table 4.6 Total Participant Pre-Program and Post-Program Mean (SD) for the Perceived Stress Scale

Perceived Stress Scale (PSS) 10 item version	Total Participant Mean (SD)	
Rated on a 5-point scale. High numbers indicate high perceived stress. Minimum score of 0 maximum score of 40 Range 0 – 13 low stress 14-26 moderate 27-40 high perceived stress	Pre-Program N = 28 23.3 (5.7)	Post-Program N = 24 20.0 (5.6)

PSS and Independent Variables

The PSS difference scores (post- minus pre-program) were calculated and a median split was used to categorize change responses into Lower Change in PSS (ranged from -20.00 to -4.99, $N = 13$) and Higher Change in PSS (ranged from -5.00 to 13.00, $N = 11$). Lower and higher change in PSS was then compared with the three independent variables (Grade Level, Non-Clinical Mental Health, Divorced Parents)

using chi-square tests of goodness-of-fit to determine whether there was an association with PSS change scores (see Table 4.7).

Table 4.7 Perceived Stress Scale Median Split Difference

PSS Grade Level	Lower Diff N (%)	Higher Diff N (%)
Junior	4 (30.8)	8 (72.7)
Senior	9 (69.2)	3 (27.3)
Non-Clinical Mental Health	Lower Diff N (%)	Higher Diff N (%)
Yes	8 (61.5)	3 (27.3)
No	5 (38.5)	8 (72.7)
Divorced Parents	Lower Diff N (%)	Higher Diff N (%)
Yes	6 (46.2)	5 (45.5)
No	7 (53.8)	6 (54.5)

Grade Level

A Pearson chi-square test for goodness of fit for the independent variable Grade Level indicated a significant change in PSS, more junior students reported change in PSS after the YWP than senior students, $\chi^2 (1, N = 24) = 4.196, p = .04$, with a medium effect size (Cramer's $V = .418$) according to Cohen's (1988) conventions for Cramer's V .

Non-Clinical Mental Health

For students' self-perceived experience of Non-Clinical Mental Health, a Pearson chi-square test for goodness of fit did not indicate a significant change in PSS although there was a trend towards lower perceived stress after YWP for students who reported experiencing a previous mental health episode, $\chi^2 (1, N = 24) = 2.818, p = .09$, with a medium effect size (Cramer's $V = .342$).

Divorced Parents

A Pearson chi-square test for goodness of fit for whether students had parents who had divorced did not show a significant change in PSS following YWP, $\chi^2 (1, N = 24) = 0.001, p = .97$, with a very small effect size (Cramer's $V = .007$).

Self-Regulation Questionnaire (SRQ)

To determine if there were observed improvements in self-regulation as a result of participating in the YWP, The Self-Regulation Questionnaire (SRQ) was administered pre- and post-program. A nonparametric test was used due to the small sample size to determine if there were significant differences between pre- and post-program self-regulation. A Wilcoxon signed-rank test indicated a significant decrease in self-regulation from pre- to post-program, $Z = -1.615$, $p = .11$ (see Table 4.8).

Table 4.8 Self-Regulation Questionnaire Pre- vs Post-Program Scores

Self-Regulation Questionnaire (SRQ)	N	Mean	Median	SD
Self-Regulation Pre-Program	25	209.84	209.00	23.73
Self-Regulation Post- Program	24	215.46	216.50	22.71
Difference	24	-6.42	-6.50	19.07

SRQ and Independent Variables

The SRQ difference scores (post- subtract pre-program) were calculated and a median split was used to categorize change responses into Lower Change in SRQ (ranged from -28.00 to 6.00, $N = 12$) and Higher Change in SRQ (ranged from 7.00 to 62.00, $N = 12$). Lower and higher change in SRQ was then compared with the three independent variables (Grade Level, Non-Clinical Mental Health, Divorced Parents) using chi-square tests of goodness-of-fit to determine whether there was an association with SRQ change scores (see Table 4.9)

Table 4.9 Self-Regulation Questionnaire and Median Split Difference

SRQ Grade Level	Lower Diff N (%)	Higher Diff N (%)
Junior	8 (66.7)	4 (33.3)
Senior	4 (33.3)	8 (66.7)
Non-Clinical Mental Health	Lower Diff N (%)	Higher Diff N (%)
Yes	5 (41.7)	6 (50.0)
No	7 (58.3)	6 (50.0)
Divorced Parents	Lower Diff N (%)	Higher Diff N (%)
Yes	7 (58.3)	4 (33.3)
No	5 (41.7)	8 (66.7)

Grade Level

A Pearson chi-square test for goodness of fit for the independent variable Grade Level indicated no significant change in SRQ, $X^2 (1, N = 24) = 2.667, p = .10$, with a medium effect size (Cramer's $V = .333$).

Non-Clinical Mental Health

For students' self-perceived experience of Non-Clinical Mental Health, a Pearson chi-square test for goodness of fit did not indicate a significant change in SRQ, $X^2 (1, N = 24) = 0.168, p = .68$, with a very small effect size (Cramer's $V = .084$).

Divorced Parents

A Pearson chi-square test for goodness of fit for whether students had parents who had divorced did not show a significant change in SRQ following YWP, $X^2 (1, N = 24) = 1.510, p = .22$, with a very small effect size (Cramer's $V = .251$).

Mindfulness Attention and Awareness Scale (MAAS)

The Mindfulness Attention and Awareness Scale (MAAS) was administered pre- and post-program to determine if there was an observed improvement in mindfulness as a result of participating in the YWP. A nonparametric test was used due to the small sample size to determine if there was a significant difference between pre- and post-program mindfulness attention and awareness. A Wilcoxon signed-rank test indicated a significant improvement in mindfulness from pre- to post-program (a higher score indicates greater improvement in mindfulness), $Z = -2.267, p = .02$ (see Table 4.10).

Table 4.10 Mindfulness Awareness and Attention Scale Pre- vs Post-Program Scores

Mindfulness Awareness and Attention Scale (MAAS)	N	Mean	Median	SD
MAAS Pre-program	25	3.53	3.43	0.87
MAAS Post-program	24	3.76	3.80	0.75

The MAAS difference scores (post- minus pre-program) were calculated and a median split was used to categorize change responses into Lower Change in MAAS

(ranged from -1.03 to .28, N = 12) and Higher Change in MAAS (ranged from .29 to 1.60, N = 12). Lower and higher change in MAAS was then compared with the three independent variables (Grade Level, Non-Clinical Mental Health, Divorced Parents) using chi-square tests of goodness-of-fit to determine whether there was an association with MAAS change scores (see Table 4.11).

Table 4.11 Mindfulness Attention and Awareness Median Split Difference

MAAS Grade Level	Lower Diff N (%)	Higher Diff N (%)
Junior	8 (66.7)	4 (33.3)
Senior	4 (33.3)	8 (66.7)
Non-Clinical Mental Health	Lower Diff N (%)	Higher Diff N (%)
Yes	4 (33.3)	7 (58.8)
No	8 (66.7)	5 (41.7)
Divorced Parents	Lower Diff N (%)	Higher Diff N (%)
Yes	6 (50.0)	5 (41.7)
No	6 (50.0)	7 (58.3)

Grade Level

A Pearson chi-square test for goodness of fit for the independent variable Grade Level indicated no significant change in MAAS, $\chi^2 (1, N = 24) = 2.667, p = .10$, with a small effect size (Cramer's $V = .333$).

Non-Clinical Mental Health

For students' self-perceived experience of Non-Clinical Mental Health, a Pearson chi-square test for goodness of fit did not indicate a significant change in MAAS, $\chi^2 (1, N = 24) = 1.510, p = .22$, with a small effect size (Cramer's $V = -.251$).

Divorced Parents

A Pearson chi-square test for goodness of fit for whether students had parents who had divorced did not show a significant change in MAAS following YWP, $\chi^2 (1, N = 24) = .168, p = .68$, with a very small effect size (Cramer's $V = .084$).

PSS and MAAS

The Perceived Stress Scale (PSS) was compared to the Mindfulness Attention and Awareness Scale (MAAS) to establish if there was a correlation between the two

measures initially as well as post-program. The Pearson correlation measures the strength and direction of the linear relationship between variables. The initial pre-program measure showed no significant correlation between perceived stress and mindfulness, $r(29) = -.26$, $p = .203$. The post-program Pearson correlation measure showed a significant negative correlation indicating that as mindfulness increased, perceived stress decreased, $r(29) = -.61$, $p = .002$.

Post-Pre Retrospective Assessment

The post-pre-retrospective assessment was designed to measure an individual's current level of knowledge or understanding to a common measure in order to compare self-perceptions before and after a learning activity has taken place. To determine that participants would experience a shift in awareness of how to foster personal well-being, as a result of participating in the YWP, The Post-Pre-Retrospective Assessment was administered post-program.

Table 4.12 shows the frequency of participants' responses overall means before and after the YWP. The difference between the before and after program means was also included. An examination of the responses indicated that for all statements, students perceived a positive change from before YWP and at the end of the program. Two questions showed the greatest improvement in terms of participants' perceptions: Question #3: Knowledge of resources that can help me when I am feeling stressed and unable to cope on my own, and Question #19: I see the value of using mindfulness strategies in my life.

Table 4.12. The Frequency of Participant Responses Overall Means Before and After the YWP

**Thinking about the Yoga Wellness Program,
and knowing what you know now, how would you
rate yourself before the program and
how would you rate yourself now?**

		Before YWP					Pre	Now					POST	Diff
1.	A clear understanding of how I can manage stress.	1	9	12	3	1	1.76	0	0	4	14	8	3.15	1.38
2.	A clear vision of how to cope with intense emotions in a healthy way.	7	12	7	0	0	1.00	0	1	11	10	4	2.65	1.65
3.	Knowledge of resources that can help me when I am feeling stressed and unable to cope on my own.	8	7	11	0	0	1.11	0	2	1	15	8	3.11	2.00
4.	Effective skills and strategies for keeping myself calm when experiencing stress.	5	7	11	3	0	1.46	0	0	4	12	10	3.23	1.76
5.	Optimism about being able to manage my physical and mental health.	3	9	10	4	0	1.57	0	1	5	12	8	3.03	1.46
6.	Confidence in my ability to manage difficulty in my life.	5	7	11	3	0	1.46	0	1	6	12	7	2.96	1.50
7.	The ability to access resources that can help me when I am experiencing difficulty managing my emotions.	3	7	13	3	0	1.61	0	0	7	12	7	3.00	1.38
8.	When I feel calm focused and aware I know I am calm, focused and aware.	4	2	10	9	1	2.03	0	0	4	12	10	3.23	1.20
9.	When I am stressed I recognize what is causing the stress.	4	12	5	5	0	1.42	0	3	5	14	4	2.78	1.30

		Before YWP					Pre	Now					POST	Diff
10.	I recognize stressors in the various areas of my life.	3	8	9	6	0	1.69	0	1	6	13	6	2.92	1.23
11.	I have a desire to deal with those stressors.	8	4	10	3	1	1.42	2	1	8	7	8	2.69	1.26
12.	I can independently access strategies of how to deal with those stressors.	6	7	12	1	0	1.30	0	1	11	11	3	2.61	1.30
13.	I have the ability to recover efficiently and effectively from the stressors.	5	8	8	4	1	1.53	0	0	11	12	3	2.69	1.15
14.	I know my body's physical response to stress.	7	6	5	5	3	1.64	0	1	4	11	10	3.15	1.50
15.	I can manage my physical reaction to stress.	12	6	7	0	0	1.82	0	3	13	9	1	2.30	1.48
16.	I recognize when my thoughts are creating unpleasant feelings.	2	11	9	2	2	1.65	0	1	5	11	8	3.01	1.36
17.	I am aware of my thoughts when they begin to take a journey and can actively redirect them to the present.	4	11	10	1	0	1.30	0	1	9	10	6	2.80	1.50
18.	I see the benefit of being present in the moment.	5	5	13	2	1	1.57	0	0	2	11	13	3.42	1.84
19.	I see the value of using mindfulness strategies in my life.	2	9	9	6	0	1.73	0	0	0	5	21	3.80	2.00
20.	I can relate my reactions/actions during stress to my thoughts and feelings.	1	11	13	1	0	1.53	0	0	2	16	8	3.23	1.69

Mindfulness Session Stress (MSS)

Before and after every mindfulness session, participants were asked to rate their perceived stress on a scale between 1 and 10 with higher numbers indicating greater perceived stress. Scores ranged from 2.14 to 8.00 pre-session and 1.00 to 5.57 post-session. The total participant mean for the pre- mindfulness session stress rating was

5.66 (SD = 1.43) while the post session rating was 3.07 (SD = 1.20). A Wilcoxon signed-rank test indicated a significant improvement in perceived stress from pre- to post-session (a higher score indicates higher perceived stress), $Z = -4.703$, $p = .000$ (see Table 4.13).

Table 4.13 Mindfulness Session Stress

MSS Grade Level	Lower Diff N (%)	Higher Diff N (%)
Junior	7 (53.8)	8 (50.0)
Senior	6 (46.2)	8 (50.0)
Non-Clinical Mental Health	Lower Diff N (%)	Higher Diff N (%)
Yes	10 (71.4)	5 (33.3)
No	4 (28.6)	10 (66.7)
Divorced Parents	Lower Diff N (%)	Higher Diff N (%)
Yes	5 (41.7)	10 (58.8)
No	7 (58.3)	7 (41.2)

Grade Level

A Pearson chi-square test for goodness of fit for the independent variable Grade Level indicated no significant change in MSS, $X^2 (1, N = 29) = .042$, $p = .83$, with a very small effect size (Cramer's $V = .038$).

Non-Clinical Mental Health

For students' self-perceived experience of Non-Clinical Mental Health, a Pearson chi-square test for goodness of fit indicated a significant change in MSS, $X^2 (1, N = 29) = 4.209$, $p = .04$, with a medium effect size (Cramer's $V = .381$).

Divorced Parents

A Pearson chi-square test for goodness of fit for whether students had parents who had divorced did not show a significant change in MSS, $X^2 (1, N = 29) = .829$, $p = .36$, with a very small effect size (Cramer's $V = .169$).

Yoga Session Stress (YSS)

Before and after every yoga session participants were asked to rate their perceived stress on a scale between 1 and 10 with higher numbers indicating greater perceived stress. Scores ranged from 2.67 to 9.00 pre-session and 1.33 to 6.00 post-

session. The total participant mean for the pre- mindfulness session stress rating was 5.41 ($SD = 1.51$) while the post session rating was 2.71 ($SD = 1.10$). A Wilcoxon signed-rank test indicated a significant improvement in perceived stress from pre- to post-session (a higher score indicates higher perceived stress), $Z = -4.624$, $p = .000$ (see Table 4.14).

Table 4.14. Yoga Session Stress

YSS Grade Level	Lower Diff N (%)	Higher Diff N (%)
Junior	4 (30.8)	11 (73.3)
Senior	9 (69.2)	4 (26.7)
Non-Clinical Mental Health	Lower Diff N (%)	Higher Diff N (%)
Yes	6 (46.2)	9 (60.0)
No	7 (53.8)	6 (40.0)
Divorced Parents	Lower Diff N (%)	Higher Diff N (%)
Yes	7 (58.3)	8 (50.0)
No	5 (41.7)	8 (50.0)

Grade Level

A Pearson chi-square test for goodness of fit for the independent variable Grade Level indicated a significant change in YSS, $\chi^2 (1, N = 29) = 5.073$, $p = .02$, with a medium effect size (Cramer's $V = .426$).

Non-Clinical Mental Health

For students' self-perceived experience of Non-Clinical Mental Health, a Pearson chi-square test for goodness of fit indicated no significant change in YSS, $\chi^2 (1, N = 29) = .537$, $p = .46$, with very small effect size (Cramer's $V = .138$).

Divorced Parents

A Pearson chi-square test for goodness of fit for whether students had parents who had divorced did not show a significant change in YSS, $\chi^2 (1, N = 29) = .191$, $p = .66$, with a very small effect size (Cramer's $V = .083$).

Positive Youth Development (PYD)

The Positive Youth Development (PYD) Questionnaire was administered in order to gain a better understanding of how empathy and self-confidence play a role (if any) on

the impact of a school-based mindfulness and yoga program. The Positive Youth Development Questionnaire was only administered pre-program due to participant refusal to complete the questionnaire a second time (participants thought the PYD Questionnaire was too time consuming to complete a second time). In addition, an examination of the results revealed that the most relevant questions on the PYD Questionnaire for the present study pertained to self-confidence (confidence) questions 8, 9, 41-46 and empathy (caring) questions 18 – 25. Therefore, these two concepts were included as an indicator of a baseline for participants before they engaged in the YWP.

The questions taken from the PYD questionnaire were rated on a 4-point scale. A maximum score of 32 indicates self-confidence and empathy while a minimum score of 8 indicates low self-confidence or lack of empathy. The total participants' mean score for self-confidence was 24.7 ($SD = 3.9$) and 25.9 ($SD = 4.1$) for empathy. Participants' pre-program scores for self-confidence and empathy were examined and compared to the independent variables: junior and senior grade level, non-clinical mental health and divorced parents.

Grade Level

A Mann-Whitney test indicated that before the YWP began, there was no significant difference in self-confidence for junior students (Mean rank = 13.15) than for senior students (Mean rank = 10.50), $U = 50.00$, $p = .35$. However, there was a significant difference for empathy with junior students showing greater empathy (Mean rank = 14.81) than senior students (Mean rank = 8.35), $U = 28.50$, $p = .02$.

Non-clinical Mental Health

It was of interest to examine whether self-reported non-clinical mental health would differentiate participants according to PYD ratings of self-confidence and empathy. However, no significant difference was found for self-confidence between students with a mental health condition (Mean rank = 12.73) or students with no mental health condition (Mean rank = 11.33), $U = 58.00$, $p = .61$, or for empathy between students with a mental health condition (Mean rank = 12.05) or students without a mental health condition (Mean rank = 11.96), $U = 65.50$, $p = .97$.

Divorced Parents

A Mann-Whitney test indicated that before the YWP began, there was no significant difference in self-confidence for students with divorced parents (Mean rank = 12.55) or for students without divorced parents (Mean rank = 11.50), $U = 60.00$, $p = .70$, or in empathy for students who had divorced parents (Mean rank = 12.45) or students without divorced parents (Mean rank = 11.58), $U = 61.00$, $p = .75$.

Summary

The intent of this section was to examine the data for statistical significance of the YWP on emotion regulation, perceived stress, self-regulation and mindfulness. It is important to identify whether participants recognized “what they did not know” including the baseline measures of self-confidence and empathy in order to draw inferences or conclusions for the study. Significant change was observed in all areas of interest including: emotion regulation, perceived stress, self-regulation, mindfulness, mindfulness and yoga session stress, post-pre-retrospective assessment, empathy and self-confidence.

The most frequently observed significant differences occurred with perceived stress. Results indicated that more junior students reported change in PSS after the YWP (72.7%) than senior students (27.3%), and although there was a trend towards lower perceived stress after YWP, students who reported experiencing a previous mental health episode reported more significant change in perceived stress after mindfulness sessions than those who did not experience a previous mental health episode. While a significant change in perceived stress was noted for juniors after yoga sessions there was also a significant negative correlation indicating that as mindfulness increased, perceived stress decreased for the entire group. Finally, there was a significant difference for empathy with junior students showing greater empathy.

Despite the quantitative results showing some significance the qualitative data provided a deeper examination of participant experiences and are outlined in the thematic analysis and vignettes below.

4.2. Part 2A: Qualitative Data

This section has been divided into three parts: Part 2A includes a thematic analysis of participant post-interview responses, Part 2B includes a thematic analysis of parent observations post-program and Part 2C describes six participant vignettes. For the thematic analysis, post-program semi-structured interviews were conducted with twenty-five of the twenty-nine participants in June 2015. During the interview process participants were asked a series of questions that were separated into 8 categories resulting in twenty-one themes related to topics discussed during the interviews. Themes were created in relation to questions asked during the post-program interview for example: *What have you learned or gained from participation in the YWP?* Each theme included sub-themes that were coded into units of meaning, describing patterns emerging from the data. A figure was created for each theme to provide a clearer understanding of the process. Some of the sub themes were collapsed in order to simplify the data; particularly when a question asked of the participant generated similar responses to another question. For example: *What did you like about the program? and What did you learn or gain from participation in the YWP?* Figure 4.1 is a visual representation of the basic process thematic analysis for this qualitative inquiry.

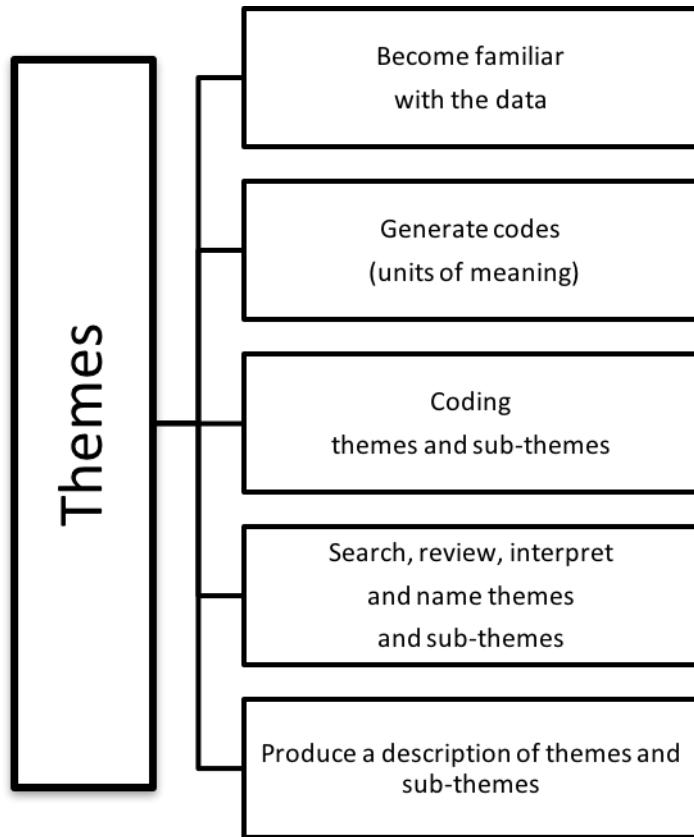


Figure 4.1. A visual representation of the process of thematic analysis for qualitative inquiry.

Categories included the following topics of interest: stress, emotion regulation, yoga and mindfulness, individual benefits, social benefits, insights into curriculum development, educator's role in fostering well-being and insights into the value of well-being from the perspective of youth. The themes were developed in relation to a question or combination of questions asked during the post-program interview process. During the interview process, participants were asked to describe changes if any they experienced in each area. Figure 4.2 is a visual representation of the categories created to separate data prior to coding and analysis.

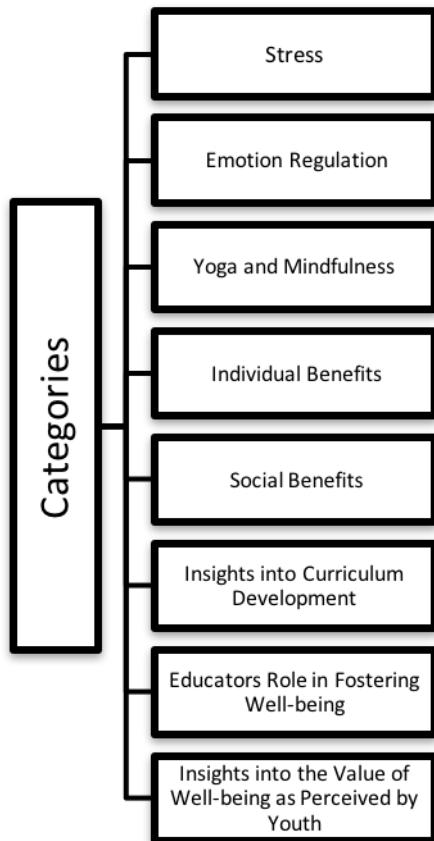


Figure 4.2. A visual representation of the themes created to separate data into categories prior to coding and analysis.

Frequently Used Terms

Frequently used terms throughout this thematic analysis include: awareness, management and strategy. The term awareness is used to describe “knowledge or perception of situation or fact”. The term awareness encompasses responses such as: realize, recognize, aware, appreciate, notice and understand. Management is intended to mean “to take measures concerning (someone or something) especially with the intention of putting something right”. The term management encompasses responses such as: deal, cope, wait, resolving, figure out, and handle. The term strategy may be described as “a plan of action or policy designed to achieve a major or overall aim.” The term strategy encompasses responses such as: apply, process, isolate, detach, disengage, organize or analyze. For example, a person must have emotional awareness in order to activate a strategy such as removing oneself from a situation.

4.3. Category 1: Stress

One of the main topics of investigation in this study was exploring how youth perceive stress and how a school-based education program may affect student participants' ability to manage stress. The YWP was designed to educate participants to recognize physical, mental and emotional responses to stress, while providing potential skills to help manage that stress. Participants attended weekly sessions of mindfulness and yoga that equipped them with a supplementary educational component that included a toolbox of strategies/skills/techniques to help combat the negative effects of stress. In all stages of the YWP (pre, during and post), participants were provided with opportunities to share their views of stress and how they perceive stress affects them in their daily lives. In the post interview participants were asked how their experience with stress had changed, if at all. For purposes of this thematic analysis, post-program interview data were coded, separated and placed into categories, themes and sub-themes. Findings for the category stress suggest that as a result of participation in the YWP, participants were able to identify situations that cause stress to include: challenging family dynamics, unrealistic academic expectations, difficult relationships, peer conflict, the inundation of social media, technology and being spread too thin with responsibilities. Participants reported positive outcomes from participation in the YWP as the ability to implement learned skills and strategies into stressful situations. In the past, many would have identified these situations as being "too stressful to deal with" and been limited in effective stress management. Most of the participants reported a tendency to isolate themselves as a response to stress. For some participants, this strategy was effective while over time this avoidant strategy may have caused greater stress. Through participation in the YWP, many of the participants reported a new perspective regarding the management of stress such as: an improved ability to focus, not believing everything they think, taking a breath, exercising, talking to someone, and stopping to think before making decisions. The two main themes for the category stress included: (a) experiencing awareness of stress and (b) building capacity for stress management. Sub-themes for experiencing awareness of stress included: (a) identification of stress, (b) causes of stress, (c) impact of stress. The sub-themes for building capacity for stress management included: (a) managing stress and (b) strategies to manage stress. Figure 4.3 is a visual representation of the thematic analysis of themes and sub-themes for the category stress.

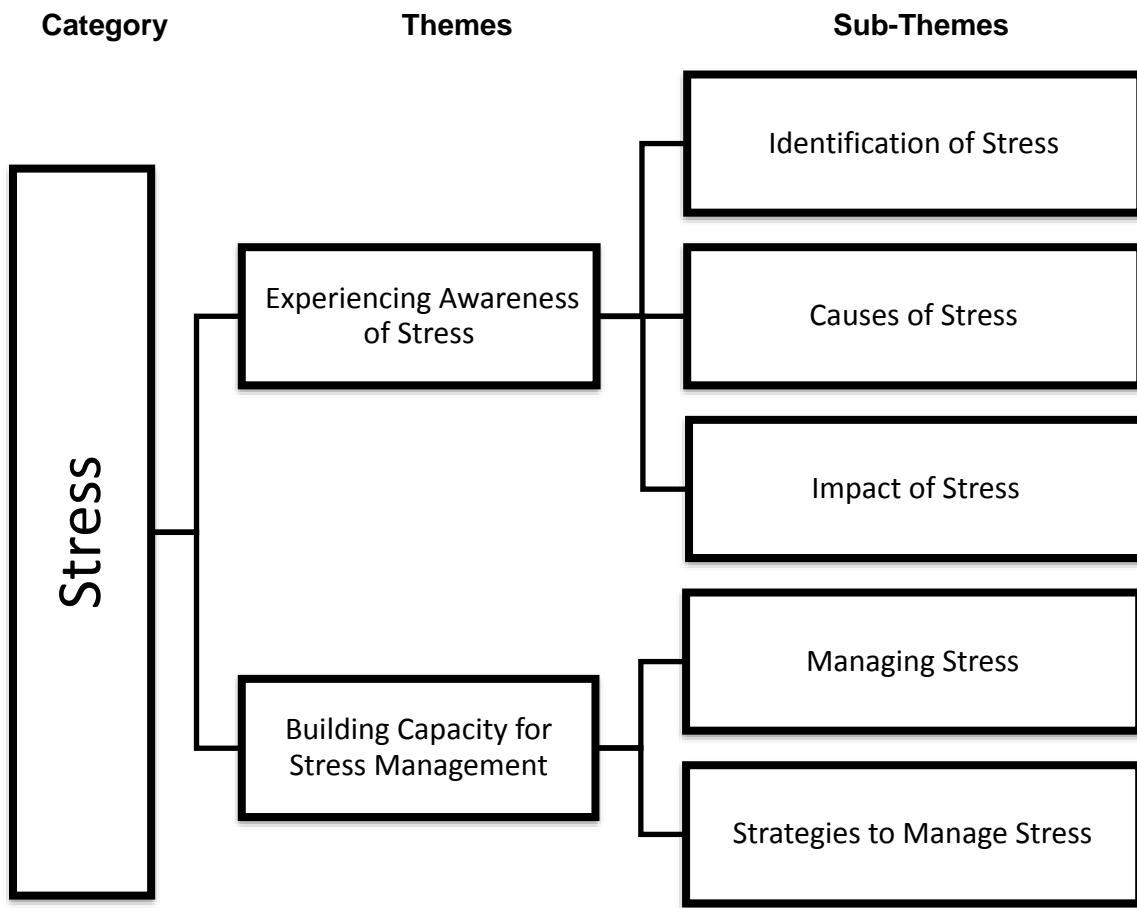


Figure 4.3. A visual representation of the thematic analysis of stress according to participant's post-YMP interview.

4.3.1. Theme 1 – Experiencing Awareness of Stress

This theme explores the awareness of stress through the ability to identify stress, understanding the causes of stress and recognizing the impact of stress from the perspective of youth. Awareness of stress is the first step in effective stress management. Awareness allows an individual to recognize the causes of stress as well as to identify stress's impact on well-being. Participant responses reflect on what may have prompted and strengthened the identification of stress within the program. Prior to the YWP some of the participants reported being unaware of when, why and how they experience stress. In the following example of a post-program interview response, one of the participants described that as a result of participation in the YWP, they have experienced an improvement in the identification and management of stress:

The other day I was stressed out about school because there was only two weeks left and I just wasn't getting done what I needed to have done. I was able to do mindfulness with you which really helped. Before the program if I was stressed I would get a headache but now I'm able to think more rationally which helped me get through the stressful period. (Grade 11 Participant)

Throughout the program, participants exhibited reflexive understanding of their experience with stress and were able to articulate their progress. Many of the participant responses overlap from one sub-theme to another and were double coded when necessary. Excerpts from the post-program interview responses described an improvement in the perception of stress as a result of participation in the YWP which is outlined in the sub-themes below.

Identification of Stress

During the post-program interview, participants were enthusiastic and highly cooperative when engaging in the reflective process with regards to their views of stress. Many participants described experiencing an increase in the identification of stress throughout various stages of the program. Participants used descriptors for the identification of stress, such as: notice, realize, recognize, appreciate, and understand. The descriptor "notice" was referred to by one fifth of participants during the post-program interview when asked: "*How has your stress or your ability to deal with stress changed if at all?*" One participant reported: "I noticed that about halfway through the program, if I was stressed about something, I would focus on my breathing and I would give it like a day and I'd be like okay, we got to solve this instead of letting it ride out." (Grade 11 Participant). A similar experience was reported by a participant stating, "I recognize that I don't get as stressed out anymore. Even when I am stressed out, I like deal with it differently, like I don't get all like, tense like I used to." (Grade 11 Participant)

Although most of the participants reported an improvement in the ability to identify stress others suggested that the shift was more subtle. One participant reflected upon their process stating:

It's been kind of a subtler short shift of me being able to deal with stress and anxiety a little better so it hasn't been like, I haven't noticed as much but I'm definitely able to time manage, and to, stay calm and like, you know study and everything a lot better than I could before. (Grade 10 Participant)

Identifying similar experiences another participant explained “When I'm stressed I can't focus. So, the program kind of helped me. I'm noticing that now.” (Grade 11 Participant) Although both participants describe a shift in the identification of stress it appears that the impact was not as great as it was for others.

Participants also described a sense of personal accomplishment regarding their involvement in the program and their new-found identification of stress. One participant expressed a new perspective stating, “I see it kind of differently as it's like, it's just stress. It's like, I can deal with it, I can, I can't fix it but I can, improve it and I can handle it better.”(Grade 11 Participant) Having the ability to reflect critically upon their experience, some participants described a sense of empowerment in relation to their growing confidence. One participant stated:

I think I'm more able to realize like when I'm extremely stressed out and like when I need to um just like calm down, like just take a minute and like be, give myself the time that I need, like give myself the time of day to calm down and like just breathe and figure things out, and I think I'm definitely more aware of that now and what I'm feeling and stuff. (Grade 10 Participant)

For this participant, the identification of the manifestation of stress has improved along with the identification of what technique works most effectively.

Causes of Stress

All of the participants reported that since the YWP, the ability to recognize the cause or triggers of stress has improved. Participants used descriptors for the cause of stress to include: realize, recognize, and notice coupled with the identification of the people, places and things participants viewed as triggers of stress. Findings revealed that conflict in relationships, unrealistic academic expectations, peer pressure, social media, rapidly changing technology and other responsibilities were described by every participant as causes of stress. Most of the participants reported family dynamics, academic expectations, peer conflict and social media as the biggest sources of stress. One participant expressed experiencing anxiety when engaged in social media stating: “social media causes stress for me personally, like not because anything bad has happened, just like sometimes when people put things on there, I would start having anxiety, for them.” (Grade 10 Participant) Throughout the program every participant

shared personal stories reflecting upon what causes them stress. One participant described a simple swim at the beach as an extremely stressful situation:

Yesterday I went to White Rock with my mom and um, normally I'd be thinking, oh God I've got to get home, I've got s-, I've got my social exam on Wednesday, why, I shouldn't be here, I should be studying, but instead you know I was like swimming, I kind of just let myself float and be like I'm here right now, I should just enjoy this. There's no point in freaking out over it because I have plenty of time to study, I'm really prepared for s-, I know socials, I have no need to be freaking out, so I'm just going to kind of enjoy the moment, instead of like stressing. And I think that's the kind of, made me less stressed because I've been enjoying myself more (Grade 10 Participant).

Another participant who routinely maintained difficulty sharing experiences within the group, candidly described the ability to identify a few areas in their life which cause stress stating:

I realized the stuff that stresses me out like friendship drama, school and family problems. I sort of have a lot going on with that lately. My friend stuff, she's good. It's not her anymore, now it's like my grandparents, 'cause my grandma just had like open heart surgery and we didn't know until, like a week before or something. I don't know, she doesn't tell us much. There is always something medical in our family. (Grade 9 Participant)

Participants reflected positively on the identification of what caused stress in their lives. For many it was an enlightening experience in which they were surprised to connect causes of stress and how it impacted them.

Impact of Stress

Many of the participants experienced an improved ability to identify the physical, mental and emotional impact of stress. Participants cited specific experiences including: stomach pain, feeling sick, nausea, negative self-talk, obsessive thinking, and the inability to focus, sadness, anger and frustration. Some participants expressed the inability to recognize the physical cues of stress prior to participation in the YWP. One of the participants stated, "I never used to be able to identify physical stress but I do now, my shoulders become tight and I get a headache." (Grade 10 Participant) Expressing a similar observation, a participant reported, "I used to really not be able to identify stress

physically. It's more like I would know too late physically and I would have a panic attack." (Grade 11 Participant)

Seven of the 29 participants reported having panic attacks while many others reported some type of anxiety or being overwhelmed with emotions which many of them now associate with stress. One participant suggested, "I can notice stress now, it's just a-anxiety like you, you kind of know what it feels like after a while" (Grade 11 Participant). Another participant reported:

My panic attacks were really bad at the beginning of the year and have been since like Grade 8. Um but now I learned like, I learned how I can control them. Um, and my stress level has gone down a lot. Like when certain things happen, my stress level goes down, and after I do the breathing and after the yoga sessions, if I'm stressed out the yoga really helps (Grade 10 Participant)

One participant described a shift from an overly emotional response to stress to a more manageable experience since the YWP:

Well before I used to like get overwhelmed by stress so I really like feel, like if I was sad, I'd kind of like burst out crying and like be overwhelmed I don't do that anymore like if I'm going to cry, I usually cry. I don't like hold it in, or I talk about it. (Grade 8 Participant)

All of the participants were able to identify the impact of stress from at least one of the three perspectives. It is important to note that all of the seven participants describing a history of panic attacks reported experiencing a decrease in occurrence, intensity and duration.

4.3.2. Theme 2 – Building Capacity for Stress Management

This theme explores building capacity to manage stress from the perspective of youth. Sub-themes included: (a) managing stress and (b) strategies to manage stress.

Managing Stress

Most of the participants reported the term "manage" when describing stress in the post-program interview. It is important to note that the term "manage" was also part of the reflective question posed to the participants post-program which may explain its

reference throughout many of the responses. The descriptors for “manage” included: deal, cope, wait, resolve, figure out, control and handle. Different variations of the words were also grouped within this sub-theme, for example: dealing with, coping with etc. Throughout the analysis process participants noted the management of stress more frequently than any other topic. One participant reflected upon their experience stating, “Through this program I found ways to um kind of manage like stress and anxiety.” (Grade 8 Participant) Another participant expressed an improvement in their quality of life as a result of participating in the YWP stating:

So, the program definitely, taught me how to deal with stress which has definitely improved my quality of life because I now know how to do other things than just think about all my stress and then stress myself out more thinking about it. (Grade 11 Participant)

Many of the participants expressed a sense of control resulting from participation in the program. One participant described a new approach to working through the impact of stress: “I ask myself is it in my control, is it not in my control, you know and then go from there. If it is in my control, I try to figure out what I do to change it.” (Grade 10 Participant) A shift in perspective was noted by all participants at some point during the YWP through conversation within the group or one on one.

Strategies to Manage Stress

All of the participants reported the positive acquisition of strategies to manage stress as a result of participation in the YWP such as: (a) mindfulness visualizations, (b) breathing techniques, (c), meditation, (d) remove themselves from the cause of stress (go to their bedroom or somewhere alone), (e) get a glass of water, (f) take a nap, (g) watch a movie on Netflix, (h) exercise, (i) eat something, (j) writing things down, (k) organize schedules, (l) wait for it to pass, (m) take a step back, (n) stop and think and (o) practice yoga postures. One participant reported: “the program really helps and like gives you strategies and like most people aren’t using the strategies and just like taking their stress out on other people and they can learn different ways to manage their stress” (Grade 8 Participant). The use of the breath as a method of self-control was reported by one participant stating, “During the program I learned how to control myself a lot using breath.” (Grade 11 Participant)

Mindfulness is a practice of becoming more aware of what's going on in one's body, one's mind, and one's environment. Rather than returning to a habitual pattern of avoiding or obsessing, mindfulness allows one to be present and notice what's happening in the present moment, further encouraging one to choose the most helpful way to respond. One participant described the impact of mindfulness and yoga on stress: "I definitely notice that my stress is way lower now but like on the days that we were doing mindfulness and yoga, my stress would just immediately go down to zero." (Grade 10 Participant) The most frequently accessed strategy cited by participants was the visualization of being at the bottom of the ocean, which is traditionally used in MBSR

The visualization of being at the bottom of the ocean and all the chaos on the surface is a strategy I use all the time now, like whenever I'm in a stressful situation or freaking out because of finals or whatever, it really, really helps me remain calm. (Grade 10 Participant)

Participants expressed an improved ability to put things into perspective as a result of program participation.

if I'm feeling stressed like I don't just be like okay I'm stressed, whatever, like I'm always stressed but now I actually listen to or think about why I'm stressed and not trying to push those feelings away. I try to come to terms with them and then try to move past that, um so I don't build up too much for myself. Or if I'm feeling too stressed, I'll take the time to just sit in my room and then just like breathe and like try mindfulness by myself because that also calms me (Grade 11 Participant)

Findings revealed that a common strategy used by the participants was to either move away from the stress by isolating themselves or causing a distraction to take their mind off of whatever was causing the stress. Since the YWP, some participants reported applying various new strategies to manage stressful situations. As reported by one participant the process of removing themselves from the situation allowed them to calm down enough to consciously apply a strategy: "when I was feeling like I was getting a buildup of stress, I decided I needed to go home, and then when I was in the car, I did a meditation and I felt so much better after." (Grade 11 Participant) Many participants reported an improved ability to thinking before reacting to a stressful situation, reporting an improvement in relationships while experiencing a decrease in conflicts with others.

Summary of the Category Stress

During the pre-program interview participants were asked the question: *How do you deal with stress?* A common response was “I don’t deal with it” or “I don’t have any real strategies to deal with it” and “I don’t see any reason to deal with it so I don’t.” (Grade 11 Participant) Following the YWP, participants reported an increased awareness coupled with the desire to manage stress as well as the application of a particular strategy. One participant stated: “since the program I try and figure out like why I’m so stressed out or anxious and then I’ll try and resolve it anyway I can, or just kind of like I’ll do something like the breathing exercise or like I will like write things down.” (Grade 11 Participant) One of the primary YWP goals was to encourage participants to identify when they are experiencing stress, what causes the stress and how they respond to stress in order to apply strategies that may manage the stress effectively. Retrospectively, many participants noted an inability to effectively recognize or apply helpful strategies when experiencing stress and reported an improvement in this area as a result of participation in the YWP:

I did not like, know what stress was really, I was just like I just like get a little anxious or whatever, like sometimes your stomach will hurt or whatever it is for different people, and I like now know what it is and like how to deal with it in my own way.(Female, 11th Grade).

Effective stress management hinges on the ability to be aware of stress, the ability to identify causes and the awareness of how stress impacts a person from a physical, emotional and mental perspective. If a person is unaware or unable to identify what triggers stress making decisions on how to deal with it can become problematic.

4.4. Category 2: Emotion Regulation

One of the main topics of investigation in this study was to explore the effects of a school-based education program on emotion regulation. In all stages of the YWP (pre, during and post), participants were provided with opportunities to share their personal experience with self-regulating emotions. Participants were asked to respond to the following question regarding emotion regulation in the post-program interview: *Do you see any change in how you manage emotions since the YWP? If so please explain.* For purposes of this thematic analysis, post-program interview data were separated, coded

and placed into categories, themes and sub-themes. Findings for the theme of ‘Emotion Regulation’ suggest that participants of the YWP became more aware of emotions, while reporting the ability to manage emotions more effectively by applying newly acquired strategies. The three main themes within the category ‘Emotion Regulation’ included: (a) Awareness of emotions (b) Managing emotions and (c) Strategies for managing emotions. Sub-themes for ‘Awareness of emotions’ included: (a) Recognize and (b) Realize. Sub-themes for ‘Managing emotions’ included: (a) Handle emotions, (b) Control and (c) Deal with emotions. Sub-themes for ‘Strategies for managing emotions’ included: (a) Removing oneself, (b) Working through the situation and (c) Using a distraction. Figure 4.4 is a visual representation of the themes and sub-themes for the category emotion regulation.

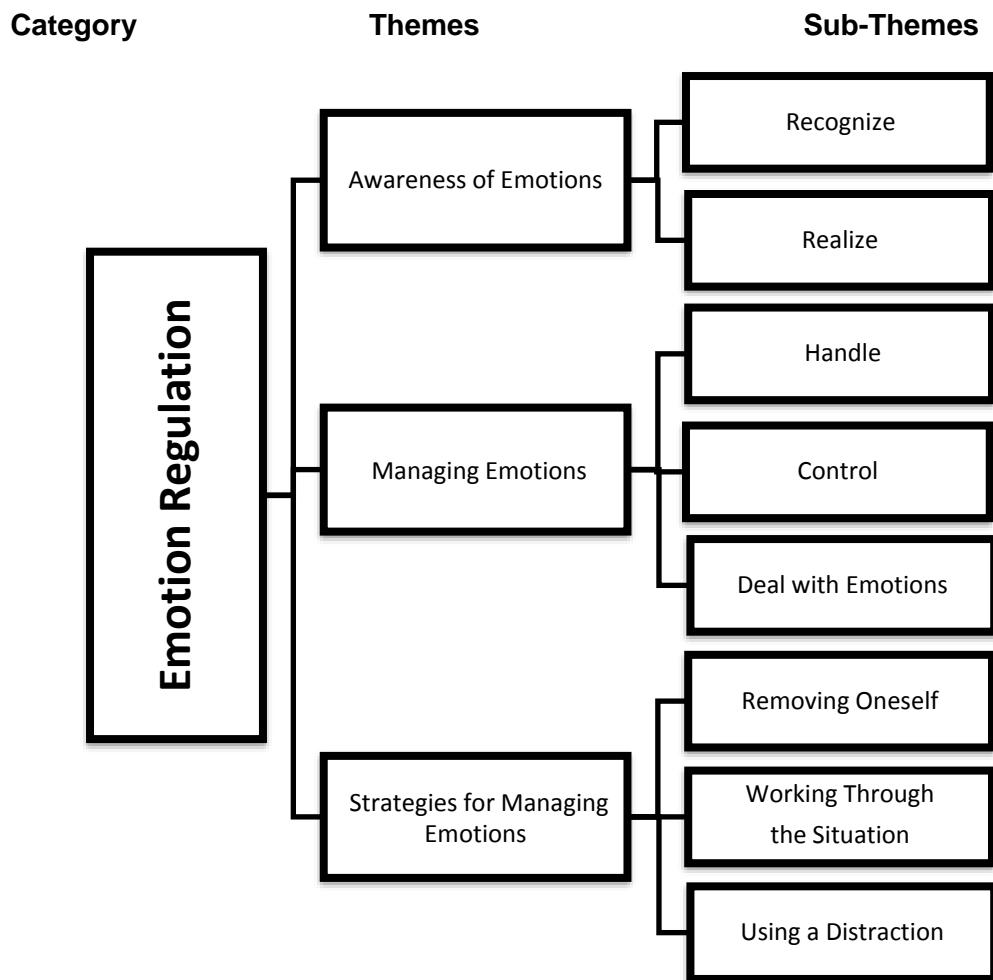


Figure 4.4. A visual representation of the thematic analysis of emotion regulation according to participant’s post-YMP interview.

4.4.1. Theme 1 – Awareness of Emotions

Most of the participants reported having a greater “awareness” of when they were experiencing intense emotions, in response to the question, *How did participation in the YWP affect your ability to regulate emotions?* Participants reported increased awareness of: (a) The range of their emotional responses during difficult or stressful encounters and (b) An improvement in their ability to identify and apply skills to de-escalate emotionally charged responses to challenging situations. Participant responses were separated for clarity and for detail-specific understanding. Many of the participant responses overlap from one sub-theme to another and were double coded when necessary. The sub-themes for the theme ‘Awareness of emotions’ included the descriptors: (a) Realize and (b) Recognize, which are outlined below.

Realize

Six participants used the descriptor “realize” in reporting an awareness of their emotional experiences and were able to apply strategies in order to regulate their emotions, a result of participation in the YWP. One participant reported, “I think just like realizing when you have a certain emotion and being able to handle it. I mean not push it away but like being aware of it and kind of, maybe just make it so it's more subtle I guess” (Grade 10 Participant). Another participant commented:

I used to be oblivious to when I was having a panic attack but like with time I started to realize like I can tell when the anxiety is building up and lots of times I'll just say like I need to take a break today 'cause I can kind of feel like it already happening (Grade 11 Participant).

Two of the many strategies discussed during the program were taking a break or allowing the experience of an emotion without the need to push it away. Participants reported a greater awareness of both when they experience emotions as well as their improved ability to regulate emotions. This was a new perspective for many of the participants as reported in the post-program interview.

Recognize

The descriptor “recognize” was cited by four participants when reporting the awareness of experiencing emotions and effectively applying emotion regulation strategies. One participant stated:

It's so weird now I feel like, with those mindfulness lessons now I can recognize emotions as like emotions rather than like things that I need to, immediately act on. I recognize that I can take my time with them and breathe and take in everything. (Grade 10 Participant)

The descriptor “*recognize*” was used by participants to express personal observations as well as the behaviour of others. One participant stated, “I think a lot of people have a lot of problems that would be fixed if they just could recognize how they are feeling and think about themselves and just take care of themselves” (Grade 11 Participant). In my opinion, this comment suggests that the awareness of emotions directly promotes emotional regulation and therefore may improve quality of life.

4.4.2. Theme 2 - Managing Emotions

The second most prominent theme for the category ‘Emotion regulation’ included participants’ descriptions of how they “*manage*” emotions as a result of participation in the YWP. Many participants cited an improvement in managing emotions citing descriptors such as: *handle*, *control* and *deal* with emotions. Some participants expressed an improvement in the management of the emotional trajectory when their experience involved intense emotions such as anger or anxiety. One participant stated:

Well I have like a pretty short temper and so when I get like really, cause when I get really angry I tend to get really high anxiety, like they come hand in hand, and so like um when I get really really angry now I do some of the visuals and it helps me calm down which in turn helps my anger to subside, like it becomes less, and I noticed I am not as angry (Grade 11 Participant).

Learning to manage emotions was a main goal of this research; there was an obvious move to self-sufficiency in ability to manage emotions described by participants who used the descriptors *handle*, *control* and *deal*.

Handle Emotions

The descriptor “*handle*” was most often cited by participants when asked, *How did the program affected your ability to regulate emotions?* The perception of being able to handle emotions was an empowering concept for some participants. One participant reported:

Sometimes I feel like with certain emotions I'll be like, all or nothing with them. And I find that since the program I've been able to, like with those particular emotions, like if I'm upset, like I'm really upset. I'm not just a little upset, it's like I need my space. And I find I've been able to like get over it a bit faster. Like I, I don't know if that's the best term, 'cause like I'll still be upset but I'll still be able to handle everything that's going on around me better (Grade 11 Participant).

Another participant expressed, "I feel like, like anxiety wise I feel like both due to this program, my anxiety has decreased a lot. I'm more able to handle it myself much better" (Grade 10 Participant). This sub-theme supports the ideation that participants experienced an improvement in managing emotions by effectively handling both experiences as well as what is occurring around them more.

Control

The descriptor "*control*" was often reported by participants in reference to the theme 'Managing emotions.' Participants reported having learned to control emotions as well as having acknowledged the natural presence of uncontrollable experiences. One participant stated, "I learned how to like control my emotions a lot better during the program" (Grade 11 Participant). Some participants expressed the realization that there are many things out of their control and learned to be contented when the focus was shifted. Some participants described learning to control what they could and letting go of things they could not control. For example, one participant stated:

Like during my provincial exam I was feeling just overwhelmed with it and overwhelmed with the end of the year, so I just kind of stood back and was like "is it in my control?" And it is because I work and study and hand things in, and I realize that, that part was in my control and that the rest, like there's other things happening that's not in my control like social situations or you know it being way too hot outside to be able to study or to concentrate, things like that. So, I think that helped me get a lot of work done that way because I realized you know I can do stuff, there is a plan of action (Grade 11 Participant).

One participant credited the YWP for learning the association between living in the future or living in the past and how this perspective impacted perceived stress. The participant stated, "Mood-wise, the program definitely helped me feel happier I guess because when you're living in the future or the past, you're stressed out because you can't control that" (Grade 10 Participant). Having an improved sense of control over

thoughts, feelings and actions was reported by many of the participants as a result of participation in the YWP.

Dealing with Emotions

The descriptor “*deal*” was used by many participants in a variety of contexts during the post-program interview. In terms of emotion regulation, it was the least reported descriptor when describing managing emotions. One participant stated, “I wouldn’t say that, that emotion goes away but I’m just able to deal with it like more” (Grade 10 Participant). Although the generalized nature of the response *deal* did not provide any noteworthy data for this thematic analysis, it is important to include as another descriptor reported by participants when describing the management of emotions.

4.4.3. Theme 3 - Strategies for Managing Emotions

All of the participants were able to identify strategies for managing emotions during the post-program interview. The sub-themes for the theme ‘Strategies for managing emotions’ included: (a) Removing oneself (b) Working through the situation and (c) Using a distraction.

Removing Oneself

One of the most frequently reported strategies participants used to manage emotions was to isolate or remove oneself from a situation by going into their bedroom. This strategy was reported by more than half of the participants at various points during the post-program interview. Descriptors used for removing oneself included: *isolate*, *detach* and *disengage*. One participant stated, “I like hide out in my room until I feel like I can calmly deal with my parents” (Grade 9 Participant). The descriptors *detach* and *disengage* were also reported as a method of ceasing to participate in an intensely emotional interaction or experience. One participant reported:

I learned like how to breathe and like calm myself down and like not everything is like, not every single one of my thoughts is what's the truth I guess, so it was really good to go through that and be able to detach myself from my emotions when I need to (Grade 10 Participant).

Many of the participants were able to communicate the value of isolating, detaching and disengaging when they experienced intense emotions. Some participants reported that this strategy assisted them in gaining control over their emotional state and enabling them to address the person, situation or internal struggle at the root of the challenging situation.

Working through the Situation

Many of the participants described an improved ability to work through an emotionally intense situation. Descriptors for the sub-theme 'Working through the issue' included: apply, process, get over and analyze. One participant reported, "Now when there's a conflict or something, I guess I can analyze the situation much better" (Grade 11 Participant). Some participants described the notion that taking time to stop and think prior to making decisions was an unfamiliar concept in the past. Working through a situation by taking a step back and considering a plan of action shows a conscious process of managing emotions. One participant stated:

I learned a lot about like patience even because like when you're breathing slowly, taking that in and that's just kind of in a way to me, it means taking everything in the situation around you, so if you're in a conflict with someone then looking at every aspect, breathing, taking your time, before you make a direct decision (Grade 10 Participant).

Many of the participants were able to verbalize the improved ability to decrease the speed of an emotional response by working through the situation, as opposed to reacting as they traditionally would have prior to the YWP. One participant with years of impulse control difficulties stated:

The program helped me a lot with like stress sort of like, especially like with like school stuff and friend stuff, it just sort of like I don't know helped me calm down when I was really mad and like, take a step back and be able to like process situations more and then make a decision of how to handle it (Grade 10 Participant).

Working through a situation requires planning, organizing and patience. This sub-theme suggests that some participants have acquired the skills to accomplish this successfully.

Using a Distraction

All of the participants reported using a distraction as a strategy to manage intense or difficult emotions. Descriptors for this sub-theme included: organize my life, go to the gym, take a nap, go for a walk, watch TV, play with my younger sibling and listen to music. As a result of using a distraction to manage emotions many participants reported an improved sense of self-control. One participant stated:

I mostly learned probably how to like control my emotions a lot better. I have been keeping my emotions under control and like moving through them, not just like pushing them down and like bottling them up but actually kind of dealing with things like now in the present. Sometimes I just take a nap or go to the gym when I am emotional (Grade 11 Participant).

One participant reported, "Now I just go on walks and stuff outside to distract myself from what's stressing me out or upsetting me" (Grade 9 Participant). Many participants described that the utilization of distractions was a valuable strategy in allowing them the space to gather their thoughts and approach issues with a calmer perspective.

Summary of Category Emotion Regulation

During the YWP, I introduced the following concept: We all have the power to change our experience with emotions by becoming aware of and learning how to manage them by applying effective skills. Many participants described this concept as, "Something they had not considered before." Understanding and providing youth with skills to regulate emotions was one of the main topics under investigation for this research. The themes awareness, managing and strategies for managing emotion regulation outline participants' reported experiences during the YWP and parallel the desired outcome of this research. It is evident through participant responses that each gained an incredible amount of personal insight in the category emotion regulation that may assist them with the awareness and management of emotionally challenging situations.

4.5. Category 3: Yoga and Mindfulness

One of the aims of this research was to develop a clearer understanding of how youth perceive the relationship between mindfulness education and yoga as well as how the two approaches inform one another. In order to gather data in this area of interest, I asked participants the question: *Why do you think I put yoga and mindfulness together?* As the participants responded, I was able to probe more to ascertain views regarding the association between mindfulness and yoga. Other questions that related to this inquiry and provided informative feedback for analysis included: *What did you learn or gain from participation in the YWP?* and *What did you like about the YWP?* These three questions overlapped in this theme as participants noted specifics about the program that inform the yoga and mindfulness section; therefore, some responses were double coded when necessary. The two main themes for this category included: (a) Mind/body connection and (b) Benefits. Sub-themes for ‘Mind/body connection’ included: (a) Complementary practice, (b) The physical body and (c) The mind. Sub-themes for ‘Benefits’ included: (a) Integration of skills and (b) Balance. Figure 4.5 is a visual representation of themes, and sub-themes for the category yoga and mindfulness.

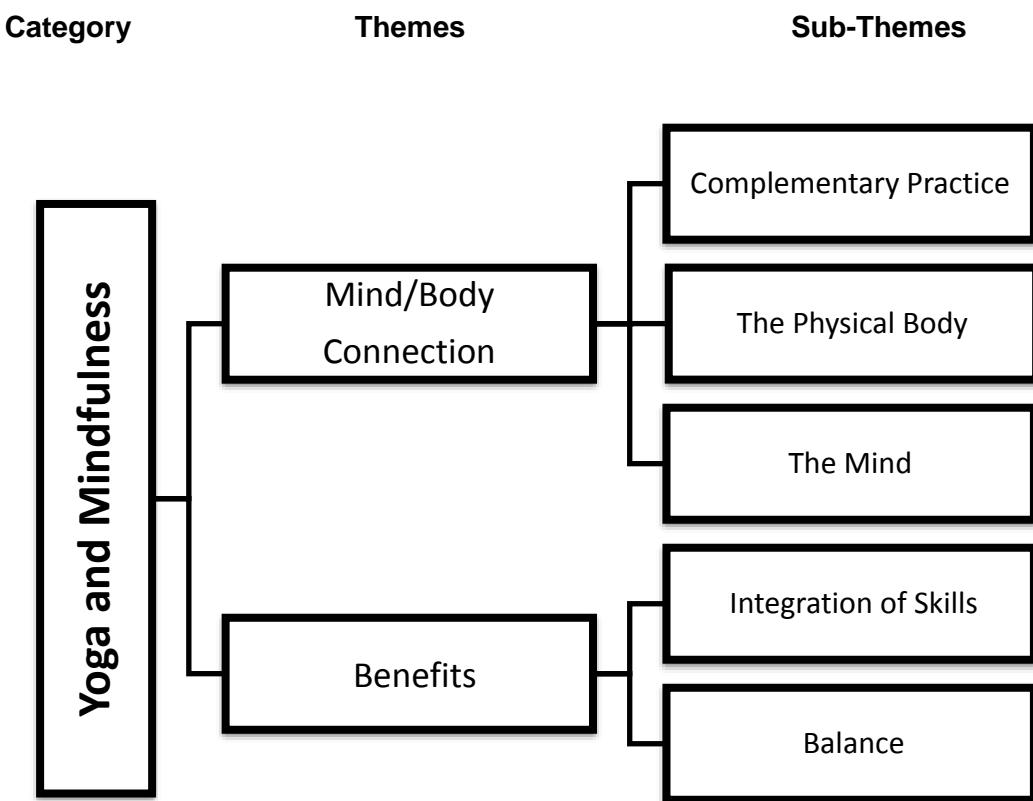


Figure 4.5. A visual representation of the thematic analysis of yoga and mindfulness according to participant's post-YMP interview.

4.5.1. Theme 1 - Mind/Body Connection

Assisting youth to improve their 'Mind-Body Connection' was an area of interest for this research. As a school counselor of twenty years, I have observed that many students seemingly lack a healthy connection to their whole body making it difficult to identify the impact of stress and intense emotion physically, mentally and emotionally. Throughout the program, every participant was able to identify and describe physical sensations they experienced as a result of stress or intense emotion. This suggests an improvement in the ability to recognize how the mind can affect the body. Sub-themes for the theme 'Mind/Body Connection' included: (a) Complementary practice, (b) The physical body and (c) The mind.

Complementary Practice

Twenty-two of 25 participants referenced the complementary nature of mindfulness education paired with yoga. During the post-program interview I asked participants the question, *Why do you think I put yoga and mindfulness together?* Responses included: “To teach us how to connect the mind with the body”, “Because the two work well together”, “They go hand in hand”, “The two create a healthy lifestyle” and “The two encourage balance.” One participant stated, “I liked the yoga because I felt like it was helping mentally and physically because it connects more with the physical aspect and it also has the releasing kind of thing that you can do with your mind and your body” (Grade 9 Participant). Another participant stated, “The combination of yoga and mindfulness definitely teaches you to like, with taking the activities we learned in mindfulness and doing it physically with your body, and like releasing tension physically as well as mentally through visualization” (Grade 11 Participant).

It definitely teaches you how to like, with taking the activities of your mind and doing it physically with your body and like connecting your mind to your body, and like releasing this tension physically not just in your head and visualizing it. Like actually doing it really helps and releases a lot. Um, yeah I think it's kind of n-newish 'cause I've definitely connected more like my mind and body together in this program (Grade 11 Participant).

The majority of participants described the combination of mindfulness and yoga as an approach to decrease stress and improve the ability to regulate emotions as an effective method during and after the YWP.

The Physical Body - YOGA

Another area of interest for this research was to encourage youth to become more connected to their physical body’s response to stress and intense emotion. The sub-theme ‘Physical body’ encompassed participant references to: physically calm sensations, physicalized techniques, calming the body, moving the body and an increased focus on the body. Many participants reported that they enjoyed yoga because it allowed them to focus on their body. One participant stated, “I think yoga was a way to kind of physicalize the mindfulness techniques we were learning” (Grade 11 Participant). The transferability of skills from mindfulness to yoga was the desired outcome of pairing the two practices together. One participant stated, “I feel like the

yoga, it was more the physical part of it, but I feel like it helped with your body being calmer so you can focus on when you're thinking" (Grade 10 Participant). One participant referred to yoga as mind-full movement stating:

I know that, like through hearing things that movement, there's mindful stretches or like mindful movements that you can do so I think yoga is a lot of mindful movement. And I, like I really enjoyed this past week when it was the combination of mindfulness and yoga because I just found you got the two together, which I really liked (Female, 10th Grade).

The physical postures of yoga encouraged participants to tune into their body with self-compassion. When paired with mindfulness, yoga can be a journey, not to get somewhere else, but to be where we are whether the experience is pleasant, unpleasant or neutral. One participant described their experience stating:

I think the yoga really helped because it was all this, like all these things that, that help like de-stress and like calm, like I feel like I've been put back into my own body if that makes sense. And just like I noticed that if, like whenever I left yoga, I'd like feel, like it would be like easier to walk, and like easier to breathe, and like easier to just like take life in and be in the moment no matter what was going on (Grade 11 Participant).

The YWP approach to yoga is less about performance and more about the exploration of the experience, moment to moment, by learning to step out of doing things mindlessly. Many participants reported that by engaging in breath awareness, by identifying of physical sensations, and understanding how thoughts and emotions impact the body, they were offered an entirely new experience of self-exploration.

The Mind - Mindfulness

The goal of understanding how youth view the relationship between thoughts, feelings and behaviours was an area of interest for this research. Participants reported experiencing an improvement in their ability to focus based on the following observations of the mind: "let your mind rest", "calming your mind", "clearing your mind" and "becoming more present in the moment." One participant stated:

I feel like yoga is like just something that is used like for like meditation, just to like leave everything and just think about one thing or, just to like let your mind rest and like that kind of related to the

breathing and just like the whole de-stressing and. I don't know, just clearing your mind (Female, 11th Grade).

The connection of thoughts to their effect on the physical body was described by one participant stating:

Well mindfulness is, to me at least, for me it's about calming your mind and letting the worries go. But then the yoga kind of helps relax the stress that your mind's caused your body to have. When I put those two together it worked really well (Female, 11th Grade).

Throughout the YWP participants were encouraged to explore the connection of their thoughts to how they feel as well as to relate it to their actions or reactions through mindfulness activities and exercises. Many participants were able to communicate their experience of recognizing and interrupting the trajectory of unhelpful reactions in relation to negative thinking as a result of applying the mindfulness skills acquired during the YWP.

4.5.2. Theme 2 - Benefits

Many participants reported having experienced 'Benefits' as a result of participating in a school-based education program that paired mindfulness and yoga to decrease stress and improve emotion regulation. 'Benefits' included an increased ability to manage stress and intense emotion through (a) The integration of skills and (b) Balance. The following sub-themes of 'Benefits' will now be explored.

Integration of Skills

The integration of skills, in terms of this research, explored participant understanding and application of mindfulness education and yoga practice to manage stress and improve emotion regulation. The YWP was designed to teach participants mindfulness concepts that would be applied during each yoga session; this would provide the opportunity to generalize their learning through physical movement resulting in the internalization of the skills and accessibility of those skills when experiencing stress or intense emotion. During the post-program interview participants were asked to respond to the question, *Why do you think I would put yoga and mindfulness together?* One participant stated:

Because we could just talk about it and kind of go through it sitting here but I think it was, like, when we'd go through an hour in yoga and relax kind of like that, I think it made all the things you were teaching us to stick more and like we'd get a chance to actually try to use them in the yoga (Grade 11 Participant).

Participants responded to the question stating the following: "They just go together", "They complement each other" and "They go hand in hand." One participant stated, "I think they both kind of tie into each other, I guess. Mainly with the thoughts and the focus and the being present in the moment and that stuff" (Grade 11 Participant). Another participant reported:

I liked how there was a balance between like learning and like actively doing it like, my, like sitting in here talking with you and then doing the exercises and doing the yoga and kind of applying them to the physical aspect so it was kind of putting it in your head and kind of repeating it with your body and I really liked that part of it (Grade 11 Participant).

One of the desired outcomes of the YWP was to encourage the understanding of the taught skills as well as to foster an appreciation for the benefits of applying the skills to personal well-being. Many of the participant responses suggest that they have met this outcome.

Balance

Every participant referred to the term balance from a variety of perspectives throughout the program. Balance was used to describe: (a) The dissemination of program information and (b) as a means of describing the effects of the skills acquired from the program. Many participants reported enjoying the format of the program and described experiencing a sense of balance with regards to how the program unfolded and the manner in which information was delivered over the course of the program. One participant reported:

I liked how there was a balance between like learning and like actively doing it like, my, like sitting in here talking with you and then doing the exercises and doing the yoga and kind of applying them to the physical aspect so it was kind of putting it in your head and kind of repeating it with your body and I really liked that part of it (Grade 10 Participant).

Many participants also used the term balance to describe the effects of applying skills acquired during the YWP. One participant stated:

I like doing yoga! Yoga was one of my favorite things especially the different types of yoga. I liked breathing and going in depth with each like emotion and breathing and thinking and mindfulness techniques. That was really cool to go more in depth and combining the two it made me feel balanced like in my head as well as in my body (Grade 9 Participant).

Throughout the YWP, most of the participants reported the ability to recognize the impact of mindfulness techniques on their physical experiences during yoga and that the internalization of skills created a balance in how they dealt with stress and intense emotions.

Summary of the Category Yoga and Mindfulness

The combination of yoga and mindfulness has not been highly researched among secondary students and is of great interest to this study. Current literature tends to study either mindfulness or yoga independently, and practices are held among special populations such as incarcerated youth or youth with mental health diagnosis. During the YWP and post-program interview, participants were encouraged to share their views and experiences regarding the pairing of mindfulness and yoga as an approach to decrease stress and improve emotion regulation. Many of the participants reported that mindfulness concepts coupled with yoga postures were of a complementary nature, encouraging an improved understanding of how mental stress impacts the physical body. Participant responses suggest that many of them experienced the benefits of participating in the YWP from a physical, mental and emotional perspective. Participants also reported that the delivery of YWP provided a balanced approach to integrating mindfulness concepts into the physical practice of yoga, as well as experiencing balance in their ability to manage emotion regulation and stress. In conclusion finding reveal that participants experienced psychological benefits from the practice of yoga in addition to mindfulness, such as a more holistic understanding of psychological distress (anxiety attacks), adaptive coping strategies and enhanced well-being.

4.6. Category 4: Individual Benefits

All of the participants cited individual benefits as a result of participating in the YWP. The following analysis was conducted utilizing the following questions from the post-program interview: (a) *What did you learn or gain from participation in the YWP program and (b) What did you like about the program?* These two questions were collapsed to create the theme ‘Individual benefits’ due to the common responses. The three main themes for this category included: (a) Acquired skills, (b) Impact on mental health and (c) Understanding the impact of stress on well-being. Sub-themes for acquired skills included: (a) Breathing exercises, (b) Visualizations and (c) Present moment awareness. Sub-themes for ‘Impact on mental health’ included: (a) A change in the occurrence and intensity of anxiety attacks and (b) Improvement in symptoms related to depression. Sub-themes for ‘Understanding the impact of stress on well-being’ included: (a) Physical, (b) Mental and (c) Emotional. Figure 4.6 a visual representation of the themes and sub-themes for the category individual benefits.

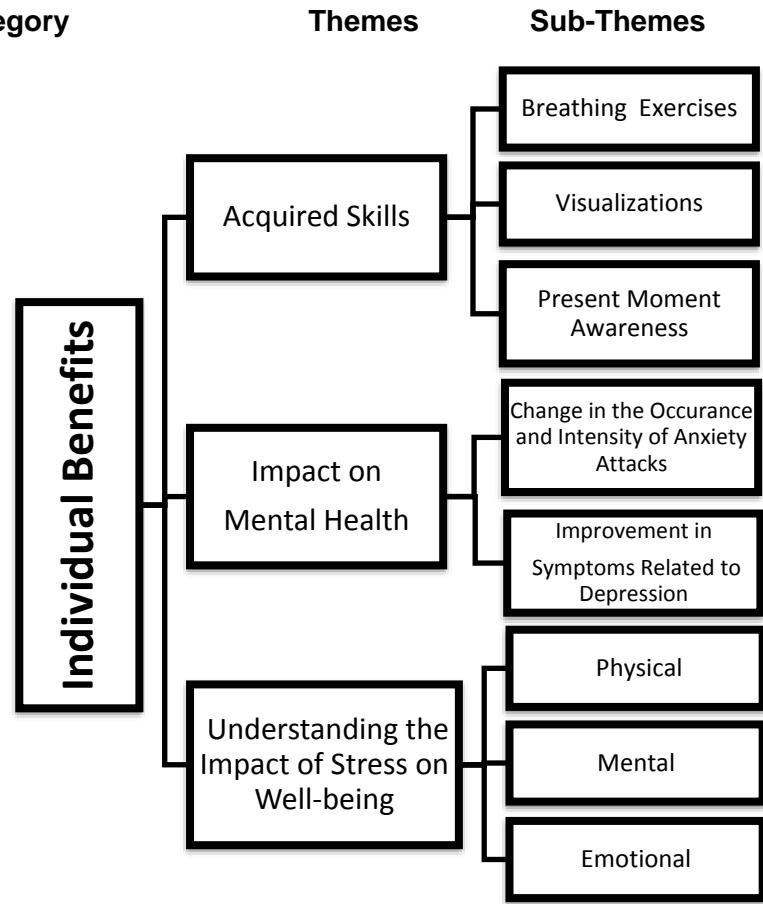


Figure 4.6. A visual representation of the thematic analysis of the category individual benefits according to participant's post-YMP interview.

4.6.1. Theme 1 - Acquired Skills

Participants' responses to the question *What did you learn or gained from participation in the YWP* included a wide variety of descriptions of skills they found useful, including: (a) Breathing exercises, (b) Visualizations, (c) Body awareness, (d) Mindful eating, (e) Being present in the moment, (f) Mindfulness meditation, (g) Yoga postures and (h) Various styles of yoga. The skills most referred to were separated into the following sub-themes: (a) Breath work and (b) Visualizations. While other skills were not included as sub-themes, I felt it was important to mention them as an observation of participant responses.

Breathing Exercises

All 25 participants reported that the breathing exercises were the most helpful skill acquired during participation in the YWP. Participants reported applying specific types of breathing exercises in a variety of contexts. Box breathing (4 square breathing) was noted by five participants as the most effective skill introduced to them during the program. One participant stated, "I liked learning how to relieve stress in no matter what situation I am in! The box breathing is probably the most helpful thing I've taken from this I use it all the time" (Grade 11 Participant). Diaphragmatic breathing (hand to chest and hand to stomach) was also mentioned by one participant as an effective technique when experiencing stress, stating:

I really like the breathing exercise where you have to put the hand on the chest and the stomach, that one like really stuck with me. I really like it because it just kind of centers me and connects me and kind of like helps me figure, like calm down and breathe and just figure out and yeah (Grade 11 Participant).

Participants were able to describe situations when they used breathing exercises, for example: before a performance, at bedtime, during an emotionally challenging situation or in preparation for a test. One participant reported:

I loved the square breathing and it's just like my brain automatically goes straight to it so- that for me was one thing that we talked about, an exercise that really stuck and I practice that a lot. Um, a lot of the breathing exercises that you used are very helpful when I'm lay, lying in bed I have the breathe on my closet, like above my closet on my wall. Yeah, so I have that on my door and it's like, where my bed is it's like I can look at it before I go to bed and I can kind of like. It's funny, I like go through the entire program before I go to bed sometimes.

Each participant was able to describe a reason for applying a breathing exercise, for example: to calm down and center myself, to deal with stress, before making a decision, to control myself, when I'm anxious, during difficult situations, to take each moment and appreciate it, and to help me relax. One participant reported:

I remember one time one of the things you taught us was every time you walk into a room breathe. Being more mindful of how busy my life is and how I can get at times and remembering to ground myself and takes some breaths and kind of look around and see where I am at and just appreciate the moment (Grade 12 Participant).

Understanding the importance and impact of attention and awareness to breathing was described by one participant, who stated:

Breathing is extremely important and you really need to take each moment as it is and appreciate it because you're only going to live once and you should recognize everything around you because it's part of your life and daily routine. Also, every time I open up my text book I've gotten kind of into the habit of taking a breath before I start to read (Grade 10 Participant).

The combination of breath awareness, the identification of situations and the ability to apply a strategy were reported by participants as valuable, applicable and worthwhile. One participant stated, "I liked learning what like my own self to do like becoming aware of like breathing and how like it's all like one kind of thing" (Grade 10 Participant).

Breath awareness was reported as the most powerful skill learned by the participants during the YWP. Breathing exercises impact the central nervous system providing one with the opportunity to calm oneself by slowing the process of circulation, heart rate and respiration, in turn bringing the body into a more balanced and calm state of being. During the YWP, every participant made reference to using breathing exercises to manage stress and emotional reactions.

Visualizations

Participants reported that visualizations, presented during the YWP, were a memorable exercise experienced during the program. Six of the participants identified with the visualization of "*your mind is like the ocean*" as described by author and neuropsychiatrist Dr. Dan Siegel. The intention of this exercise was to picture yourself at the bottom of the ocean, looking up calmly at the ever-changing surface (of your mind). The idea that the core of who we are resides in that place of stillness, at the bottom of the ocean, and that we chose to react to what occurs on the surface resonated with most of the participants. This visualization was a unique approach to helping participants create space between an experience and their reaction to the experience. This type of practice helps to break the cycle of reactivity and living mindlessly as if to be on autopilot. One participant described their experience stating:

Focusing on my breathing is not thinking about other things and just remember like breathe in and out and just kind of calm down and doing that stretching yoga when you put your arms out and it just release is everything in your chest because I hold all my stress and my chest and it really helps a lot. And just thinking about it like that visualization of the ocean when you're at the bottom so I like a disaster can be going on but I can still be calm and I can still get through it (Grade 11 Participant).

One participant described an aversion of the ocean visualization stating:

Um there was this one day in, in yoga where you said to visualize like we were at the bottom of the ocean and like all our thoughts were waves that went by and I like had an anxiety attack and I thought like I was dying and drowning and I, I, and I think that's when I realized not everything in the program I have to love. But like there are always things that I can do to like work around it. Like instead like you helped me come up with like, oh like lie down in a place where you feel comfortable, so I chose like a meadow and I was so much more calm and whenever you said to do that exercise that made me feel really uncomfortable, I would just put myself like in the meadow with like all the daisies and I'd do what the other people were doing but in my own setting (Grade 11 Participant).

Another effective exercise for some participants was the visualization of a whirlpool. It suggests that a person could decide to jump into the chaos of the whirlpool and be swept away or simply sit on the edge and watch from a distance. This concept resonated with one of the participants who stated, "I liked the visualization of the wave and the tide and the whirlpool, it just made it easier for me to understand the concepts and stuff, it just gives you an image to work with so, that was helpful" (Grade 11 Participant). One participant adopted these concepts and reported sharing the idea with others stating:

I use these visuals on a daily basis. Like I'll even tell my parents, I'll tell my mom, remember that whirlpool I talked to you about, like, use that, she's like oh yeah. It's actually helpful and I use it all the time whenever I feel like I'm getting drowned by all this stuff, like just, just stop. Keep swimming (Grade 11 Participant).

Many participants reported that the visualizations were very helpful in understanding the concepts of mindfulness.

Present Moment Awareness

Mindfulness is present moment attention and awareness. One of the goals of this research was to educate youth about the benefits of mindfulness. One participant suggested, “I think like all teenagers, all adults could like just be able to take the moment, observe what's happening like right now” (Grade 10 Participant). Learning to enjoy the moment while preparing for the future encourages balance and the ability to live a healthy positive life. One participant reported:

I think just using mindfulness or meditations or even just informal mindfulness, to like be more in the present, not worrying too much about the future, past. 'Cause I find I personally live, have lived a lot in the future and past, always thinking about that, not thinking about the present and realizing what I have right now, so I think that (Grade 10 Participant).

As a result of participating in the YWP, one participant reported, “I definitely think that I'm not as concerned about the future now, but I'm not constantly thinking about it. I feel like I'm more present if that makes sense” (Grade 10 Participant). Grasping the concept of living in the moment with nonjudgmental attention and awareness is not the same as living as though you are immortal, taking risks and making unhealthy choices. Many of the participants reported that to live in the moment and enjoy life while planning for the future encourages a happier existence as opposed to living with anxiety and depression.

4.6.2. Theme 2 - Impact on Mental Health

The second most prominent theme for the category ‘Individual benefits’ was the program’s impact on mental health. ‘Impact on mental health,’ for the purpose of this thematic analysis, included the sub-themes: (a) a change in occurrence and intensity of anxiety attacks and (b) an improvement in symptoms related to depression as reported by participants. Many of the participants disclosed having anxiety attacks, experiencing symptoms of depression as well as struggling with other mental health experiences. By the end of the program, the majority of participants who disclosed experiencing anxiety attacks observed a change in the occurrence and intensity of their anxiety attacks while participants with self-disclosed symptoms of depression reported an improvement in the

symptoms they experienced related to depression. It is important to note that anxiety attacks were the most often reported mental health symptom described by participants.

Change in the Occurrence and Intensity of Anxiety Attacks

Seven of the 29 participants (mostly from Grade 11) reported a history of anxiety attacks from as early as age 12 none of which were clinically diagnosed. Many of participants cited a change in the occurrence and intensity of an anxiety attack since participation in the program. In terms of occurrence, one participant reported being surprised that they had not had as many anxiety attacks since starting the YWP stating:

I have not had as many anxiety attacks actually. I haven't really even noticed until now, like I haven't thought about it because they haven't been happening, but um, I used to go from like a couple of them a week to maybe like only one or two, like and like, or none at all. Um I just noticed that (Grade 11 Participant).

Another participant suggested, "I do have anxiety attacks but not so much as anymore. I used to have really bad ones" (Grade 10 Participant). In terms of intensity, one participant reported, "My anxiety attacks are not as severe, um and I feel them happening like I can breathe so I do my breathing and they are not like I can sometimes avoid them which is really nice" (Grade 11 Participant). In terms of anxiety, as opposed to attacks of anxiety, one participant stated, "I feel like, like anxiety wise I feel like both due to this program, my anxiety has decreased a lot. I'm more able to handle it myself much better" (Grade 10 Participant). All participants reported having felt elevated levels of anxiety resulting from the academic, social and parental demands. Similarly, all of the participants who reported experiencing anxiety attacks as a result of elevated anxiety reported having gained a greater awareness of their escalation process as a result of participating in the YWP.

Improvement in Symptoms Related to Depression

During the pre-program interview some participants reported feeling depressed or perceived symptoms of depression such as: isolation, exhaustion, decreased energy and the loss of desire to do the things they once found of interest. During the post-program interview one participant reported, "Before I was super depressed and I was like in my room like every day for like two weeks but now I feel like way better about things" (Grade 10 Participant). Another participant described, "Last year I quit dancing and I got

really depressed, so now I like being super busy but like I need to know my limits too. I feel like I'm starting get some balance in my life" (Grade 11 Participant). Some of the participants expressed the ability to recognize an improvement in the symptoms related to depression and were able to implement strategies to cope with depression from a healthier perspective, resulting from participation in the YWP.

4.6.3. Theme 3 – Understanding the Impact of Stress on Well-being

The theme 'Understanding the impact of stress on well-being' encompasses the knowledge and awareness of how participants respond to stress from three components of well-being: (a) Physical, (b) Mental and (c) Emotional responses. Research suggests that the awareness and understanding of the components of wellness coupled with the ability to recognize responses to stress from each perspective may assist an individual in experiencing balance. This overarching theme outlines the views of youth and their experience with stress from all three components of well-being as well as describing the impact that the program has had on their understanding and awareness of the three components. The sub-themes for the theme understanding the 'Impact of stress on well-being' included: (a) Physical, (b) Mental and (c) Emotional.

Physical

Every participant reported an improvement in the awareness of their physical response to stress as a result of participating in the YWP. In the post-program interview participants described physical responses to include: muscle tension in the shoulders, neck, head, chest and back. During the program, many participants reported that when they practiced yoga they were able to connect to their physical response to stress. One participant stated, "During yoga I kind of, I actually notice what muscles are sore from being stressed and need to be stretched" (Grade 9 Participant). Another participant stated, "I realize when we're doing yoga that I hold a lot of tension in my back" (Grade 10 Participant). Some participants reported headaches, stomach-aches, and lack of energy, fatigue, frequent sickness and nausea when experiencing stress. One participant reported that participating in the YWP alleviated their physical response to stress, stating, "If I was really stressed out I found that after I would do yoga or mindfulness, I would feel so much less stressed out. And one time I had a really bad headache and then it went completely away" (Grade 9 Participant). Building a

connection between stress and how it impacts the physical body is crucial for stress management. Too often the relationship is not linked until every other approach to the problem has been explored, including the medical model. If youth can begin to understand the influence of stress over their body, mind and emotional reactions, perhaps they will learn to experience life from a richer and healthier perspective.

Mental

Many participants reported an improvement in their ability to recognize mental responses to stress during the YWP. In the post-program interview, participants described experiencing: the inability to focus, trouble concentrating, negative self-talk, excessive worrying, restlessness and lack of motivation. One participant stated, “It's definitely made me more aware of like of myself, like how I feel and a lot of it is whether I'm focusing or not when I'm stressed so I've really noticed that lately” (Grade 11 Participant). Some participants reported that they were able to apply the skills they learned in the YWP to gain control in reacting to stress. One participant reported:

I feel more centered and more grounded and more, like I don't just let things pass me by. I've noticed that I've become a lot more observant. And just a lot more like um, focused on like my breathing like all the time. Like if I like, even if I'm just like bored or have nothing to do, I'm like I want to do some breathing exercises. Or when I'm like doing a test and I like get stressed out, I notice that like I just start doing like, I just start breathing in for four, and then hold it four and then breathe out for four and hold it for four and I, just like stuff like that you know. And yeah, I just like feel like more grounded and centered and focused and yeah (Grade 11 Participant).

Having an improved sense of mental balance coupled with the ability to recognize “that thoughts are just thoughts” was a powerful concept for many of the participants. The notion that clinging to thoughts or ruminating on things was discussed at length during the program as well as in the post-program interview.

Emotional

Some participants reported an increased ability to recognize their emotional responses to stress during the YWP. In the post-program interview participants described: anxiety, panic attacks, anger, frustration, sadness, irritability, and depression as typical emotional responses to stress. One participant reported, “I would say that I'm

a lot calmer, I don't get panicky or cry as much as I use to" (Grade 10 Participant). Another participant stated, "Since the program I now have a greater understanding that my emotions are just emotions that don't require an immediate response and that I can take my time and breathe and take everything in." Although the identification of emotional responses were not as highly reported as the physical and mental responses by participants, the information is still a valuable part of this research and therefore included within this category.

Summary of the Category Individual Benefits

Every participant reported experiencing some level of individual benefit from participating in the YWP. Acquired skills, the impact on mental health, and the understanding of the impact of stress on all components of well-being were most commonly referred to during the post-program interview. As a school counsellor, I have observed the difficulty for youth in identifying the impact of stress on well-being. Initially, many participants displayed a disconnection between the mind and the body when experiencing stress; the desired outcome of this research is to empower youth to make the connection between all three components of well-being. Post-program evidence suggests that the majority of participants were able to identify the effects of stress from all three components of well-being with an improved ability to overcome the effects of stress and emotion dysregulation by applying skills acquired during the YWP. The data also suggested that the participants who reported anxiety or depression experienced a decrease in the occurrence, intensity and symptoms of their mental health.

4.7. Category 5: Social Impact

One interesting and valuable category that emerged during the research was the social impact of participation in the YWP. Social impact refers to: (a) How peer involvement in a school-based program affects participation, (b) How relationships within each participant's inner circle are affected and (c) How each participant views global change as a result of participation in the YWP. Throughout the program participants attended weekly sessions of mindfulness and yoga that equipped them with a supplementary educational component that included a toolbox of strategies/skills/techniques to help combat the negative effects of stress. In all stages of

the YWP (pre, during and post), participants were provided with opportunities to share the changes in their perceptions of interpersonal relationships as well as each participant's experience within and outside of the group. Participants were also encouraged to discuss opportunities where they were able to share their new knowledge with other participants in describing their ability to manage stress and how that has impacted those around them. In the post interview participants were asked to respond to the following questions for the category of social impact: (a) *What do you think your experience would have been like if your friends did or did not participate in the YWP?* and (b) *Would people in your life see a difference in you since participating in the YWP? If yes what would they say?* For purposes of this thematic analysis, post-program interview data were separated into categories, coded and placed into themes and sub-themes. Findings for the category of social impact suggest that peer influence had both a positive and negative affect on program participation. Participants also experiencing a community of like-minded individuals working toward change. Data suggest that as a result of participation in the YWP, participants experienced a change within themselves which was also observed by others. It was also noted that each participant's inner circle also adopted skills of stress management and emotional dysregulation that were acquired during the YWP. The three main themes within the category of social impact included: (a) Impact of peer involvement during the YWP, (b) Impact on relationships and (c) Change. The sub-themes for 'Impact of peer involvement during the YWP' included: (a) Influence on participation and (b) Building community based on a common experience. The sub-themes within 'Impact on relationships' included: (a) Family/partner relationships and (b) Peer relationships. The sub-themes for 'Change' included: (a) Observable change (b) Impact beyond our community. Figure 4.7 is a visual representation of the themes and sub-themes for the category social impact.

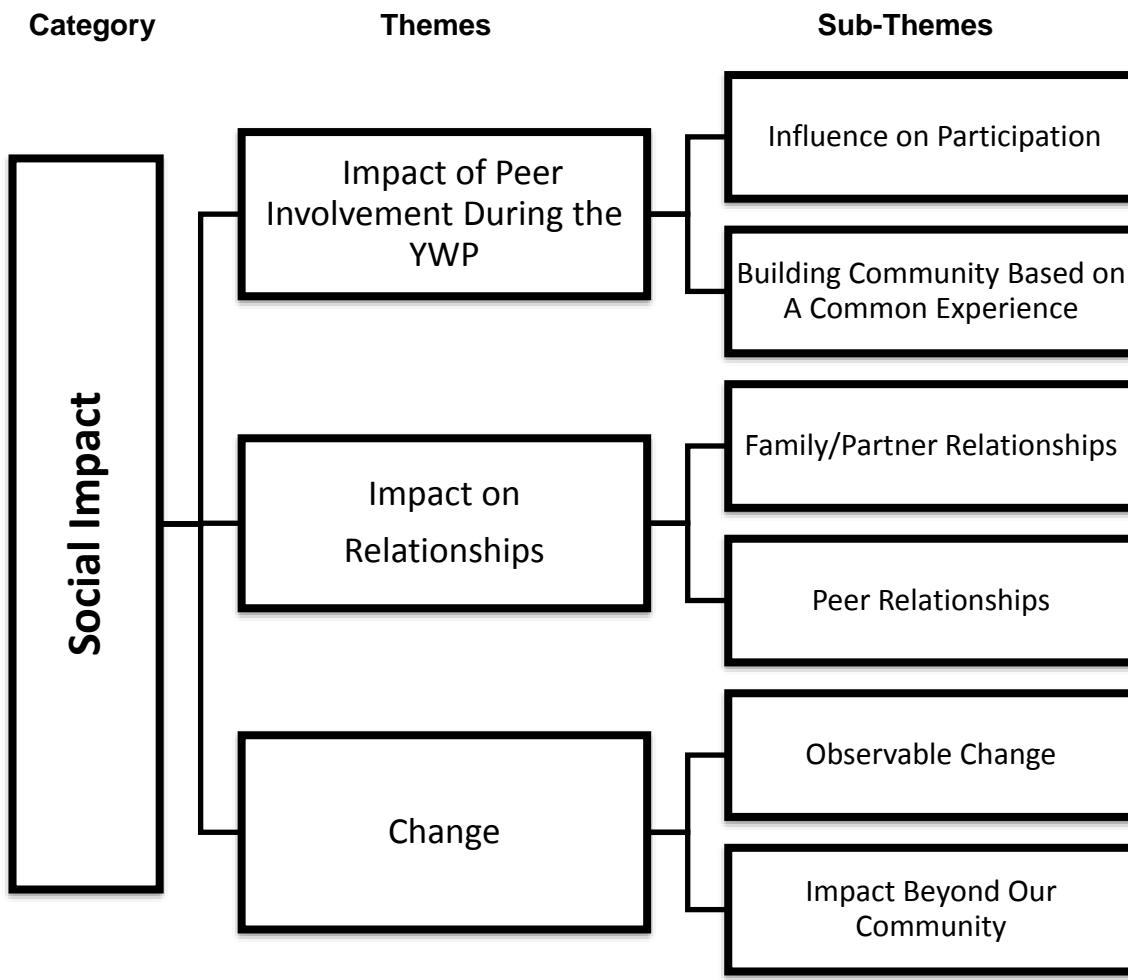


Figure 4.7. A visual representation of the thematic analysis of the category social impact according to participant's post-YMP interview.

4.7.1. Theme 1 - Impact of Peer Involvement during the YWP

Peer relationships tend to be a major focus during the developmental stage of adolescence. This theme provides information to better understand the influence peers have over student participation and attendance in a school-based program that also informs curriculum development. Many participants joined the YWP as a result of peer persuasion, while during the YWP; I witnessed participants attending or missing sessions depending on peer activity. For example, on one occasion, four participants entered the yoga class intending to take part, but left before the class began, deciding to go to a local coffee shop instead. It was this experience, and my observation of the peer dynamic that prompted a closer look at the phenomenon of peer influence. During the program, I observed changes in the interaction between group members depending on

group composition. For example, changes included: the reluctance to share within the group, the appearance of discomfort during guided meditation as well as the oversharing and taking over the conversation depending on group configuration. The following post-program interview question was designed to explore this phenomenon from the perspective of youth: *Do you believe that your experience would have been different if your friends did/did not participate in the program?* Throughout the program, many participants exhibited reflexive understanding of how they relate to peers, and were able to articulate their experiences. Participant responses were separated for clarity as well as for understanding the phenomenon in more detail. Many of the participant responses overlap from one sub-theme to another and were double coded when necessary. The following sub-themes of '*Impact of peers during the YWP*' will now be explored.

Influence on Participation

Influence on participation was a topic of discussion and an observation throughout the program. Findings revealed that peer influence on participation was viewed as both a positive and negative experience for some youth. During the pre-program interview some participants expressed being concerned that friends might interrupt the sessions or negatively affect their experience during mindfulness and yoga. Initially participants reported concerns such as: (a) Others fooling around causing distractions, (b) People not show up for sessions and (c) People quitting the program before it was finished and affecting the dynamics of the group. During the pre-program interview, participants also expressed weariness at the idea of attending sessions with others from different grades or different arts majors, while also acknowledging the possibility of being uncomfortable. Many participants expressed being "very" comfortable during the YWP mindfulness and yoga sessions in the post-program interview. One participant stated, "If I was with a bunch of strangers I don't, I don't know if I wouldn't necessarily be as comfortable 'cause I mean it's not really focusing on like the people around you, it's focusing on yourself, but it was kind of nice I guess to have my friends there as well as other students from the school" (Grade 11 Participant). It is important to note that not all peer influence was stated in positive terms. Some participants reported that their friends were a hindrance to participation at times, fearing the repercussions of disclosing information that may have social ramifications. One participant stated:

When you would ask questions and my friends were there I would try not to think of something like that actually affects my mood because like oh my gosh now my friends if they see that I'm upset or like more stressed then they are going to be all like oohhh are you ok? So, kind of like, we didn't even say anything of what we were thinking but I was very like. I had a little box, like okay don't go outside the box and what you're thinking because then your friends that are doing the same thing right beside you, they're going to notice and I guess, but, so that kind of limited my thinking process I guess and mindfulness. (Grade 11 Participant)

Group dynamics were a topic of discussion throughout the program as well as during the post-program interview. Although many of the participants reported that having friends participating in the same session was more desirable than attending sessions with participants from outside their social group, the experience was not considered negative. It is also important to note that many of participants reported that they would have attended the YWP regardless of their friends' involvement.

Building Community Through a Common Experience

One of the areas of interest within the theme '*Social Impact*' that emerged from the data was the sense of community that the program encouraged (this sub-theme is also double coded for curriculum development). Many participants reported an improvement in the group cohesion over the course of the 8-week program. Some participants expressed having gained a common language that participants were able to use in assisting one another when experiencing stressful or challenging experiences. As described by one participant, "When one of us is going through a stressful time, just like remind each other it's okay, like just breathe or like think of an activity that we've done during mindfulness or yoga" (Grade 11 Participant). Another participant recounted the experience of supporting a fellow participant by reminding them to activate newly acquired strategies (the participant's name has been replaced with the gender-neutral pseudonym Sandy to ensure anonymity) stating, "Sandy and I talk about the program cause Sandy tends to freak out about a lot of things and then, I will just say breathe Sandy think of box breath" (Grade 11 Participant). Several participants describe the program as an excellent way to meet other students while building a community of support and understanding, exemplified by one participant, "Like we all come from like different places and we were all interested in different things in different majors like different backgrounds and stuff but we all came together due to this one thing which is

pretty cool" (Grade 11 Participant). Another participant stated, "It was an enjoyable experience to come together with other students from other Grades and get to know them during the program" (Grade 8 Participant). Throughout the program I observed participants spending more time than usual in the common area of the counseling department. Given this close proximity to the participants, I was able to observe conversations that included dialogue about the YWP. On many occasions, I witnessed participants genuinely remind one another to apply strategies in situations of stress or when another participant was experiencing an emotional outburst.

4.7.2. Theme 2 - Impact on Relationships

During the program, many participants exhibited reflexive understanding of changes in how they relate to others and how others relate to them and were further able to articulate their experiences. Excerpts from the post-program interview responses described an improvement in the perception of interpersonal relationships, conflict resolution and general interaction with others as result of participation in the YWP. For the purpose of this theme the term "partner" will be used in place of boyfriend or girlfriend. The sub-themes of 'Impact on relationships' is outlined below.

Family/Partner Relationships

Participants reported experiencing increased depth in family and partner relationships as a result of participation in the program. This improvement was noted through the ability to support family by the sharing of acquired skills. One participant described, "I bring it up with my Mom a lot when I tell her just relax about things, and it's going to happen eventually, just take it in. And I talk a lot about it actually, it's weird" (Grade 11 Participant). Many of the participants described sharing the new-found knowledge with family members and reported situations when family members applied the skills to real life situations. One participant reported discussing strategies with their partner, who then also shared it with their sibling, stating:

I told my partner about mindfulness a few weeks ago. Since then I've been always talking about this to them and they have a lot of stuff going on as well, and I always told them you should just look into it at your school even if you just did the mindfulness part, you should just look into it. And they went to their counsellor and there was actually a yoga class that day and my partner probably never would have done it if I hadn't told them to, but they tried it out and they love it. And now

they talk about it with their sibling who is super stressed out all the time too so they do it now so it's really cool (Grade 11 Participant).

Many participants described sharing knowledge with others as empowering and that it encouraged them to want to try and help people who also experience stress. Another observation described by several participants was the experience of recognizing when family members, or partners, “lose control” and the participant was able to stay “calm” and “rational” while providing tips to de-escalate an emotionally charged situation.

Peer Relationships

Through exercises such as “loving kindness guided meditation”, many participants experienced higher introspective abilities, recognizing that the relationships they had with peers have not always been ones of respect. Through this acknowledgment, one participant experienced a change in perspective regarding treatment of self and others:

Since I joined the program I’ve been more aware of what my friends, like how I would react, act with my friends and how they actually treated me so it’s opened my eyes to just making better decisions for myself. I think the loving kindness exercise helped with that” (Grade 10 Participant).

Many participants reported that the loving kindness exercise was one of the most powerful experiences during the YWP. It was most commonly described as a shift in perspective with regards to how participants viewed self-compassion which was a perspective many of the participants had not considered prior to the exercise. As a result, numerous participants expressed the desire to have more self-compassion and empathy.

4.7.3. Theme 3 - Change

Twelve of twenty-five participants reported that family members, partners and friends have described observing a “change” in the participant’s ability to manage stress or intense emotions resulting from stress. Some participants described a belief that all people would benefit from this type of education perhaps impacting how we relate to one another as a community and a promoter for world change. The theme change is also

reported in the parent feedback thematic analysis. The sub-themes of 'Change' are outlined below.

Observable Change

Many participants described having discussions with family members and peers who acknowledged having observed the change in each participant's ability to manage both stress and emotions. One participant reported, "My mom said that I'm not so stressed out and really anxious and that I am more relaxed and I can order myself better. My best friend said I am way more happy these days" (Grade 10 Participant). Another participant described a conversation with their parent reporting; "I talked to my dad about that and he said that I'm not as stressed out or anxious about things 'cause I'm learning to just let it be" (Grade 11 Participant). Throughout the program participants shared stories, reporting their ability to manage emotional reactions that were observed by themselves and others. The parent feedback expands on this sub-theme by use of parent observation.

Impact Beyond Our Community - Changing the World

Every participant, with the exception of one, responded "yes" when asked *Would you recommend this program to others?* Several participants reported that if everyone practiced the skills learned throughout the YWP, the world may become a more peaceful and calm place to live. As expressed by one participant:

If everyone were to practice these skills people would be much calmer. And I don't think there would be as much self-harm in teenagers or youth I guess. I honestly don't think it would be as high as it is right now and I think there'd be less yelling in families and kind more appreciation for everybody and everything around people (Grade 11 Participant).

While pre-program interview data showed participants' lack of understanding of stress and of effective stress management, following the YWP program, one participant suggested:

I feel like not a lot of people, even know what stress is or know how to deal with it, so I feel like if they were, if they came to the program they would know what it is and how to deal with it themselves (Grade 11 Participant).

During the program one participant described having helped their partner in overcoming difficulty with another family member by talking them through a breathing exercise; another participant reported experiencing feelings of greater compassion and lesser judgement while observing homelessness. Throughout the program many of the participants disclosed stories of sharing the skills acquired through participation in the YWP with others and how these sharing experiences offered them hope for global change. Overall, each reported feeling excitement at the idea of being a part of the process for change.

Summary for Social Benefits

In terms of peer impact on participation, it should be noted that in the first few weeks of the YWP, participants were asked to sign up for specific session times due to space constraints. As time passed, attendance began to drop, and I began to offer to accommodate participants' schedules when they had other commitments that would impact their ability to attend sessions. It was during this time that I noticed the group dynamics begin to change, including lack of trust between friends, hesitation to interact, and overbearing behaviours. It was of interest to observe the lack of trust between friends, who reported a fear of sharing too much or appearing weak amongst their peer group. For some participants, fear of appearing vulnerable seemed to be of greater interest than focusing on one's well-being. The impact of participation on peer and parent relationships was discussed at length within the group during the program. An improvement in family relationships was a common observation by youth and family members. Participants reported a sense of empowerment when sharing skills with their parents and described the process as a "powerful method" helping to "bring family closer together." The idea of changing the world one session at a time was a fascinating concept and one that many participants described as a result of participation in the YWP. The ripple effect of participants sharing their newly learned skills of mindfulness and yoga education was evidently impactful.

4.8. Category 6: Insights into Curriculum Development

This research study was designed to explore the effects of a mindfulness and yoga education program on perceived emotion regulation and stress with secondary

students. Throughout the program youth were encouraged to contribute to the development of weekly sessions based on a reflective process with the goal of developing relevant educational curriculum. This weekly reflective process provided me the feedback necessary for creating the most effective program for participants in order that they gain the knowledge and skills required to manage stress and emotion dysregulation. During the program, participants acknowledged the aspects of the program that they disliked and further described what they felt were challenges for them in terms of participation. To gain a deeper understanding of these issues, participants were asked to respond to the following questions during the post-program interview to assist in curriculum development: (a) *What challenges did you encounter during the YWP?*, (b) *What did you dislike about the YWP?*, (c) *What would you change or add to the YWP?* and (d) *Would you recommend this program to others?* The three main themes for the category 'Insights into curriculum development' included: (a) Noteworthy, (b) Challenges and (c) The recommendation of the program to others. Sub-themes for 'Noteworthy' included: (a) Researcher and session availability and (b) General suggestions. Sub-themes for 'Challenges' included: (a) Attending sessions, (b) Inability to focus and (c) Yoga. Sub-themes for The recommendation of the program to others included: (a) Grateful for the experience (b) Beneficial to others and (c) Expand the target audience. Figure 4.8 is a visual representation of the themes and sub-themes for the category insights into curriculum development.

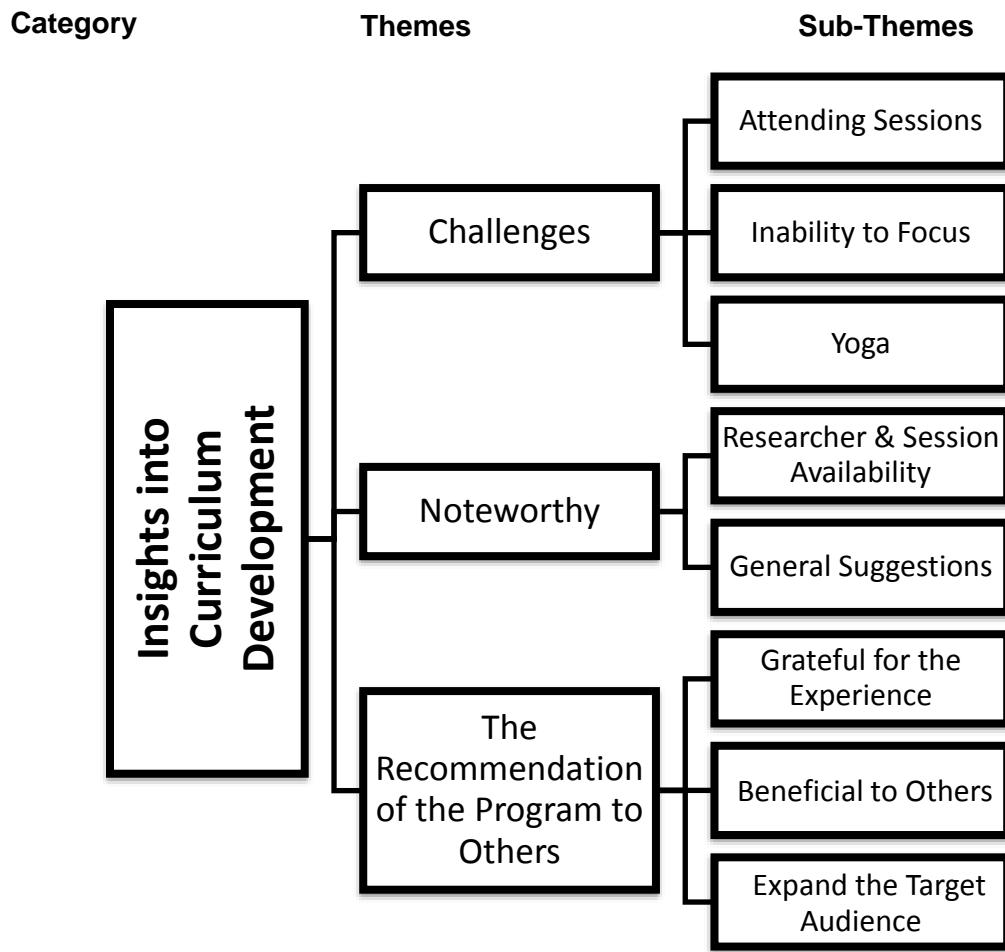


Figure 4.8. A visual representation of the thematic analysis of the category insights into curriculum development according to participant's post-YMP interview.

4.8.1. Theme 1 - Challenges

The theme 'Challenges' informs the research by describing some of the obstacles youth encounter in the pursuit of participation in a school-based wellness program like the YWP. It is crucial that these challenges are considered when developing curriculum in order to assist youth with the skills to effectively manage stress and emotion dis-regulation. The theme 'Challenges' included the sub-themes: (a) Attending sessions (b) Inability to focus and (c) Yoga. It is important to note that there were many other challenges reported by participants throughout the program that were not cited during the post-program interview other than the three sub-themes described

here. Those supplementary challenges are included in the discussion chapter of this thesis.

Attending Sessions

Attending sessions became difficult for all participants over the course of the YWP. The program was designed to take place during lunch and after school while many of the participants seemed to be over-scheduled during those times. In week 4 of the YWP, approximately one third of the participants were involved in a school production and most of them described a sense of conflict, resulting in feelings of guilt and disappointment, in not being able to attend YWP sessions. One participant expressed the following:

I felt terrible guilt and almost more stressed out when I had drama ensemble, but you gave a lot of days that were really good for people who had schedules, you would have to do yoga around their schedule. It just got hard, I remember I missed I think three or four weeks of yoga because, drama ensemble and things just kept coming up and I couldn't work around it, and it was awful. I missed yoga so much.
(Grade 11 Participant)

Another participant described having too many things to do and having to make a choice stating:

It was hard to come at lunch I have to go to math help and eat or have a break or do a missed test. But once I found the time to do it, I really enjoyed it! I always ended up finding the time but it was about planning how to fit it in. (Grade 10 Participant)

Of all of the challenges noted by participants, attending sessions was the issue reported most often during the program, also mentioned in the post-program interview. Academic expectations and required performance rehearsals were an obstacle for attending the YWP which created conflict for many of the participants.

Difficulty Focusing

Every participant reported a difficulty in the ability to focus at some point during the program. Calming the mind was a recurrent challenge for many of the participants as a result of “thinking too much”. One participant reported, “It was challenging to get to the point of being totally unstressed and breathing ‘cause you have so many things

running through your head and it's hard to focus." (Grade 11 Participant) Many participants suggested that the implementation of strategies such as visualizations were effective methods for "clearing the mind" or "learning to focus". One participant stated:

I guess um at the beginning of the program, it was hard to really to clear my brain and focus. Since the program I try to just observe my emotions or feelings or my thoughts and then just let them pass because I've never really known, like heard about doing that before. I can actually focus better now (Grade 10 Participant).

The majority of participants reported using skills acquired during the YWP to regain focus and become more present. I suggest that some of the participants' inability to focus could also be the result of running at a high level of stress, which was apparent with the reported anxiety caused by the sense of obligation to the program.

Yoga

During the YWP I taught yin, yang or a combination of the two yoga styles in order to introduce varied forms of yoga to the participants. Many of the participants reported enjoying all three styles of yoga while other participants expressed that some of yoga was difficult. One participant stated:

I found sometimes during yoga it was challenging for me because of my own body would get in the way and I'd get really frustrated that I couldn't do like some of the poses I could see other people doing and I couldn't do it as well because my body, its bigger so my thighs would get in the way (Grade 11 Participant).

Another participant described physical and emotional obstacles preventing them from participating in some of the yoga postures, stating:

My back isn't flexible like I don't have very high back flexibility so sometimes I got really frustrated when I couldn't do poses (Grade 9 Participant).

Throughout the YWP, participants shared moments of physical challenge and emotional frustration during the yoga sessions. In my opinion, the yin style class was challenging for participants who tend to be detached from the physical effects of stress. The holding of specific postures was both a release and a point of discomfort for some

participants. Many participants were able to identify postures that were effective or caused difficulty physically, mentally and emotionally during each yoga session.

4.8.2. Theme 2 - Noteworthy

The theme ‘Noteworthy’ includes valuable information to assist in the development of meaningful and relevant program curriculum. Participants were eager to share their views throughout the program and during the post-program interview. The information gathered during the program was used to inform the development of weekly sessions. Consequently, during the post-program interview, I decided to ask the participants what they liked, disliked and what they would add or change to the program in order to gather more information for effective program development. The sub-themes for this theme included: (a) Researcher/session availability/flexibility and (b) General suggestions.

Researcher & Session Availability/Flexibility

During the program, the schedule was adjusted daily to accommodate the changing nature of the participants’ schedules. Given my role as the school counsellor at the research site, I was able to be flexible and to offer sessions that would accommodate participants’ schedules. Participants expressed an appreciation for this flexibility both during and after the program; one participant reported, “I just liked the feeling of being so calm all the time and you were available a lot, so, it was never a problem to get a hold of you or anything” (Grade 11 Participant). Another participant described their experience by stating,

I think you've done a really good job with being kind to all the students and making sure everyone has come to their days and now you've made yourself available to everyone when they needed to change their times or whatever (Grade 12 Participant).

Although participants reported availability and flexibility to have allowed them to attend more sessions, it is important to note that the schedule of the program was not ideal. I found it challenging to deliver both mindfulness and yoga sessions to accommodate as many participants as possible. For example, when the majority of students were required to attend rehearsals for a school performance, I offered sessions during the weekend to accommodate the large group of students who would miss 2

weeks of yoga and mindfulness. Ideally, one session of mindfulness and yoga for all the participants at one time in one location would have been a more desirable and a more efficient approach in terms of time. This is another reason for the proposed inclusion of a program such as this into existing curriculum or to offer this program as a stand-alone class; this would ensure best practice and efficiency.

General Suggestions

Participants were asked to recommend changes or additions to the program. Initially, through discussion, it appeared that the timing of the sessions was the greatest challenge, but through the process of thematic analysis, many of the participants expressed the desire for: (a) Combination of classes at lunch, (b) The YWP as a credit course, (c) Longer yoga sessions, (d) Session space (location).

Combination Classes

The majority of participants described the complementary nature of combining mindfulness and yoga (format of the additional sessions) into one session as desirable. Providing a brief educational segment prior to the yoga session and then incorporating the learning throughout the yoga practice was considered to be the most effective method of program delivery. One participant stated, “I actually really liked when we did yoga at lunch because it was right after um a big test right before my most stressful class so I actually really enjoyed the last two weeks” (Female, 11th Grade). Participant responses suggest that the combined approach of acquiring a mindfulness skill in a separate setting and applying it within a yoga class assists the participant in cementing the new concept into their repertoire of strategies as well as their physical body.

The YWP as a Credit Course

Throughout the program, participants consistently suggested that the school should offer the YWP as a credit course providing participants increased opportunity for attendance. One participant stated, “I think that overall, this would be helpful for anybody and I think a lot of people would participate in it if it was an elective or a course” (Grade 10 Participant). This discussion occurred with participants and other students on a daily basis; in fact, I had many students request to take part in the program weeks after it started. Unfortunately, I was not able to accommodate new participants due to the structure of the program, but it should be noted that each student who requested to join

similarly expressed the need for this type of education to be made available as an elective.

Longer Yoga Sessions

The yoga sessions were 45 minutes in length, which included the time to complete a written reflection. Many of the participants expressed the desire for longer yoga sessions throughout the program. One participant stated:

I would have liked a bit of a longer yoga session almost. I feel like it was just after school, like right after school you were doing yoga, so maybe a bit longer or we talk before the yoga so we can kind of just relax from the day and then go into yoga (Grade 11 Participant).

Another participant, who took part in the optional sessions, suggested, "The yoga class could be longer. I like the combined class and I think if you were going to do the whole program again, you should do like combined classes that would make them longer" (Grade 9 Participant). All of the participants, at some points during the program, reported the need for longer yoga sessions, particularly when a more in-depth guided relaxation followed the yoga class.

Session Space

Throughout the program, several participants expressed concern regarding the space where yoga sessions were held. For the first two weeks of the YWP, yoga sessions took place in a portable, regularly used for music classes, just outside of the school building. During week three, I was provided the opportunity to move the sessions to a more suitable location within the school. Many participants expressed that neither space was "conducive to peaceful and calm surroundings." One participant reported, "It was ridiculous during every yoga class someone would knock at the door or walk into the space and disrupt the session." Participants also reported interruptions such as the end of the day loud speaker announcements and loud voices in the hallway as being very distracting. One participant stated, "If I had to pick one I think the smaller gym was a better location because it was quieter and it was more kind of like the atmosphere was a lot different than in the elementary music portable" (Grade 12 Participant). A second participant echoed this observation stating, "I didn't like the place we did yoga the first 2 weeks. It was like not that comfortable like the music room wasn't the best for yoga"

(Grade 10 Participant). When the location was changed for the yoga sessions, students were informed in person as well as by email one week prior to the move. Despite participants being informed of the change of location, some participants noted experiencing some confusion. One participant stated, “I think maybe if we had yoga in one set spot because I got confused running around the school like trying to figure out where it was” (Grade 11 Participant). It is important to note that all participants made reference to how they felt in the space at some point during the YWP. Many participants expressed that the space greatly affected their experience in both yoga and mindfulness sessions and that location should be more readily addressed in future program development.

4.8.3. Theme 3 – The Recommendation of the Program to Others

Participants were asked the following question, “*Would you recommend this program to others? Why or why not?*” Although this was noted in the category ‘Social benefits’ I felt it was further relevant for insights into curriculum development. Twenty-three of twenty-five participants who were interviewed said they would recommend this program to others. The sub-themes for the theme ‘Recommendation of the program to others’ included: (a) Grateful for the experience, (b) Beneficial to other, (c) Expand the target audience.

Grateful for the Experience

As a response to the question *Would you recommend the program to others?* a common descriptor used by most of the participants was “grateful”. One participant stated:

I am so grateful for this program and I just enjoyed it and I enjoyed being, a hundred percent (100%) there during it and then when I was taken away from it; it was something I wouldn't want other people not to be able to take away. I just think it's really an awesome experience and lifestyle kind of thing. I would totally recommend this program to others. Cause I feel like it's not just something that you do while you're in the mindfulness or yoga session, I find that I've taken away stuff and I actually use, and it's helpful. I think that if it's able to help me, why wouldn't everyone want to like do it to help themselves, kind of thing (Grade 11 Participant).

During the program, all of the participants reported an appreciation for the program in group discussion settings as well as in one on one reflection. Whether it was a skill they were able to apply, a relationship that was strengthened, or just the time to take a moment and calm their mind and body during a session, all participants were able to verbalize at least one occasion when they were able to apply their new-found knowledge to improve the outcome of a stressful situation.

Beneficial to Others

During the post-program interview, some participants reported that they believe mindfulness and yoga education would be beneficial to others, particularly regarding those with similar non-clinical mental health. As described by one participant “I would recommend the YWP because, I know a lot of people that get stressed out easy and that have like more, worse anxiety attacks than I've had before, and that really would benefit them a lot” (Grade 10 Participant). Participants were able to recognize the impact the practice of mindfulness had on emotion regulation and stress as described by the following, “I would recommend this program because it has actually helped me with recognizing stress and like some things I can do to help deal with it and focus more and I think it would be helpful to others” (Grade 11 Participant). On a number of occasions participants expressed that they believe others would benefit from attending a program like the YWP, suggesting that the program be available to all students.

Expand the Target Audience

Throughout the program, participants suggested that I expand my target audience in the future, in order to include all ages. On many occasions throughout the program participants expressed the need for the YWP to be a credit course within the academic timetable (Note: This is also discussed in the category educator's role in fostering well-being). One participant described the YWP as teaching universal concepts that would benefit all ages stating:

I think, I mean I've never known that much about mindfulness but until now but, and I'd love to learn more but I feel like it something everybody could use. And I feel that in today's society we just don't take the time to really live in the now and we're always on like technology or thinking about the future even. In school, it's like this homework to do tomorrow, the next day you're always thinking about what's going to happen if I don't do that or something so I think all children, teenagers and adults could just be able to take the moment,

observe what's happening right now and use some of the techniques we learned in the program their lives would be much calmer (Grade 10 Participant).

Although all but one participant reported that they would recommend the program to others, it is important to note that participant's point of view. The participant stated: "I think it depends on the person. I don't think certain people could do the yoga or like want to do the yoga, um, they would think it was stupid or whatever" (Grade 10 Participant). Understanding the value of a school-based mindfulness and yoga program was evident in the responses regarding expanding the target audience to give people of all ages the opportunity to learn skills that enable them to live a more peaceful and calm existence.

Summary for the Category Insights Into Curriculum Development

When creating curriculum that is meaningful and relevant to a particular group it is important to gather as much information from the perspective of the target population as possible. During the YWP and post-program interview, participants were encouraged to share suggestions that may improve the quality of the program. Participants described what they liked, disliked and would add or change to the program; these suggestions covered a variety of areas from the altering of the session format to the adding of more desired topics. Challenges of participating in the YWP were also disclosed by students, each expressing that his/her attendance was the greatest challenge and stressor. Many of the participants reported feeling stressed both when they attended and when they were not able to attend sessions. Participants expressed that missing social time or being unable to fulfill academic expectations when spending time attending a session were the two most common stressors. Some participants described being concerned with disappointing me, the teacher/researcher, if they were unable to attend. It is significant to note that the school site (LFAS) where the research took place has a compressed academic schedule given the addition of the arts into the timetable. This model imposes demands and expectations of the students that a traditional high school generally does not. The students at LFAS are expected to devote free time to extra credit courses, rehearsals and school performance preparation, which all take place outside of the school timetable. These expectations require that students arrive to school early, stay at the school past school hours, and work through lunch almost every day. On occasion, many of the school's art programs require students to

attend 16 hours of extra rehearsal on weekends. This must be considered given that that duration of this program took place during one of the school's biggest drama performances. This greatly affected participation between weeks 3 and 6, while one third of the YWP participants maintained prior commitments to the show. These are not atypical secondary student dilemmas, although, the average adolescent tends to dedicate time to employment, extra-curricular activities as well as social events, all which may interfere with participating in an outside of school hour's program such as the YWP. It is evident that a program occurring outside of the academic schedule would require flexibility and would greatly benefit from offering a variety of session times during the week that would encourage enrolment. Ideally, full credit courses or lessons within PE curriculum or Planning 10 would be considered a more effective and efficient approach to program delivery. It is hopeful to see that participants value the program enough to recommend it to others of all ages.

4.9. Category 7: Educators Role in Fostering Well-being

Seven of the ten participants who were asked to respond to the statement "*Youth don't value well-being*" (two from the junior group and five from the senior group) were also ask the following question: "*What can educators do to help students foster their own well-being?*" The two main themes for the category educator's role in fostering well-being included: (a) Teacher expectations and (b) Suggestions. Sub-themes for the theme 'Teacher expectations' included: (a) Decrease pressure and (b) Decrease workload. Sub-themes for the theme 'Suggestions' included: (a) Offer programs and (b) Improve communication. Figure 4.9 is a visual representation of the themes and sub-themes for the category educators role in fostering well-being.

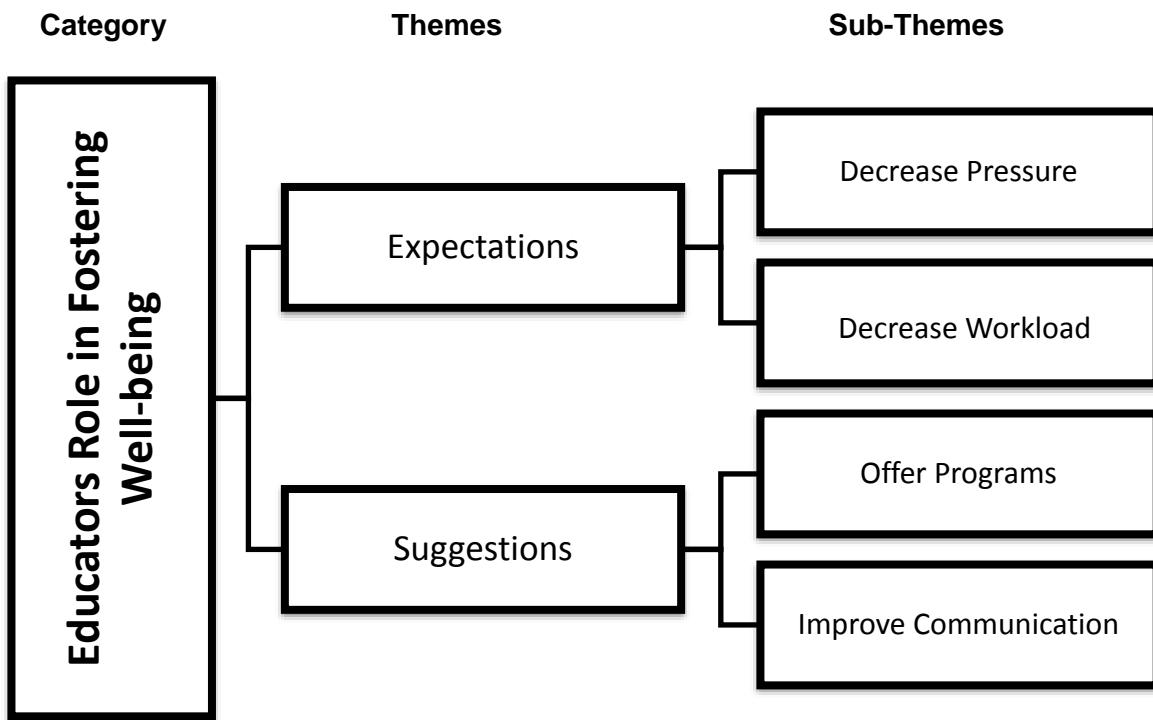


Figure 4.9. A visual representation of the thematic analysis of the category educator's role in fostering well-being according to participant's post-YMP interview.

4.9.1. Theme 1 - Teacher Expectations

Every participant reported 'Teacher Expectations' to be a major source of stress. Sub-themes for the theme 'Teacher Expectations' included: (a) Pressure and (b) Workload. Four of the seven participants reported that it would be helpful if teachers did not put so much pressure on students. Three participants reported that many teachers assign too much work without realizing the other responsibilities that students maintain. One participant stated:

I feel like I can't do anything because people like rely on me to do so many things and teachers, like when I don't say yes to their extra-curricular thing that they want me to attend and to be a part of and if I don't say yes I disappoint them and then they're not a huge fan of me, so I have to say yes so I can't disappoint them, and then the other teacher wants the same thing and they want me to do this and it's like okay but I have this, this, this and this to do and every teacher thinks their class is the most important. And every student feels that way (Grade 11 Participant).

In this theme, I will explore youth's perception of teachers' expectations and the suggestions that youth provide in order to alleviate the perceived stress brought on as a result of pressure and workload. The following sub-themes of 'Teacher Expectations' will now be explored.

Pressure

Throughout the program, as well as during the post-program interviews, participants described high levels of stress as a direct result of pressure from some teachers to complete school assignments, projects and tests. When asked, "*How can educators help students see the benefit of well-being?*" one of the main responses was to "stop putting pressure on kids." One participant stated:

I shouldn't say assign less things but try not to put so much pressure on kids to get work done. Because I think a lot of the times people don't realize how much other stuff kids have to deal with. I mean just like people in general are kind of oblivious with what kids are dealing with, whether it's something emotional or they just have a lot on their plate to do and to get done but I think just not putting so much pressure on people would be really nice. (Grade 11 Participant)

As a method of managing the pressure of getting school assignments completed on time one participant suggested, "I feel like when you have so much pressure on you, you kind of have to just put some stuff aside and focus on what need to be handed in next because you can't do it all at once" (Grade 10 Participant). Many participants suggested that they often feel a tremendous amount of pressure in all areas of their lives and that if teachers were able to decrease the pressure to complete work it would be beneficial to students' well-being.

Workload

Similarly, many participants reported workload as a major stressor. 'Workload' for purpose of this sub-theme consists of assignments, projects, tests, performances, and extra credit courses outside of the timetable. One participant suggested:

It just needs to be talked about more. Like teachers pile all this work on you and stuff it's almost like they forget that happiness is an important thing. So, I think that if they kind of realized it and made it more of a relevant thing it was just kind of fix itself (Grade 11 Participant).

Some participants reported feeling like they were unable to express their concerns regarding workload to teachers for fear of consequences, such as a poor mark on a project. A common response by participants when asked, “*Why don’t you approach the teacher with your concerns?*” was, “I don’t tell the teacher because I don’t want them to get mad at me.” The need for approval from the teacher was suggested by most of the participants as a reason for not discussing workload.

4.9.2. Theme 2 - Suggestions

Some participants suggested that creating a climate of better communication and offering programs in school may decrease stress for youth. It was suggested by many participants that offering programs to address issues such as emotion regulation and stress would be an effective approach in assisting youth to learn the value of well-being. Most of the participants reported poor communication when describing interaction with teachers. Participants suggested that communication with their teachers may improve if teachers were to practice compassion towards students, promote active listening in the classroom, and encourage understanding instead of using discouragement through judgement. The sub-themes for the theme ‘Suggestions’ included: (a) Offer programs and (b) Improve communication and will be explored.

Offer Programs

The desire to have the YWP offered as a course or club was expressed by each participant during the post-program interview, as well as throughout the 8-week program. One participant stated, “In an ideal world it would be great if there was just like an hour of an elective or something dedicated to that” (Grade 11 Participant). Another participant stated, “I think that overall, this would be helpful for anybody and I think a lot of people would participate in it if it was as an elective or a course” (Grade 11 Participant). Participants were extremely vocal in suggesting the need for a program to address emotion regulation and stress for youth. Similarly, each participant expressed the desire to participate in the design, development and implementation of a program that may address these issues.

Improve Communication

Throughout the program many participants disclosed experiencing difficult relationships with teachers. Some participants reported both positive and negative experiences when communicating with teachers. One participant stated, “I think that, in some cases there's a lot of encouragement from the teachers but in others there's really like is not at all” (Female, 11th Grade). Another student suggested, “Maybe teachers could just encourage kids to take their time, make sure that they they listen to themselves at least once a day” (Grade 11 Participant) Although the inconsistency of teaching styles appears to create the most stress for students. It is the reality of relationships, while learning to communicate as effectively as possible with teachers was discussed at length during the program. Two of the seven participants mentioned that they believe that some teachers believe that their class is more important than others. One participant stated, “Every teacher thinks their class is most important. Every student feels this way” (Grade 11 Participant). As a school counsellor, I have frequently observed poor communication between teachers and students that has historically been reflective of conflict such as a clash of personalities, a fear of repercussion, an absence both physically and mentally, a lack of taking responsibility for actions or non-action and sheer stubbornness. In most cases, taking ownership for behaviour has quickly remedied situations where communication has broken down.

Summary of the Category Educators Role in Fostering Well-being

In my opinion, it is important to recognize that the views expressed by participants were reflective of their personal experiences or their observations of others' experiences. During my experience as a school counsellor, I have had many discussions with students and these suggestions are common issues regardless of Grade. Youth's perspective on improving relationships, decreasing pressure, decreasing workload and providing programs to assist youth in managing stress are informative in curriculum development. Addressing and improving the areas or at least attending to and acknowledging that some youth view these issues as barriers to well-being could be the first step in moving forward to empower all parties to fulfill the requirements of both teaching and learning.

4.10. Category 8: Insight into the Value of Well-being from the Perspective of Youth

In order to gain insight into the value of well-being from the perspective of youth, 10 of the twenty-five participants were asked to comment on the following statement: “*Youth don’t value well-being. Do you agree or disagree? Please explain.*” Of the 10 respondents, four agreed with the statement while the other six responded as follows: (a) “It depends on the person”, (b) “I don’t think they think about it much”, (c) “I don’t agree or disagree” and (d) “I disagree with that statement”. Participant responses were collapsed to create the category ‘Insight into the value of well-being from the perspective of youth’ given the common responses. For purposes of this thematic analysis, post-program interview data was separated into categories, coded and placed into themes and sub-themes. Some of the participant responses for this category were double coded due to the overlapping with the category ‘Insight into curriculum development.’ The three main themes for this category included: (a) Obstacles, (b) Priority and (c) Lack of knowledge or limited life experience. Sub-themes for ‘Obstacles’ included: (a) Too busy and (b) Socially inconvenient. Sub-themes for ‘Priority’ included: (a) No time and (b) Don’t think about it. Sub-themes for ‘Lack of knowledge or limited life experience’ included: (a) Never taught, (b) We are too young to appreciate well-being, (c) Living in the moment and (d) Distorted perspective. Figure 4.10 is a visual representation of themes and sub-themes for the category ‘Insight into the value of well-being from the perspective of youth.

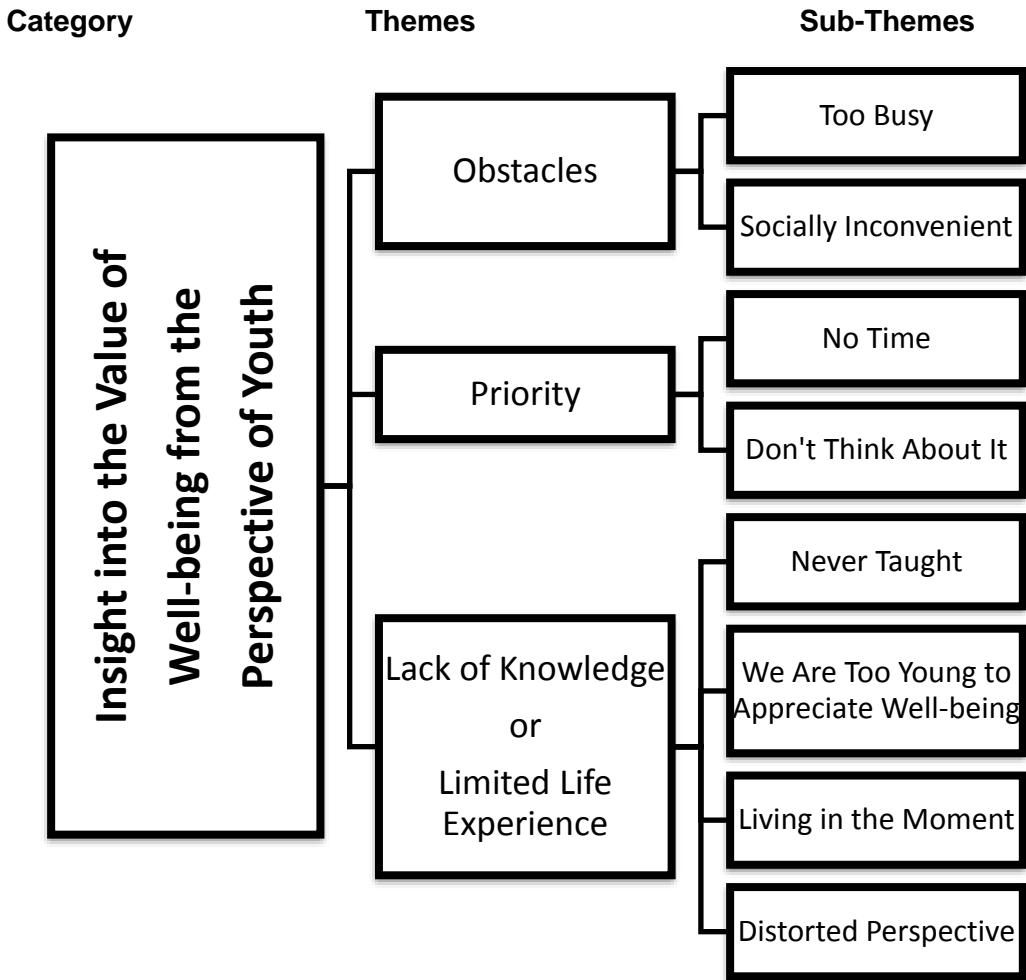


Figure 4.10. A visual representation of the thematic analysis of the category insight into the value of well-being from the perspective of youth according to participant's post-YMP interview.

4.10.1. Theme 1 – Obstacles

The theme 'Obstacles' was chosen to outline the barriers that participants suggested impede their pursuit of health and well-being. Sub-themes for the theme 'Obstacles' included: (a) Too busy and (b) Socially inconvenient. The following sub-themes of 'Obstacles' will now be explored.

Too Busy

Many participants reported "too busy" as the primary reason that youth *cannot* value well-being. The difference between the idea that youth "*do not value well-being*" and "*cannot value well-being*" should be noted here. Participants suggested that youth

want to value well-being but are “too busy” to pursue its improvement. At some point during the YWP every participant reported “being spread too thin” and suggested that having “too much to do” prevented them from spending time on improving personal health and well-being. One participant stated:

A lot of people spread themselves really; really thin to try and get everything done but then they don't get it done to the best of their ability. I know all these things. Like I know all the right answers but I just, it sucks and I can't apply it to my life, because it's too difficult I am too busy (Grade 11 Participant).

Many participants reported that the inundation of tasks that require completion on any given day affects the amount of time they have to dedicate to their health and well-being. One participant stated, “It's just not something we think about because we are too busy.” Despite their positive experience during the YWP, many participants reported that attending the mindfulness and yoga sessions were “just another thing they needed to get done.” One participant stated:

Although its super hard to make time for the mindfulness classes it's nice to know for lunchtime today I'm going to focus on myself during mindfulness and I'm going to find ways to learn how to figure myself out like, it can get really difficult especially when there is so many other things to do for school. Sometimes it's hard to like put those aside and be like okay, what's going on with me first and then the rest will get done? (Grade 12 Participant)

Throughout the program many concessions were made to ensure that all participants were able to attend both mindfulness and yoga sessions. Although participants expressed the desire to learn more about health and well-being, their ability to attend sessions remained an obstacle given the variety of other responsibilities.

Socially Inconvenient

Throughout the YWP, I observed that the desire to be with peers surpassed the motivation to focus on health and well-being for the majority of participants. One participant suggested, “I feel like you know some days are just so preoccupied with um, hanging out, being social, maybe getting school done, um, that they don't really take the time to care for themselves” (Grade 11 Participant). Every participant reported “social time” as the most important activity they look forward to on a daily basis. One participant

stated, “I think that like most kids don’t want to stay home and do homework on a Friday night, they would rather go out with their friends” (Grade 10 Participant). Several of the participants reported that they would rather “suffer the consequences” of not getting homework done to be with friends and that school is “just not their priority.”

4.10.2. Theme 2 - Priority

When exploring the reason for youth not valuing health and well-being, many participants suggested that well-being is *“just not a priority.”* The term ‘Priority’ was used in response to the statement regarding the value of well-being by six of the ten participants. One participant described their process of prioritization stating:

I think prioritization is a really difficult thing. I feel like I have no time you know and I am trying to figure out what is valued more, and what I need to do right now immediately, and what I can do later (Grade 11 Participant).

Many participants reported that learning to prioritize tasks for completion has been reported as a benefit from their experience during the YWP. Sub-themes for the theme ‘Priority’ included: (a) No time and (b) Don’t think about it. The following sub-themes of ‘Priority’ will now be explored.

No Time

The sub-theme ‘*No time*’ refers to the practices that participants have acquired during the YWP that help them to prioritize what they need to accomplish. The sub-theme ‘*Too busy*’ describes participant’s inability to value well-being as a result of over scheduling and too many responsibilities. Throughout the YWP every participant expressed feeling like they have “too much to do and no time to do it.” Time management, prioritization and organization skills were discussed during the YWP in an attempt to assist participants in decreasing stress and managing the things within their control. As a result of participating in the YWP one participant stated, “Now I set times and when I should do stuff and I just do it, I get started and just do it and then I feel better that I have accomplished something, even if it’s just like one question, yeah, it helps” (Grade 11 Participant). Learning to make time for health and well-being was recognized by many participants as a necessary means to improve well-being. One participant stated:

I think I'm more able to realize when I'm extremely stressed out and when I need to just calm down and just take a minute and be and give myself the time that I need, like give myself the time of day to calm down and just breath and figure things out, and I think I'm definitely more aware of that now and what I'm feeling (Grade 10 Participant).

Although many of the participants continue to over schedule themselves, which they report adds to their stress, many also report having a better understanding and appreciation for taking the time to improve well-being and health in general.

Don't Think About It

Some participants described well-being as something they “just don’t think about”; therefore, they do not make it a priority. One participant stated: “I don’t really think about well-being, I think by default youth don’t really care about it. It’s really not a priority for most kids” (Grade 11 Participant). One participant described the value of well-being as experienced during exam week for many youth stating:

It's exam week coming up so everyone's like I'm going to stay up until 2:00 in the morning studying and then I'm going to have to wake up at 6:00 and then I'll study more and then I'll go to my test and. Nobody thinks about okay, I think I need to eat a proper breakfast, I have to eat a proper dinner, get the eight hours, ten hours of sleep that I'm supposed to get so I'll be able to stay awake for my exam (Grade 11 Participant).

This quote reflects many of the experiences participants shared during the YWP. The sense of helplessness, coupled with the lack of time management skills indicate that many youth simply exist to get through deadlines, adding to their inability to manage stress or emotional reactivity. Throughout the program, participants were given many opportunities to explore and appreciate the value of well-being. It was my observation that many of them were able to connect with the idea of taking care of themselves from a whole-body perspective as a result of participation in the YWP.

4.10.3. Theme 3 - Lack of Knowledge and Limited Life Experience

Some of the participants reported that youth don’t value well-being due to ‘Lack of Knowledge or Limited Life Experience’. Sub-themes for the theme ‘Lack of Knowledge and Limited Life Experience’ included: (a) Never taught, (b) We are too

young to appreciate well-being, (c) Living in the moment and (d) Distorted perspective. The following sub-themes of 'Lack of Knowledge or Limited Life Experience' will now be explored.

Never Taught

Throughout the YWP most of the participants expressed a desire to learn more about the concepts of mindfulness with the intention to improve their well-being. Health and well-being was commonly reported by participants to be an under-educated area. Some of the participants expressed a sense of disappointment that the concepts of well-being had never been addressed during their school experience. One participant stated, "It's sad really to think that health and well-being was something that we were never taught to care about" (Grade 11 Participant). I think it is important to note that from as early as kindergarten, health and well-being is addressed through the implementation of various programs designed to assist student's overcoming developmental milestones. The concepts of mindfulness and yoga are a relatively new approach to curriculum in the area of health and well-being and could be the possible reference point for YWP participants.

We Are Too Young to Appreciate Well-being

Some participants suggested that youth have 'no appreciation' for well-being because they are 'too young.' One participant stated, "I don't think they've really had as much time to appreciate you know because 15, 16, 17 years old you really don't appreciate cause we are young, like we rebound from things quickly we just don't get it" (Grade 10 Participant). For some participants, not having experienced the consequences of unhealthy behaviours such as injury or illness, there is little relatability for reasons to engage in practices of well-being. One participant stated, "Some kids will party and they won't realize all the effects of the sugar in the alcohol and doing drugs in the long term" (Grade 10 Participant). The inability to recognize long-term effects, coupled with the desire to experience every moment in time, was a trend described by many of the participants.

Living in the moment

Risk taking behaviours were described by one participant as a method of 'living in the moment.' One participant suggested, "We don't feel the consequences of things

immediately like physically. So, I think we don't appreciate it as much but just not as conscious of it" (Grade 10 Participant). The inability to see the consequences of behaviour was suggested by another participant who stated:

I think kids just live in the moment especially with drinking and drugs and stuff I think that I don't really think about it too much. I think they're just kind of like, oh this is an option, I have no one else to talk to and nothing else to do really. Just like oh it won't affect me later (Grade 9 Participant)

Participant responses suggested that for many youth risk-taking behaviour is "living in the moment," but combined with a lack of understanding or acknowledgment of this lifestyle's consequences, the risk of fallout has the potential to increase stress and emotion dysregulation.

Distorted Perspective

The sub-theme 'Distorted perspective' was the result of reflection on a particular response from a participant. In describing their view of "Why youth don't value well-being" the participant stated:

I'd say a lot of people value their well-being in the sense, in a very distorted way. They value that to want to be healthy and to look a certain way but the way that they believe they are being healthy is distorted and actually not healthy at all. Like dieting, like so many youth diet, constantly dieting, constantly dieting, you break that diet, oh I have to start all over again even though you don't stick to it for more than two days and they think they're being healthy but really, they're not. Or they'll go to the gym for a month and think they're being so healthy and they think it's a way of life but really, they're not (Grade 10 Participant).

This quote provided the notion that youth believe that they are living a healthy lifestyle although their reality appears to be in conflict, mainly due to lack of knowledge, education or experience.

Summary of the Category Insight into the Value of Well-being

Participants' responses indicated that being an adolescent is an enjoyable, but also dangerous and vulnerable time of development. Assisting them to find a life balance between planning and enjoying the moment would be considered a healthy

approach; although, there is sense of immortality that tends to be rampant within the age of adolescence, and can be counter-influential to well-being education. Generally, youth are prone to thrill-seeking, as well as a desire to live fully, and without fear; this can be advantageous for taking risks, and choosing without the prejudice of resulting consequences. Yet, one of the downfalls of being young is that youth may not always consider the repercussions when making impulsive choices with the belief that nothing will hurt them and they have a great deal of living to do. Guiding youth through this developmental milestone requires adequate patience, appropriately planned education and willing participants for effective influence.

4.11. Summary Thematic Analysis

This thematic analysis embodies the post-program interview responses from participants. The eight categories, 21 emergent themes and 107 sub-themes have provided an in-depth perspective of how youth perceive emotion regulation and stress while stating both the individual and social benefits they experienced as a result of participating in the YWP. Carmondy (2015) suggested that “when people are preoccupied with their internal narrative awareness of the sensory world is minimized the situation that results in not only unpleasant every day experience but also reduced opportunities for joy and the connection with others” (p. 67).

Participants offered many suggestions for the development of effective and relevant curriculum that is developmentally appropriate while also addressing the ways in which educators could work with youth in learning to recognize the importance of personal well-being as beneficial as a skill to be fostered throughout their lifetime. The skills involved are relevant at all ages and I believe that this sort of training would result in less conflict in the home and workplace and an overall cultural benefit. Teaching youth about well-being is educationally relevant regardless of age or concept. I agree that YWP should be a credit course; in fact, it should be a required credit on an annual basis with the encouragement of continuing on into adulthood.

During this study, seven participants reported a history of what they perceived to be anxiety attack like experiences; two participants self-disclosed having an issue with restricting food and one participant who reported having experienced symptoms of

depression (past and current). It should be mentioned that these were all self-disclosures none of which have a clinical diagnosis from a medical professional; therefore, this sample is considered average youth struggling with age appropriate developmentally acceptable mental health.

4.11.1. Part 2 B -Thematic Analysis (Parent Observations Data)

Parents of participants were contacted post-program and were requested to answer questions via email to obtain observational data as a secondary source of data collection. Six of 29 parents responded and provided observational data that were separated by category, coded, and placed into themes and sub-themes. Categories were selected according to parents' responses to the following questions: (a) *Describe what you observed (if anything) about your child's ability to deal with stress over the period of the Yoga Wellness Program at LFAS,* (b) *What have you noticed about your child's ability to regulate their emotions when experiencing stress? Please describe and* (c) *Please provide any information/feedback you have regarding the mindfulness program and your child's experience from your perspective. Feel free to add anything you believe relates to this program for your child.* Themes and sub-themes described patterns emerging from the data; each category includes a figure to provide a clearer understanding of the process. Figure 4.11 is a visual representation of the categories from the three questions queried to parents.

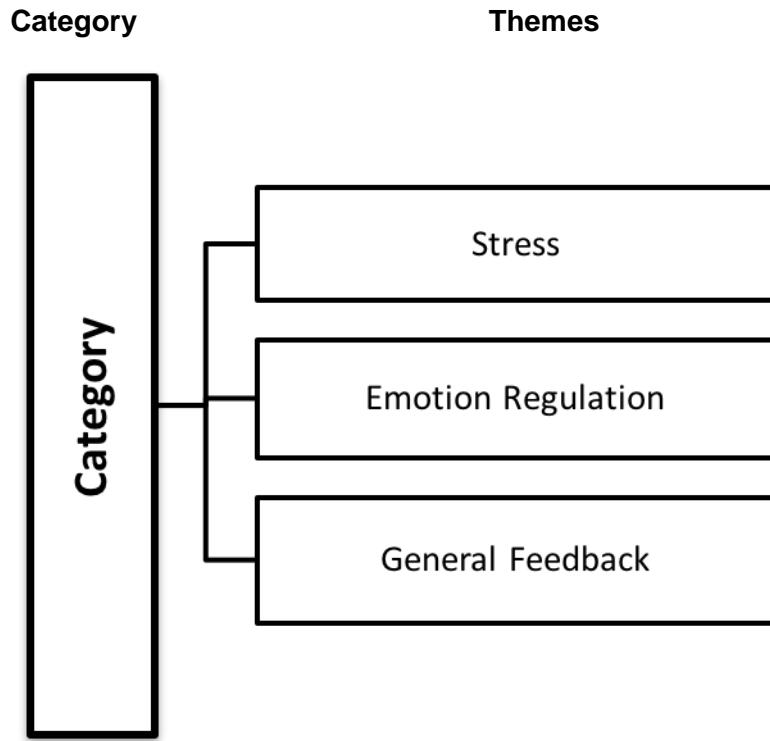


Figure 4.11. A visual representation of the categories created from parent observations to separate data prior to coding and analysis.

The following six themes emerged from the three categories: (a) observed navigation of stress, (b) observed impact of skill application, (c) ability to regulate emotions, (d) awareness of emotions, (e) program appreciation and (f) program continuation. Figure 4.12 is a visual representation of the categories and themes.

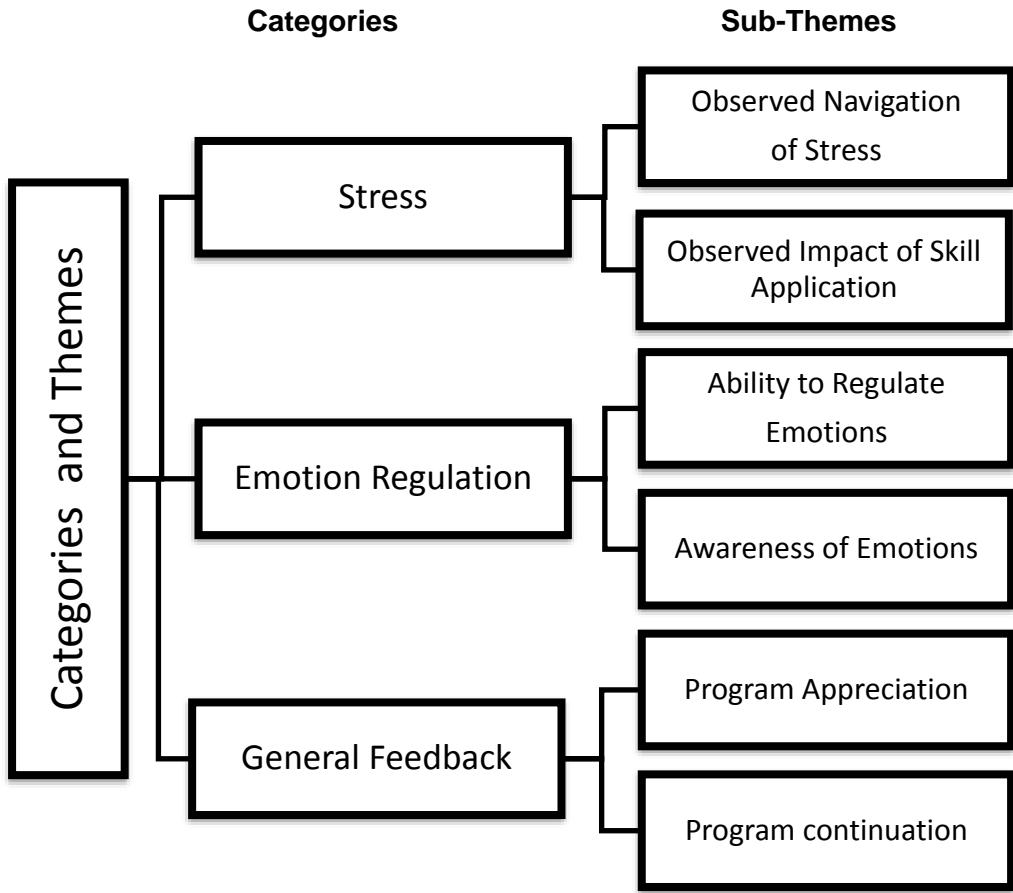


Figure 4.12. A visual representation of the categories and themes that emerged from the parent observations.

4.12. Category 1: Stress

For the category stress, parents were asked the following question, “*Describe what you observed (if anything) about your child's ability to deal with stress over the period of the Yoga Wellness Program at LFAS?*” Parents responded with the most elaboration throughout this category; they often interrelated responses, which were separated for clarity and to illuminate the phenomenon in more detail. Responses were coded according to the two main themes including: (a) observed navigation of stress, and (b) observed impact of skill application. The term “observed” was used for both themes within this category because it is the parent's observation of change, if any, regarding stress. Findings suggest that as a result of participation in the YWP, caregivers observed an improvement in their child's ability to navigate stress and the

impact of applied skills. Figure 4.13 is a visual representation of the themes and sub-themes that emerged from the category stress.

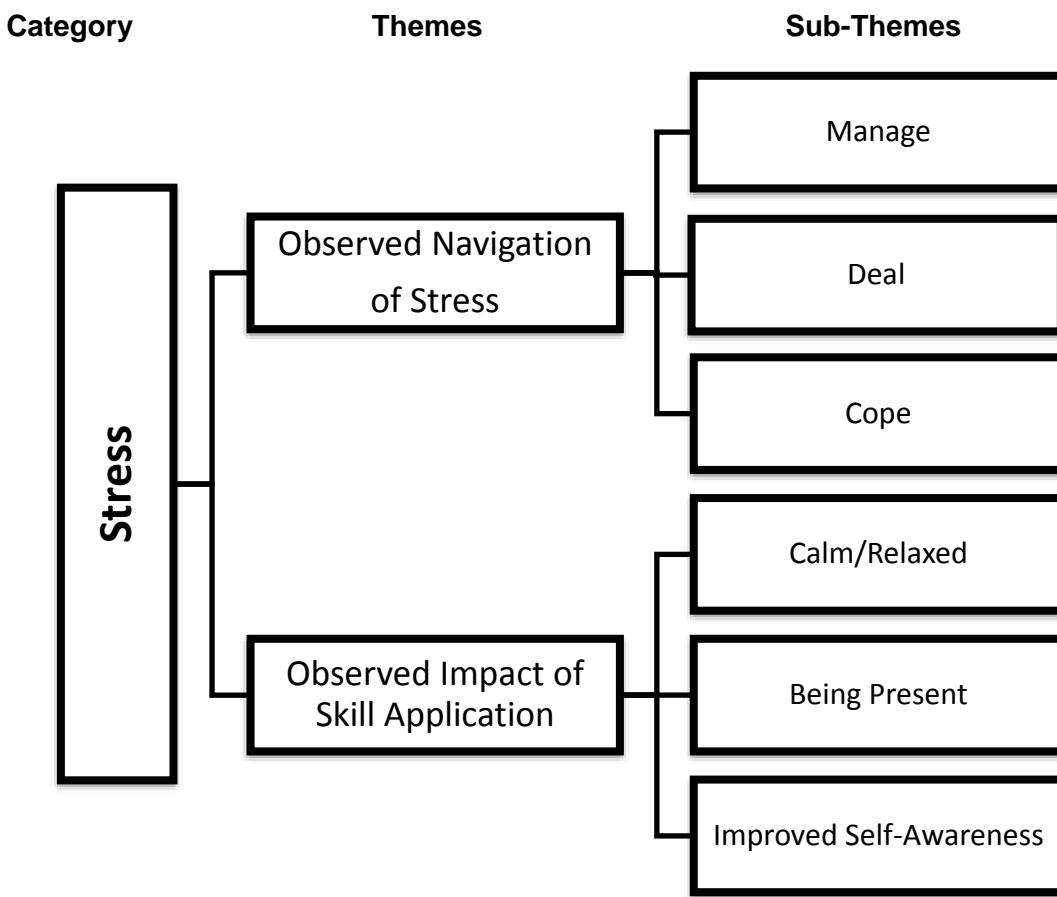


Figure 4.13. A visual representation of the thematic analysis of the category stress according to parent observations.

4.12.1. Theme 1 – Observed Navigation of Stress

The majority of parent feedback included observations regarding their child's ability to navigate stress. The sub-themes for this theme included: (a) Manage stress, (b) Deal with stress and (c) Cope with Stress. The most often reported descriptors used by parents when asked the question, *Describe what you observed (if anything) about your child's ability to deal with stress over the period of the Yoga Wellness Program at LFAS* included: manage, deal and cope with stress. Although the descriptors manage, deal and cope are all considered similar in meaning each descriptor was used in a different context therefore analyzed separately. The following sub-themes of the theme 'Observed Navigation of Stress' will now be explored.

Manage Stress

Two of the 6 parents made reference to observing an improvement in their child's ability to manage stress and anxiety using skills/strategies acquired from the YWP. One parent stated, "My daughter has learned how to manage her moods, anxiety, time management skills better using yoga methods." Another parent reported, "I noticed an improvement in her ability to manage stress and emotional well-being." Three of the six participants made reference to this being one of the best years for their child's educational experience and credits the program for supporting their child's well-being.

Dealing with Stress

Participants' improvement in the ability to deal with stress was noted by two of the 6 parents. Both parents cited observing their child with improved ability to access strategies when dealing with stress. One parent reported recognizing their child's ability to deal with stress stating:

My child's ability to deal with stress, during Yoga Wellness Program at LFAS, was improved. During times of stress and anxiety she began to utilize deep breathing strategies that she learned in the program, which helped to reduce her anxiety and stress.

This child's awareness of their emotional condition, coupled with parental observation presents a collaborative opportunity creating a natural support structure. The observation present by the parent contributes to the framework of future wellness to be referred to when required.

Coping with Stress

Three of the 6 parents reported a change in how their child was able to cope with stress. One parent described a recognizable shift in how their child habitually coped with stress, stating, "The usual ways my child copes with stress (cheezies and cookie dough) were not required during the study term." This response suggests moving away from traditionally unhealthy strategies when coping with stress to healthier more effective methods.

4.12.2. Theme 2 – Observed Impact of Skill Application

All six of the parents noted an increase in their child's awareness of stress, anxiety, mood, emotions as well as an overall increase in self-awareness, and further described the conscious application of skills learned in the YWP to reduce stress. Sub-themes within this theme included: (a) calm/relaxed, (b) being present and (c) improved self-awareness. The following sub-themes of 'Observed Impact of Skill Application' will now be explored.

Calm/Relaxed

Three of the parents reported observing their child's improved ability to remain calm and more relaxed during challenging situations. One parent described a difficult interaction stating:

My daughter experienced some trouble with one of her teachers. Before she would not be able to approach the issue with a calm head. Not only was she able to stay calmer but she also was able to verbalize her issues with this teacher.

Another parent described a friendship issue stating, "I observed during this time, my daughter approaching a difficult friend issue in a much calmer manner than she had in the past. She appeared to deal with this person much more composed." Both observations suggest an improvement in managing emotional reactivity by remaining calm and relaxed during stressful situations.

Being Present

Three of the 6 parents reported observing their child becoming more present when experiencing stress. One parent described the benefits of participation in the program stating, "This program was of immense benefit to my daughter as it assisted her in learning strategies that helped her to reduce stress and become more present." Another parent simply stated, "Being in the program helped her to become more present in the moment." All three parent responses suggested that participation in the YWP has served to create an empowering experience that encouraged present moment awareness for their children.

Improved Self-Awareness

The implementation of strategies to improve self-awareness was reported by one parent stating, “During the program my daughter began to implement the strategies to help her become more self-aware and present when she was stressed.” The YWP was designed to provide tools to promote self-sufficiency through mindfulness training this response similar to the present moment awareness sub-theme also suggest an improved self-awareness that created a sense of empowerment.

Summary of the Category Stress

In summary, the relationship between the program and the effective management of stress was noted by all 6 parents who noted situations of observed change. Each parent was able to describe techniques their child was able to apply in order to manage, cope and deal with stress while also describing the impact that the application of the strategies had on their children.

4.13. Category 2: Emotion Regulation

One of the goals of this research was to increase the ability to observe and control emotions during stress. Emotion regulation involves becoming less emotionally reactive while maintaining the ability to experience negative feelings without requiring impulsive repression; this requires awareness and self-control. Many of the parents noted recognizing an improvement in their child’s ability to be aware of and to regulate emotions by intercepting the trajectory of emotions in challenging situations. Parents were asked the following question: *Describe what you have noticed (if anything) about your child's ability to regulate their emotions when experiencing stress.* The two main themes for this category included: (a) The ability to regulate emotions and (b) The awareness of emotions. Parents reported directly observing specific situations where their child implemented skills acquired from their participation in the YWP. Figure 4.14 is a visual representation of the themes and sub-themes for the category emotion regulation.

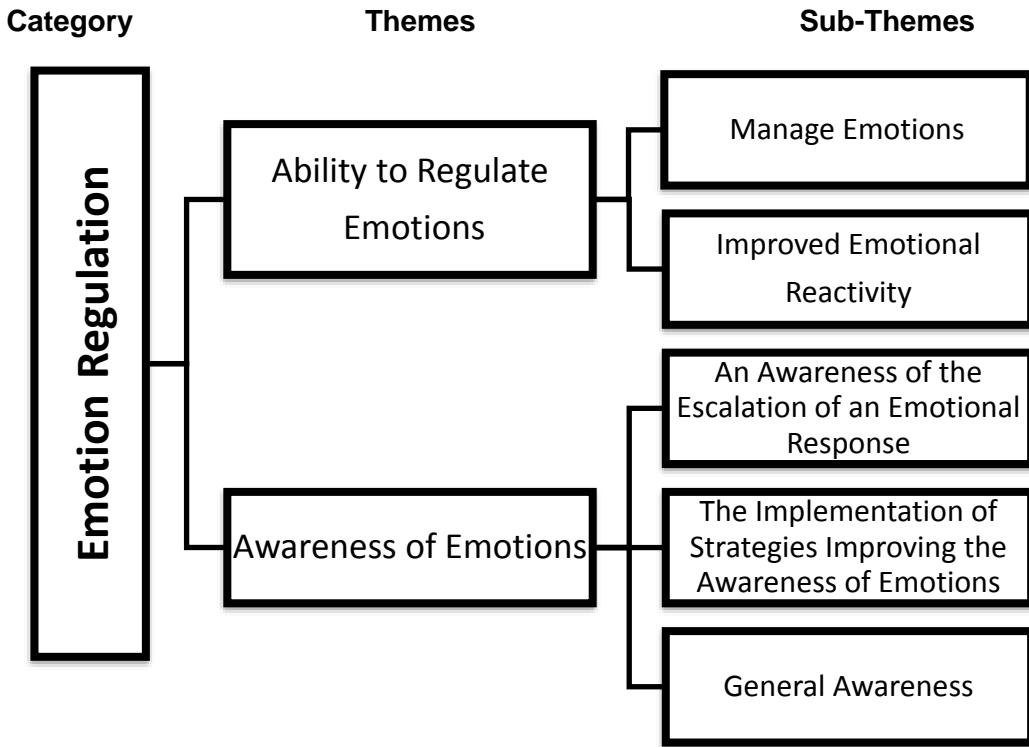


Figure 4.14. A visual representation of the thematic analysis of the category emotion regulation according to parent observations.

4.13.1. Theme 1 - Ability to Regulate Emotions

All six parents noted observing a change in their child's ability to regulate emotions and emotional responses when experiencing stress. The sub-themes for ability to regulate emotions included: (a) Manage emotions and (b) Improved emotional reactivity. One parent reported observing their child's ability to regulate emotions stating, "During the Yoga Wellness Program, my daughter's ability to regulate her emotions was improved." This theme supports the ideation that the parents' involvement in the process is not only preferred but essential to success. As a primary observer, they are most able to assist their children in addressing feelings of futility or hopelessness. The following sub-themes of the theme 'Ability to Regulate Emotions' will now be explored.

Manage Emotions

Four of the 6 parents suggested that participation in the program improved their child's ability to manage emotions. One parent reported, "I can see a tangible difference

in how my daughter manages her emotions”, while another parent suggested, “I believe what my daughter learned during the program brought an improvement to her ability to be aware of and manage her emotions in a positive way.” Finally, another parent expressed that “The program was a wonderful way for my child to learn how to manage her emotions.” My observations support the idea that parental support is critical to success. Ongoing dialogue allows for greater encouragement and opportunity for a common language in support of an improved quality of life.

Improved Emotional Reactivity

Some of the parents described observing a noticeable difference in how their child reacts to emotionally charged situations. The following excerpt is an example reported by one parent illustrating an observed improvement in emotional reactivity:

Over the past 8 weeks my daughter has shown improvement over how she reacts to some issues that have come up. Rather than flying off she seemed to slow down in her responses. It's almost as if she thought of something before she said anything.

This observation suggests an interruption of the trajectory of emotion regulation with the application of a strategy such as stopping to think before responding.

4.13.2. Theme 2 - Awareness of Emotions

Three of the 6 parents that responded to the questionnaire reported that they observed the following: their child’s awareness of the escalation of emotional responses, an ability to implement strategies and an improvement in their child’s emotional awareness. The sub-themes for ‘Awareness of Emotions’ included: (a) An awareness of the escalation of an emotional response, (b) The implementation of strategies improving the awareness of emotions and (c) General Awareness. Parents’ responses for this theme were double coded due to the overlap between the two sub-themes. The following sub-themes of the theme ‘Awareness of Emotions’ will now be explored.

An Awareness of the Escalation of an Emotional Response

The learned development of awareness of the escalation process of an emotional response or experience is a necessary tool in learning to manage intense emotions. In

response to the question, *What have you noticed about your child's ability to regulate their emotions when experiencing stress? Please describe*, one parent stated, "She became more aware of when she was beginning to have anxiety and feel stress and thus was able to implement strategies such as deep breathing, going to exercise, using the mind-up app, taking baths to help her to calm down." The first step in managing an emotional response is developing an increased awareness, which allows for the implementation of a skill or strategy to effectively manage the emotion.

The Implementation of Strategies Improving the Awareness of Emotions

Two of the 6 parents described observing their child implement strategies that improved their child's awareness of emotions. One parent stated, "The strategies she began to implement helped her to become more self-aware and present, which I believe brought an improvement to her ability to be aware of and manage her emotions in a positive way." The association between the ability to implement strategies and improved emotion management suggests that their child's experiences in the YWP were positively impacted.

General Awareness

A general awareness of emotions was reported by one parent stating, "During the program my daughter became more aware not only of her stress and anxiety, but also her mood and emotions." Most parents recognized a positive correlation between their child's participation in the YWP, with its implementation of emotional awareness strategies, and its subsequent strategies for management. The strategies learned during the YWP sessions were carried over into the home life of the participants, as primary caregivers were able to observe a significant change in emotional well-being.

Summary of the Category Emotion Regulation

In summary, each participant's individual improvement in the ability to regulate emotions and/or an improved awareness of emotions has been noted by all six of the parents. Each parent agreed that the program has aided in the emotional reactivity of their children during stressful and challenging situations. Some parents were able to communicate specific examples supporting these observations suggesting the internalization of skills presented during the YWP. This feedback showcases the

positive impact of the YWP, and its ability to provoke an alternative approach to managing stress and emotion dysregulation.

4.14. Category 3: General Feedback

For the category, general feedback parents were asked to the following question: *Please provide any information/feedback you have regarding the mindfulness program and your child's experience from your perspective. Please feel free to add anything you believe relates to this program for your child.* The two main themes for this category included: (a) Program appreciation and (b) Program continuation. Figure 4.15 is a visual representation of the themes and sub-themes for the category general feedback.

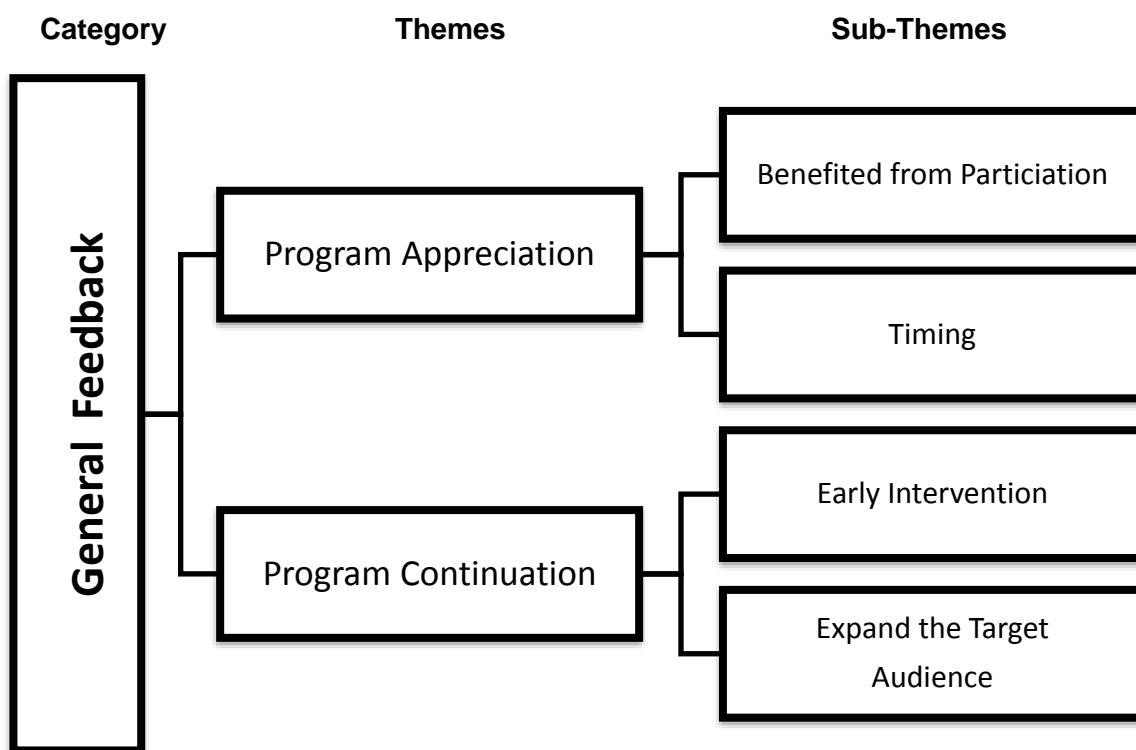


Figure 4.15. A visual representation of the thematic analysis of the category general feedback according to responses from the parent observation post-YMP survey.

4.14.1. Theme 1 – Program Appreciation

In addition to a solid endorsement of the benefits of the program, all of the parents made reference to being appreciative of the program, and their child's ability to

participate. One parent reported, "I am most thankful for the Yoga Wellness Program," while another parent described gratitude stating, "Thank you for taking the time to help these children!" Sub-themes for the theme appreciation included: (a) benefited from participation and (b) timing. The following sub-themes of 'Program Appreciation' will now be explored.

Benefited from Participation

All six parents reported that their child benefited from participation in the YWP. One parent stated, "I think my child benefited a great deal from this program and I am happy she was able to participate in it. I can see a tangible difference." Another parent described benefits that assisted their child after a traumatic brain injury:

This program was of immense benefit to my daughter as it assisted her in learning strategies that helped her to reduce stress and become more present. The yoga component along with the mindfulness teaching was beneficial to her in that it helped her to slow her thoughts and focus more on her breathing along with giving her a way to ease back into physical activity after her injury.

Another parent reflected on how their child would have historically reacted to stress crediting the skills acquired during the YWP for a better year end experience:

Before this experience she would have breakdowns at the end of the terms. This year, she was still under extreme stress and had high anxiety but I can honestly say that it was the best year yet. I am so happy she was able to work through it and finish the year on a good note."

Finally, one parent reported being impressed with their child's insight, having observed a new outlook on stress and the ability to share the knowledge acquired from the YWP:

A couple of times when I got upset and she said to me that if I can't control it then there is no need to be upset. Of course, she is correct but that is not anything she would normally say. I was quite impressed with her insight.

These parents' responses all suggest an optimistic outlook for their child's ability to deal more effectively with emotion regulation and stress in the future, a result of participating in the YWP.

Timing

Two of the 6 parents reported that the timing of the program was helpful and timely for their child. One parent reported, "This extra class was/is a useful aid thrown into the mix of her schedule this spring. I call it 'a reconnection of reality'." Another parent stated, "The Yoga Wellness Program, coincidentally, was offered during a very difficult time for my daughter as she was suffering from a brain injury." In my opinion the expression of hope, anticipation and optimism in the face of what had been uncertainty of the future is suggested by some of the parents' responses. Parents expressed an appreciation for giving their children the opportunity to participate in a program that provided accessible strategies to assist their children in managing challenging situations.

4.14.2. Theme 2- Program Continuation

All six of the parents suggested that the program continue within the school as either a club or class within the academic schedule. Some of the suggestions included: offering the program earlier in the education process and expanding the audience to a larger group. Sub-themes developed for analysis within this theme included: (a) early intervention and (b) expand the target audience. The following sub-themes of 'Program Continuation' will now be explored.

Early Intervention

One parent suggested that if their child would have previously had the opportunity to participate in a program like the YWP, perhaps her child's educational experience may have been impacted stating, "My child's school experience would have been much easier if she was involved with a program like this in her early years." This observation has given rise to active participation and future planning that was perhaps once not thought possible is now a real opportunity.

Expand the Target Audience

Throughout the program, both parents and participants reported a desire for the program to become available to the entire school community. One parent stated, "I wish that this program had been offered to all students, as I feel it would of immense benefit to all children and youth." Another parent reported their child's hope for program

continuation stating, "My daughter is hoping next year this session will be available for her and a few others in the school system." These observations suggest an advocacy by the parents in the creation of educational programs with a focus on health and well-being.

Summary of the Category General Feedback

In summary, all 6 parents described an appreciation for the YWP suggesting the desire to have the program continue in the future. Many parents reported recognizing the benefits of participation in the program suggesting the program become a class or club available to all ages within the school community.

4.14.3. Summary of Parent Observations

Parent observation data was included to verify if and to what extent youth applied the skills learned in the YWP in other settings. These perspectives yield insight into the potential for applying mindfulness and yoga approaches within the education system to assist students in managing stress and regulating emotions effectively. While only six of the 29 participants' parents responded to the post-program questions, the information gathered provided detailed accounts of parent observations. The common reflections included: an improved ability to manage stress and regulate emotions, an increased awareness of emotions and a decrease in emotional reactivity while experiencing stress. These results suggest a positive influence through the implementation of skills acquired during the YWP. Each of the parents expressed a desire to see a program such as the YWP offered in the education setting, recognizing its positive effects. In summary, all 6 parents reported having observed their child take an altered approach to managing stress crediting the YWP for an improvement in emotion regulation and decreased emotional reactivity.

4.15. Part 2C - Vignettes

Six participants are selected as vignettes in order to provide brief descriptions of individual experiences in the YWP. Pre- and post-program semi-structured interviews are examined, as well as student reflections in both yoga and mindfulness sessions throughout the program (qualitative data). These are also coupled with pre- and post-

program scales including questionnaires (quantitative data). The vignettes represent three students from Grade 9, 10 (Junior) and three students from Grade 11 (Senior). No students re chosen from Grade 8 or 12 due to insufficient data. To ensure the anonymity of each participant, all participants described in the vignettes have been assigned a gender-neutral pseudonym in place of their name. Details that have potential to reveal a participant's identity will be substituted with other information; for example: depression or anxiety symptoms may be substituted with mental health. The participants selected to be illustrated for the vignettes are chosen based on the following criteria: (a) full data set pre- and post measures, (b) low, medium or high achiever in terms of self-disclosed motivation academically coupled with researcher observations. It should be noted that attendance has been an included factor for the 8-week program, noting that weeks 9 through 12 were optional. Participants' responses are summarized for both clarity and confidentiality. The content has not been altered in any way that would change the intended meaning in any given participant's reflection, baring that confidentiality could be compromised.

4.15.1. Junior Grade Level

Lee

Lee has grown up in a two-parent home, and has belonged to the school community for all of their educational experience. Lee is a junior student and self-reported high achiever whom I have known for more than five years. They have had no involvement with the counseling department requiring intervention. Lee seldom quarrels with peers by intentionally avoiding conflict situations. I have had many informal conversations in the past with Lee regarding social issues and they reported that "life was far too busy to have time for drama." Lee's intense drive and determination is evident in their work ethic and personal accomplishments. Lee is highly involved in activities both in and out of school and maintains a 95% average. I suspect that Lee has high expectations for success but also experiences pressure from parents and teachers to excel in every aspect of life. For example: I have observed on numerous occasions that teachers refer to Lee as a dependable leader. Teachers know that if something needs to be done, Lee will complete the task promptly and with superior quality. And, although Lee is dependable, they exhibit personality traits that are inflexible and uncompromising. I have observed Lee's inability to adapt or manage change in an

overscheduled situation, for example: during the YWP, Lee reported having difficulty juggling all of their commitments and reported feeling like the YWP was another commitment needing to be fulfilled. When asked to describe stress, Lee reported that it was “feeling like you've got a lot going on, too much like an overload of important things like, criteria of something that you have to fulfill.” For Lee, situations that cause stress include: exam preparation, workload and a lack of time. Throughout the program, Lee was very guarded and appeared to have difficulty with conversations that seemed to elicit vulnerability. Lee's responses were frequently “yeah, yes and possibly” with little explanation or details, even when probed further. Pre-program data suggest that Lee has many commitments and internalizes stress.

Lee described the emotional effects of stress to include frustration, anxiety and fear. They reported being fearful of not being able to accomplish goals, as well as a feeling that something bad might happen:

It's almost like sometimes I feel like I live in fear. I feel like well I have a good family life and I have friends and a lot of people don't. I'm afraid something bad going to happen because I do have it so good right now.

These comments highlight the reality of Lee's experience with stress and emotion. Lee's sense of impending doom does not correspond to their report of experiencing little to no stress. Throughout the interview, Lee appeared to be unfocused and the concepts and questions appeared foreign to them. When probed for strategies that Lee considered effective in dealing with stress, Lee reported: listening to music, talking with friends, writing out schedules, planning ahead, practicing yoga and expression through the arts. In contrast, Lee included unhealthy coping strategies as: drugs, alcohol and smoking cigarettes. I suspect that appearing “perfect” has been an instilled way of being for Lee, and I believe that continuing to promote this lifestyle is preventing them from recognizing how the façade of perfectionism impacts their stress. From my observations, Lee's internalization of stress manifests itself as physical symptoms. For example, the pre-program interview revealed that Lee has a history of insomnia, poor appetite, headaches, stomach-aches and an inability to focus. Prior to program participation, Lee had not connected the relationship between their stress and their somatic experiences. Lee sought assistance from a medical professional as opposed to exploring or acknowledging the physical, mental and emotional impact of

their stress. When asked how stress affects Lee mentally, they reported: "I just kind of get like a little bit frustrated and anxious, kind of like, fear almost, like I'm not going to fulfill what I have to do." Lee described the escalation pattern of stress to be both a process Lee recognizes to be oblivious to at times when they are overwhelmed with tasks:

Sometimes I almost know it's coming, like I have this feeling, so I know I'm going to be stressed. But sometimes I don't really realize it 'cause I'm doing a lot and then all of sudden, I have a lot to do and then it, when I realize that, then I start to get stressed. I don't usually get like headaches or stomach pains or that kind of thing from stress, maybe lack of sleep. Maybe, but that's probably it. More just like the mental stuff.

During the pre-program interview Lee stated that the goal for participation in the YWP was "to learn how to deal with stress." I suspect that Lee has the tendency to worry significantly more than Lee disclosed, manifesting then as stomach and headaches.

Quantitative Data

The following section outlines quantitative data comparing Lee's scores to the other participants' mean scores. Stress (PSS), Self-Regulation (SRQ), Emotion Regulation (DERS), Mindfulness (MAAS), Post-Pre-Retrospective Assessment, Pre-Post Mindfulness and Yoga session perceived stress scores and Positive Youth Development (PYD) are included in the table. Lee volunteered to participate in the program through word of mouth and attended 7 of the 8 mindfulness sessions and all 8 of the yoga sessions. They were unable to attend week 8 of mindfulness due to outside of school activities, yet Lee attended 3 optional weeks of mindfulness and yoga combined. On average, participants attended 6 of 8 mindfulness sessions and 5 of 8 yoga sessions; therefore, Lee was above the average in terms of weekly attendance.

Table 4.15. Lee's Quantitative Scores

Perceived Stress Scale (PSS) 10 item version	Lee's Total Score		Difference (post minus pre)	Total Participant Mean & SD		Difference from the total participant mean	
Rated on a 5-point scale. High numbers indicate high perceived stress. Minimum score of 0 maximum score of 40 Range 0 – 13 low stress 14-26 moderate 27-40 high perceived stress	Pre 17.0	Post 21.0	+4.0	Pre 23.3 (5.7)	Post 20.0 (5.6)	Pre -6.3	Post +1.0
Self-Regulation (SRQ)	Lee's Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference from the total participant mean	
Rated on a 5-point scale. Minimum score of 63 maximum score of 315 Range 63-213 low or impaired capacity 214-238 intermediate/mod capacity 239-315 high intact capacity	Pre 209.0	Post 216.0	+7.0	Pre 210.0 (23.7)	Post 215.4 (22.7)	Pre -1.0	Post +0.6
Difficulties with Regulation (DERS)	Lee's Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference from the total participant mean	
Rated on a 5-point scale. Range: higher numbers indicate greater difficulty in regulating emotions.	Pre 103.0	Post 107.0	+4.0	Pre 102.5 (23.5)	Post 93.0 (19.2)	Pre +0.5	Post +14.0

Mindful Attention and Awareness Scale (MAAS)	Lee's Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference From the total participant mean	
Rated on a 6-point scale. A higher score reflects higher level of mindfulness. Minimum score of 1 and a maximum score of 6. An average score is 3.86	Pre 3.1	Post 3.2	+0.1	Pre 3.5 (0.9)	Post 3.8 (0.8)	Pre -0.4	Post -0.6
Post-Pre- Retrospective Assessment	Lee's Total Score		Difference (post minus pre)	Total Participant Mean & SD		Difference From the total participant mean	
Rated on a 6-point scale Measures perceived emotion regulation, stress and well-being pre- and post program. Minimum score of 0 and a maximum score of 80. An increase in score from pre- to post would indicate increased perception.	Pre 44.0	Post 66.0	+22.0	Pre 29.7 (10.8)	Post 59.8 (7.1)	Pre +14.3	Post +6.2
Mindfulness Sessions Stress Scores	Lee's Mindfulness Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference From the total participant mean	
Rated stress on a 10-point scale. Range: higher numbers indicate greater perceived stress 1 not stressed at all and 10 being extremely stressed.	Pre 3.7	Post 2.0	-1.7	Pre 6.0 (2.3)	Post 3.0 (1.2)	Pre -2.3	Post 1.0

Yoga Sessions Stress Scores	Lee's Yoga Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference From the total participant mean	
Rated stress on a 10-point scale. Range: higher numbers indicate greater perceived stress 1 not stressed at all and 10 being extremely stressed.	Pre 3.3	Post 1.8	-1.5	Pre 5.4 (1.5)	Post 2.7 (1.1)	Pre -2.1	Post -0.9
Positive Youth Development Questionnaire (PYD)	Lee's Score for Self Confidence (Pre-Program only)		Total Participant Mean & SD	Lee's Score for Empathy (Pre-Program only)		Total Participant Mean & SD	
Rated on a 4-point scale. A maximum score of 32 indicates self-confidence and empathy. A minimum score of 8 indicates low self-confidence and lack of empathy.	25.0		24.7 (3.9)	27.0		25.9 (4.1)	

Summary of Quantitative Data

The data from Table 4.15 indicate that after attending the YWP, Lee experienced a positive impact on mindfulness and self-regulation, perceptions of well-being and stress from participation in mindfulness and yoga sessions. The quantitative data suggest that Lee experienced a positive shift in all areas excluding perceived stress (PSS) and emotion regulation (DERS). Perceived stress (PSS) and the ability to regulate emotions (DERS) increased during the program, indicating a rise in stress and a slight decrease in the ability to deal with emotions as effectively post-program. Lee's score for self-regulation (SRQ) moved from an impaired to a moderate capacity which was within the range of the combined participant mean. In terms of emotion regulation (DERS) Lee's score indicated a decrease in their ability to regulate emotions over the 8-week program. As compared to the combined participant mean, it appears that participation in the program did not improve Lee's ability to regulate emotions and possibly suggests a negative impact comparably. It is possible that given the consistency of positive movement for most of their other scores, that the slight increase in the PSS and DERS could be considered an anomaly. It is possible that the anomaly

is related to the timing of post-program questionnaire, given that Lee reported in the pre-program interview that: "exam time causes the most stress for me because I usually have a lot to study for and I don't have enough time, which is usually my problem. I don't have enough time for things and that probably makes me more stressed." The post-program questionnaire was administered at the end of the year, one week prior to final exams, therefore I suggest that it is possible that there may be a correlation between the timing of the questionnaire and Lee's perceived stress as well as their ability to regulate emotions. Although Lee's mindfulness score shows an increase of mindfulness, their post-program score falls below the combined participant mean. The Post Pre-Retrospective Assessment scores suggest an increase in emotion regulation, perception of stress and well-being within the combined participant. Scores reported by Lee, for perceived stress pre-post mindfulness and yoga sessions, were also within the combined participant mean although it should be noted that Lee's pre-session rating for both mindfulness and yoga were much lower than the average participant. The Positive Youth Development Questionnaire (PYD) score indicated Lee's self-confidence and empathy scores are slightly above the combined participant mean. Questions from the PYD were chosen to inform the research in the area of participant self-confidence and empathy as an indicator of mental well-being. Lee reported that *doing what is right regardless of the consequences socially* as well as *standing up for what they believe in even when their peers disagree* is extremely important. While Lee acknowledges these values as extremely important, there were several conflicting views in their responses regarding self-confidence. For example: Lee reported that at times *they think that they are no good at all* while on another occasion they reported being *glad to be who they are, having much to be proud of and views life as having purpose with a bright future as an adult*. From an empathic perspective, Lee dislikes *the idea of others being taken advantage of, being treated unfairly or when bad things happen*. Lee reported feeling *sad when others are without the things that they have in life as well as when people do not have friends, or are hurt or upset in anyway*. My observations are in line with Lee's perceived self-confidence and empathy as observed by how they interacted with peers. I view Lee as a strong minded individual with deep rooted values which they will not compromise under any circumstance. Although Lee appears to be a strong independent type of person, it is in my opinion that Lee's responses were often unreliable in order to keep up the appearance of being nothing less than perfect. This needs to be considered throughout this narrative.

Qualitative Data

Qualitative data include pre- and post-program interview data as well as weekly reflections from both mindfulness and yoga sessions. The pre-program interviews were summarized to provide a brief description of Lee's views of emotion regulation and stress prior to participating in the program as outlined in the introduction of this vignette. Lee's post-program interview, and reflections, were summarized to provide a fuller understanding of the effects of program participation.

Summary of Mindfulness Reflections

Following each mindfulness session, Lee's reflective process focused mainly on stress and tension from a physical perspective. In week 6, Lee was able to recognize the physical, emotional and mental impact of stress as well as the ability to identify a strategy for more effective coping:

I know I am experiencing stress physically, emotionally or mentally from tension in my shoulders, neck, head, face, back, stomach etc. My thoughts can turn blurry unclear and I become anxious. From the session, I have learned to step back and realize what's wrong not just try to solve it, but noticing what is the problem. I will also start to recognize when I am negative thinking and becoming more positive.

The major themes Lee reflected upon included: new knowledge, visualizations, and the identification of physical symptoms from stress, recognizing negative thinking and making a purposeful shift to positive thinking. Lee reported struggling between the desire to attend the YWP and the pressure of academic expectations during week 2 of the program. Over time, this conflict subsided due to the realized positive effects that Lee was experiencing throughout the sessions.

Summary of Yoga Reflections

Following each yoga session, Lee's reflective process focused on physical movements, distractions, inability to focus and present moment awareness. During the first week of the YWP, Lee recognized that when doing things mindlessly, they experience difficulty releasing tension and cannot relax as easily. This connection prompted Lee to construct a goal for program participation. During week 2, Lee reported staying focused on releasing physical tension as a goal for program participation. Between weeks 2 and 6, Lee described tension to be entirely a physical state and

reported: "I am curious that if I warmed up before the session would I have less tension." And in week 6, Lee appears to connect how to use thoughts to release tension reporting: "by the end of class found my mind was wondering less and I was thinking about the breath and applying it to the areas that the teacher was suggesting to relieve tension." During week 8 of the YWP, Lee reported to be continually challenged by a wandering mind. Difficulty with focusing and letting discomfort pass were areas Lee described as needing more practice. Week 10's sessions appeared to be of assistance in solidifying some of the skills presented in the YWP as described by Lee: "I found this session very productive and helpful to me it was the first time that some of the techniques we learned happened almost on their own." Each week, Lee reported experiencing a decrease in stress with a focus on deeper states of mindfulness and relaxation.

Summary of Post-Program Interview

The post-program semi-structured interview was designed to explore the experience of each participant from their perspective. During the post-program interview, Lee commented that the combined yoga and mindfulness sessions created a shift from their thinking processes to the actualized feeling of physical release:

I liked the yoga and mindfulness combined because I felt like it was helping mentally and physically. I feel like it connects more with the physical aspect and it also, has the releasing kind of thing that you can do with your mind and your body.

Lee's desire to be healthy of mind and body is evident in their reflections as highlighted in both the pre- and post-program interview. For Lee, the experiential themes included recognizing how to deal with stress, discovering the most effective methods of dealing with stress, and learning how stress affects them physically. When asked to describe some of the challenges, Lee experienced while participating in the program, they described the inability to focus and to be present in the moment, further made difficult by having to make the time to attend the program.

Summary of Qualitative Data

Prior to the first session, Lee reported being skeptical about the process and was concerned with the time required at the expense of academics, as well as if they would benefit from participation in the program. Through discussion after a mindfulness

session in week 4, Lee described a shift from wanting to do other things during lunch to recognizing the benefits of program participation. Despite their struggle between the desire to implement techniques and the concern regarding the technique's effectiveness, there appeared a shift for Lee, occurring by week five of mindfulness. Lee reported recognizing the impact of stress mentally and emotionally: "surfing the waves for me was a very effective way of noticing my emotions it helps me realize them and let them pass. I am interested to try letting the waves pass when I have a more intense emotion." It should be noted that Lee was reluctant to disclose anything from an emotional standpoint, therefore the reference to their experience of emotions in week 5 should be considered significant in Lee's process of understanding well-being.

Converging the Data – Quantitative and Qualitative

Lee's pre-program perceived stress (PSS) score initially depicts a moderate level of perceived stress which increased by the end of the program. Their perceived stress was moderate throughout the program despite Lee's goal to learn to manage stress as reported during the initial interview. The reflective processes do not reflect the increase in Lee's perceived stress as they reported experiencing either a low level of stress or a decrease in stress throughout the program. During the pre-program interview, Lee reported that Lee rarely experiences stress or negative self-talk and when these experiences do occur, they are very brief. I observed them shifting back and forth between expressing moderate levels of stress to being stress free. During week 9, Lee reported:

I didn't have very much tension in my body again before starting the session today so I haven't noticed much of a difference. However, when I do have tension I can control it much easier now. Mentally I haven't come across many chances to use what I have learned I now know how to deal with stress.

This self-reflection indicated a positive shift in Lee's management of stress but this shift was not reflected in the PSS scores. In my opinion, they continue to remain detached from the emotional, mental and physical effects of stress; this may offer a reasonable rational for the increase in perceived emotion regulation and stress. Further, as discussed in the quantitative summary, the post-tests were administered at the end of the school year, with exams being reported as Lee's greatest source of stress. Despite

this, their post-program perceived stress was still within the moderate level for Lee during exam time.

Lee's self-regulation (SRQ) score indicated an improvement in their ability to self-regulate from low/impaired to moderate capacity, corresponding with my observations. The improved self-regulation observed was a relatively low increase as would be expected given Lee's attendance throughout the program. It was not until week 6 that Lee described the ability to identify the benefits of using visualizations and various other techniques to create a relaxed and calm physical state. They reported a deeper understanding of how and why Lee experiences stress, and which strategies they find to be most effective. As previously mentioned, Lee's skepticism may be the cause of their inability to openly learn several of the concepts taught during the YWP.

Lee's emotion regulation (DERS) score increased post-program indicating a decrease in A's ability to regulate emotions. In the pre-program interview, Lee reported:

I feel I am balanced in my emotional state: maybe 'cause I don't know I think of myself as probably more like fairly responsible. So, I feel like I don't usually have that much to stress about.

Interestingly, Lee correlates a balanced emotional state with being a responsible person; I believe that this perspective is in line with their drive and determination, while still maintaining minimal ability to deal with emotions. It may be possible that Lee viewed taking the time to learn about regulating one's emotions as an irresponsible use of time in relation to the numerous other tasks they need to attend to. I predict that Lee's stomach-aches and headaches are coming from a form of anxiety, which is currently being examined from the medical model, while it may be more beneficial to approach the body's reactions to anxiety, frustration, sadness and other intense emotions as a whole-body experience. After the program, Lee was asked: "*Do you see any kind of change in how you react to stress emotionally since the program?*" Lee's response, "I think my initial response to stress has changed since the program. Now I usually try to talk myself through the emotion of being stressed instead of trying to get rid of it." Their resistance to display or experience emotion is evident throughout the program and may be reflected in the increase of Lee's DERS. Another perspective from post-program interview data suggests Lee's ability and desire to work through difficult emotions is a clear shift from

the tendency to avoid or cover up emotions, while this was not reflected in the DERS score.

Lee reported a slight increase in mindfulness which was observed through their description of present moment awareness and the implementation of techniques such as focusing on the breath when distracted during yoga in week 3 of the YWP:

I experienced a decrease in my stress I did find myself thinking about some random things sometimes but I was good at bringing myself back to the present. My strategies include coming back to focusing on the present moment or my breathing.

On many occasions, Lee reported being more present in the moment both through writing and discussion as a result of program participation.

Lee's Post Pre- Retrospective Assessment post-program scores indicated an above average increase in perception of well-being. It is important to note that the pre-retrospective scores suggest that they came to the program with a higher than average perception of well-being, while the post scores indicated that Lee gained more from participation than the average participant. In week 10, Lee described the automatic nature of learned techniques:

I found this session very productive and helpful to me it was the first time that some of the techniques we learned happened almost on their own.

Although Lee reported the desire to learn more about how to manage stress as a goal of participation, it should be mentioned that throughout the program their reported below average levels of perceived stress prior to each mindfulness and yoga session. This is another validating reflection of Lee's inability to connect reality to their desired perception from others regarding stress. It may be further hypothesized that Lee wanted to be perceived in a positive light displaying higher than average ability to cope with stress.

Lee's self-confidence and empathy scores are slightly above the mean as compared to the rest of the population. In terms of self-confidence, Lee is not overly concerned about "fitting in" with a certain group and works well with students and staff

without relying on others for social support. In terms of empathy, I consider Lee to be one of the few students with a higher level of conscientiousness. From a global perspective, Lee donates time by volunteering to those in need both locally and abroad. Although Lee's motivation can be questionable at times with a possible drive to be perceived as "perfect," I don't believe that Lee would spend valuable time to a cause that was unimportant to them. In the pre-program interview, Lee reported gratitude for their life and suggests that many others do not have this experience, possibly contributing to greater stress levels in others' experience. This reflection suggests that Lee feels empathy for those who do not have as rich of a life experience.

Overall Observations and Conclusions

Lee was a highly determined participant who wanted to ensure to make every effort to complete all aspects of the program. The common thread for Lee is that they are an overscheduled, highly determined personality type with low level of skills to manage the stress that often accompanies these life habits. Prior to the beginning of the program, Lee expressed concerns for the amount of time required for participation the YWP. It should be noted that Lee was the only participant requesting a detailed outline of the program and the number of required hours that Lee would need to set aside to receive the maximum benefit of participation. It is also pertinent that despite Lee's conflict between feeling short on time and attending the YWP, they always arrived promptly ensuring to "*keep up their end of the bargain*", while also fully engaging in every aspect of the yoga and mindfulness sessions. Throughout the mindfulness and yoga sessions, Lee reported to have the desire to be highly productive while fulfilling all commitments. I suspect that Lee is also a type "A" personality with a desire to be successful despite the sacrifice of personal happiness. They had the tendency to be "hyper cognitively focused" (overthinking and being disconnected from the body; throughout the program I observed evidence of Lee internalizing coping strategies such as headaches and stomach aches which I believe to be a physical manifestation of stress.

As a result of YWP participation, Lee reports newly acquired ability to make the connection between visualizations and the calming effects on the mind and body. This is evident in Lee's reference to the visualization of "the mind being like the ocean" as particularly powerful technique. Throughout the program, Lee appeared to make a

distinct shift from focusing primarily on Lee's thoughts to becoming more present in the body with a greater ability to identify where Lee holds stress. This allowed Lee to be able to implement personally relevant strategies to assist in minimizing the physical effects of stress such as deep breathing. Finally, Lee described participation in the YWP to be a valuable experience and they would like to continue with this practice in the future.

Charlie

Charlie has grown up in a single parent home, and has belonged to the school community for all of their educational experience. Charlie is a junior student, self-reported and observed academically low achiever, whom I have known for more than five years. Charlie has been assisted by the counseling department for various issues including social conflict, bullying, social media concerns, cutting, suicide ideation, parent child conflict, teacher conflict, symptoms of depression as well as what Charlie described as anxiety attacks. Charlie has struggled socially and academically throughout their entire school experience, which have included several office referrals required to resolve conflicts with staff and students. Charlie currently smokes cigarettes on a daily basis and has experimented with a variety of drugs and alcohol. They have reported years of cutting and other forms of self-injurious behaviour and within the past 2 years and described experiencing high anxiety. Charlie is under the supervision of a medical doctor and counselor to assist them in learning to manage symptoms related to non-clinical mental health. Charlie is extremely outspoken, which has negatively affected many of their relationships both at school and in the community. Charlie has experienced a great deal of conflict in the workplace causing dismissal as a result of their inability to manage their strong opinions and verbal outbursts. Charlie's strong opinions were very helpful in informing the program before, during and after its implementation and their ability to articulate thoughts and feelings were an asset in this regard although Charlie's ability to filter requires some amending in order to provide effective feedback.

Charlie described situations which cause stress to include: school work, daily life, social expectations, overall expectations, work and friendships. Charlie suggested that their mental health symptoms, as well as peer issues, tend to be the biggest source of stress: "If I am in a friendship and I have to deal with a lot of their drama is what triggers

stress." Charlie cited emotions such anger and anxiety as indicators of stress before the YWP. In the pre-program interview, Charlie described the main method of coping to be isolation, emotional outbursts, and school avoidance. They described anxiety attacks to be the result of prolonged stress: "When I get super stressed I sometimes have an anxiety attack. I start getting freaked out and I'll start like hyperventilating or I'll start crying and then I'll freak out and then I don't want to do anything." Charlie described the escalation process to be very quick and often includes physical responses such as hitting things. Charlie acknowledged having had this response to stress since the age of 6. Although they reported having no real strategies to access when stressed or experiencing intense emotions, Charlie acknowledges strategies that may be effective including: writing in a journal, going and talking to someone, taking a step back, thinking before reacting, eating ice cream, drinking tea, watching a movie, sitting in bed, riding a bike, listening to music or going to the gym. Charlie also described unhealthy coping such as: eating disorders, cutting, and depression. They further reported having "no ability" to regulate emotional outbursts related to stress; for example, in stressful situations, Charlie described taking anger out on those that they care most about. In the pre-program interview, Charlie described wanting help with managing intense emotions with a strong desire to live a calmer, more peaceful existence. A few years ago, I suggested that Charlie start to practice yoga for mood management and to assist with their emotional volatility. Consequently, Charlie began a consistent practice and reported that yoga is very effective at helping manage moods, emotions and behaviour when experiencing challenging situations. With ongoing committed practice, Charlie experienced an improvement in mental health symptoms. While these practices remain true, it should be noted that as the school counselor I have observed that despite Charlie's reported desire to learn strategies and skills to cope, they do not value personal well-being and traditionally seeks the immediate mitigation of any emotional discomfort. It has been observed from the countless interactions regarding issues around mental health over the duration of my time as Charlie's school counselor. This information was considered when creating this account in an effort to provide as complete a depiction as possible of this participant.

Quantitative Data

The following section outlines quantitative data comparing Charlie's scores to the mean of the other participants. Stress (PSS), Self-Regulation (SRQ), Emotion

Regulation (DERS), Mindfulness (MAAS), Post-Pre- Retrospective Assessment, Pre-Post session perceived stress scores and Positive Youth Development (PYD) are included in the table. I spoke to Charlie about the program and although very enthusiastic about participating, they were one of the last participants to fill out paperwork. Charlie attended 2 of the 8 sessions of mindfulness and 4 of the 8 yoga classes as well as week 10 (optional additional session). Charlie reported having missed 3 weeks of school, due to illness, as a consequence of their mental health symptoms. On average, participants attended 6 out of 8 mindfulness sessions and 5 out of 8 yoga sessions; therefore, Charlie was well below the average in terms of weekly mindfulness and yoga session attendance.

Table 4.16. Charlie's Quantitative Scores

Perceived Stress Scale (PSS) 10 item version	Charlie's Total Score		Difference (post minus pre)	Total Participant Mean & SD		Difference from the total participant mean	
Rated on a 5-point scale. High numbers indicate high perceived stress. Minimum score of 0 maximum score of 40 Range 0 – 13 low stress 14-26 moderate 27-40 high perceived stress	Pre 31.0	Post 26.0	-5.0	Pre 23.3 (5.7)	Post 20.0 (5.6)	Pre +7.0	Post +6.0
Self-Regulation (SRQ)	Charlie's Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference from the total participant mean	
Rated on a 5-point scale. Minimum score of 63 maximum score of 315 Range 63-213 low or impaired capacity 214-238 intermediate/mod capacity 239-315 high intact capacity	Pre 198.5	Post 207.0	+8.5	Pre 210.0 (23.7)	Post 215.4 (22.7)	Pre -11.5	Post -8.4
Difficulties with Regulation (DERS)	Charlie's Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference from the total participant mean	

Rated on a 5-point scale. Range: higher numbers indicate greater difficulty in regulating emotions.	Pre 123.0	Post 123.0	0	Pre 102.5 (23.5)	Post 93.0 (19.2)	Pre +20.5	Post +30.0
Mindful Attention and Awareness Scale (MAAS)	Charlie's Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference From the total participant mean	
Rated on a 6-point scale. A higher score reflects higher level of mindfulness. Minimum score of 1 and a maximum score of 6. An average score is 3.86	Pre 2.9	Post 3.7	+0.8	Pre 3.5 (0.9)	Post 3.8 (0.8)	Pre -0.6	Post -0.1
Post-Pre- Retrospective Assessment	Charlie's Total Score		Difference (post minus pre)	Total Participant Mean & SD		Difference From the total participant mean	
Rated on a 6-point scale. Measures perceived emotion regulation, stress and well-being pre- and post program. Minimum score of 0 and a maximum score of 80. An increase in score from pre- to post would indicate increased perception.	Pre 24.0	Post 52.0	+28.0	Pre 29.7 (10.8)	Post 59.8 (7.1)	Pre -5.7	Post -7.8
Mindfulness Sessions Stress Scores	Charlie's Mindfulness Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference From the total participant mean	
Rated stress on a 10-point scale. Range: higher numbers indicate greater perceived stress 1 not stressed at all and 10 being extremely stressed.	Pre 7.5	Post 2.0	-5.5	Pre 6.0 (2.3)	Post 3.0 (1.2)	Pre +1.5	Post -1.0

Yoga Sessions Stress Scores	Charlie's Yoga Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference From the total participant mean	
Rated stress on a 10-point scale. Range: higher numbers indicate greater perceived stress 1 not stressed at all and 10 being extremely stressed.	Pre 5.4	Post 2.0	-3.4	Pre 5.4 (1.5)	Post 2.7 (1.1)	Pre 0	Post -0.7
Positive Youth Development Questionnaire (PYD)	Charlie's Score for Self Confidence (Pre-Program only)	Total Participant Mean & SD	Charlie's Score for Empathy (Pre-Program only)	Total Participant Mean & SD			
Rated on a 4-point scale. A maximum score of 32 indicates self-confidence and empathy. A minimum score of 8 indicates low self-confidence and lack of empathy.	22.0	24.7 (3.9)	24.0	25.9 (4.1)			

Summary of Quantitative Data

The data from Table 4.16 indicates that after attending the YWP, Charlie experienced a positive impact on stress, self-regulation, mindfulness, perception of well-being, as well as a decrease in stress immediately following mindfulness and yoga sessions, while there has been no observed impact to emotion regulation. Overall, the quantitative data suggests that Charlie experienced a positive shift in all areas except emotion regulation. It should be noted that Charlie's pre-program DERS started high with a score in comparison to the combined participant mean. Although self-regulation has improved, demonstrated by the increase in their score post-program, the improvement still falls in the impaired/low capacity to self-regulate. Charlie's mindfulness score was below the mean of the population initially and within the range of the combined participant mean post-program. I suggest these changes were not within the mean due to Charlie's minimal participation in the mindfulness sessions; this introduces key concepts of mindfulness that are reiterated during the yoga sessions (Charlie only attended 2 mindfulness and 4 yoga classes and 1 optional additional session). Charlie reported that the mindfulness and yoga sessions were more effective

in reducing stress than the average participant, but also that Charlie's pre-session rating was higher than the average participant for mindfulness with post session scores compared to the combined participant mean. Charlie's perceived stress score indicated a decrease in perceived stress. Both pre- and post-program scores for perceived stress fall within the high/high moderate stress category. Charlie's self-regulation (SRQ) score remained in the impaired or low capacity, although there is movement toward the moderate capacity. In terms of emotion regulation (DERS), Charlie's score was the same pre- and post-program suggesting no change in their ability to regulate emotions over the 8-week program. Charlie's Post Pre- Retrospective Assessment score was below the combined participant mean, indicating that they did not gain as much insight into well-being as did the average participant. Scores reported by Charlie for perceived stress pre-post mindfulness and yoga sessions were within the mean of the population. It is important to note that Charlie's pre- session scores for mindfulness were reported as higher than the average participant while the post session scores were below the combined participant mean for improvement indicating a greater impact on stress as a result of program participation as compared to the rest of the population. The Positive Youth Development Questionnaire (PYD) indicated lower levels of self-confidence and empathy falling just below the combined participant mean for both. Charlie reported that *doing what is right regardless of the consequences socially as well as standing up for what Charlie believes in even when peers disagree* was extremely important. While Charlie holds these values as extremely important there were conflicting views in several of their responses regarding self-confidence. For example, Charlie reported that *they think that they are no good at all*. On another occasion, Charlie reported that *they are glad that Charlie is Charlie and yet does not see life as having purpose at this moment but will have a bright future as an adult*. From an empathic perspective, Charlie *dislikes the idea of others being taken advantage of, being treated unfairly or when bad things happen*. Charlie reported *not feeling sorry for people who are being treated unfairly* and yet *feels sad when others are without the things they have in life or someone is being picked on*. It appears from the responses to the PYD that Charlie is a strong and confident individual willing to stand up for others and yet my I have observed B's tendency to be self-loathing and preoccupied with a negative view of self. There is some contradiction in the manner of which Charlie answered questions regarding empathy. It has been my observation that Charlie is highly self-involved with very little patience or empathy towards others. In my opinion, a more intensive and long-term intervention

may be required for Charlie to see a difference in the ability to self-regulate or regulate emotions more effectively. Their mental health symptoms are a barrier for growth in terms of impulsivity, affecting Charlie's ability to wade through emotionally challenging events, evident in their reactivity as observed over the many years of interaction with them.

Qualitative Data

Qualitative data include pre- and post-program interview data as well as weekly reflections from both mindfulness and yoga sessions. The pre-program interview was summarized to provide a brief description of Charlie's views of emotion regulation and stress prior to participating in the program as outlined in the introduction of this vignette. Charlie's post-program interview and reflections were summarized to provide a fuller understanding of the effects of program participation.

Summary of Mindfulness Reflections

Charlie's reflective process, after attending only 2 mindfulness sessions, focused primarily on the physical aspects of the mindfulness practice. The major themes Charlie reported included: the release of muscular tension and a sense of relaxation and calm.

Summary of Yoga Reflections

Charlie's reflective process, following each yoga session, focused on a sense of calm, the release of tension in the physical body, relaxation, and effective visualizations. In week 2, Charlie reported an improvement in the ability to focus on the breath when they become distracted: "My thoughts actually ran really balanced today the only distraction was really the air vent however it sounded like water so I was calmed by it but when I do get distracted breathing brings me back to my center." By week 4, Charlie reported the improved ability to access visualizations to stay calm and relaxed when distracted and "fidgety" during the session.

Summary of Post-Program Interview

In the Post-program interview, Charlie reported having learned to recognize and incorporate effective strategies to manage stress since the YWP: "I have learned to be calmer in stressful situations, taking a step back and like just breathing, and thinking, being more in tune with my body and taking things more slowly." Charlie described a

decrease in anxiety attacks, although reported anxiety continues to be a problem. Challenges reported by Charlie included: being too busy with work to attend all the sessions, which they described as “creating more stress” due to the inability to fulfill their commitment to the program. Charlie described enjoying the physical part of yoga and described the benefits as: “I feel like it helped with your body being calmer so you can focus on when you’re thinking.” Charlie reported that they would recommend the program to others: “I know a lot of people that get stressed out easy and that have like more, worse anxiety attacks than I’ve had before, and that really would benefit them a lot.” Charlie reported to enjoy yoga from a physical perspective but also recognized the benefits of yoga as a method of keeping the body calm in order to more greatly focus.

Summary of Qualitative Data

The qualitative reflections and post-program interview data provided a snap shot of Charlie’s brief journey into mindfulness and yoga education with a goal to decrease perceived stress and increase the ability to regulate emotions. The main themes of the qualitative data included: relaxation, a sense of calm, recognizing physical tension, effective visualizations and the awareness of strategies to encourage focusing. In my experience, Charlie is an emotionally unstable individual with poor coping skills. Charlie has an ongoing yoga practice, which they described as beneficial for decreasing the effects of Charlie’s mental health diagnosis; they have benefited from participation in the program, despite their poor attendance and inability to be fully open to the concepts delivered during the sessions Charlie attended.

Converging the Data – Quantitative and Qualitative

Charlie’s perceived stress score (PSS) indicated a decrease in perceived stress. Both pre- and post scores for perceived stress fall within the high/high moderate stress category. In my opinion, these scores accurately reflect Charlie’s perspective of stress. During week 2 of mindfulness, they reported having arrived at the session “extremely stressed” but that the practice of mindfulness encouraged Charlie to become “very calm and laid back.” In my observation, Charlie runs on a very high frequency, experiencing major shifts of emotion and energy output. Throughout the mindfulness and yoga sessions, Charlie refers to feeling “sleepy” and “well rested.” In my opinion, they could have experienced a greater decrease in perceived stress with more program participation.

Charlie's score for self-regulation (SRQ) remained in the impaired or low capacity to regulate although there is some movement toward the moderate capacity. Charlie's ability to self-regulate has been noticeably impaired throughout the time I have worked with them. In the post-program interview, Charlie described a decrease in some of the behaviours that accompany their mental health symptoms that are directly related to self-regulation. For anonymity purposes, the behaviours cannot be disclosed.

Charlie's score emotion regulation (DERS) indicates no change in their ability to regulate emotions over the 8-week program. Despite that the scores do not reflect any change in emotion regulation, Charlie described learning to be "more calm in stressful situations" as a result of program participation. Charlie also reported: "I would say that I'm a lot calmer, I don't get panicky and cry as much." In my opinion, the time of year and ongoing health issues may have affected the manner in which they responded to the questions for emotion regulation. It is also important to note that difficulty regulating emotions and poor self-regulation is a symptom of Charlie's pre-existing non-clinical mental health and has been historically observed. I speculate that due to their mental health symptoms, Charlie will require more than a short-term intervention to see change particularly with self-regulation and emotion regulation.

Charlie's mindfulness score indicates an increase of mindfulness. During week 4, they reported the improved ability to bring Charlie back to the present: "When I became fidgety and my mind wandered a lot coming back today was not as hard as it used to be." I believe that if Charlie had attended more sessions, there would have been a greater impact on mindfulness.

Although Charlie's Post Pre- Retrospective Assessment, their score was below the average, there is an improvement in the area of perception of well-being. Despite Charlie's poor attendance, it appears that they gained some knowledge as a result of participation in the program. In the post-program interview, Charlie agreed that most teens do not value well-being. It is important to note that Charlie has struggled with their self-perception for many years, which may have caused Charlie to make risky choices to cope with stress. It is important to note that during the interview Charlie reported that most teenagers value well-being in a "distorted way", claiming that most girls want to be healthy and look a certain way but go about it in an unhealthy way. Charlie referred to fad diets, excessive exercise, binge purging, using drugs and alcohol to manage weight

as well as cutting calories to dangerous levels. Charlie can relate to all of the methods from personal experience. In my opinion, Charlie is not ready to make change and perhaps that was a factor along with low attendance in observing an improvement in the perception of well-being.

Scores reported by Charlie for perceived stress pre-post mindfulness and yoga sessions were within the mean of the population. It is important to note that their pre-session scores for stress were reported higher than the average participant while the post session scores were below the mean for improvement indicating a greater impact on stress as a result of program participation as compared to the rest of the population. In Charlie's reflections for both mindfulness and yoga a common theme is a sense of calm and relaxation. I suspect that due to Charlie's extreme highs and lows of emotion and emotional reactions that this practice was very helpful at dramatically reducing perceived stress albeit short-term. During week 2 of mindfulness, Charlie reported:

I came in extremely stressed right now I'm experiencing being sleeping running to doze off and sleep my attention is more noticeable however my mind is very calm and laid-back and slightly dizzy and my body is a little too rested.

Each of Charlie's reflections post mindfulness and yoga sessions referred to feeling sleepy, calm and rested which is in line with their decrease in perceived stress.

Charlie's scores for Positive Youth Development Questionnaire (PYD) indicated lower levels of self-confidence which is in line with my observations as well as their mental health symptoms. Charlie has struggled with personal identity for many years searching for a sense of belonging having been abandoned by their biological father. A low score for empathy was also expected as I have observed their minimal patience or compassion for others. During the pre-program interview, Charlie reported taking anger out on others with no remorse or willingness to change. They also described a situation with a friend:

My friend is an alcoholic, and she's been drinking since she was nine. She does not remember what she did the day after she has been drinking and she does not know it yet but she has extreme depression and one of these days, it is going to catch up with her.

Charlie continued to discuss this friend throughout the interview showing no empathy, compassion or understanding considering they have also struggled with substance abuse and addiction.

Overall Observations and Conclusions

Charlie struggled throughout the program to attend sessions, as well as to practice the concepts suggested in the YWP. Historically, they have had issues with following through on academic expectations at which time Charlie's mother would come to the school to advocate for Charlie. The common thread for Charlie is lack of self-esteem, poor coping skills and impulsivity. They would rather employ an easier method to relieve stress than take the time to practice a skill that would require great effort. Charlie requires immediate gratification, which in my observation, has been enabled by Charlie's mother. Charlie has extremely poor skills when dealing with conflict as well as managing negative self-talk or the influence of media particularly in the area of body image. Charlie is skilled at making things everyone else's fault and in taking no responsibility for any of their actions. Charlie had the tendency to be disconnected from the body and throughout the program I observed evidence of internalizing coping strategies such as migraines, flu like symptoms, stomach aches and back issues which I believe to be a physical manifestation of stress. Prior to program participation, Charlie was unable to link the relationship between stress and their somatic experiences. It is my observation that Charlie both internalizes and externalizes stress which causes them to make risky choices; for example, smoking marijuana, cutting and other forms of self-injurious behaviour in order to manage emotionally challenging situations and stress. Charlie reported being in a chronic state of stress citing a 7 out of 10 with 10 being extremely stressed. In my experience, Charlie is very disconnected from the body and has tremendous difficulty regulating emotions. Charlie uses food, cigarettes, drugs and alcohol to manage intense emotional experiences. Over the years, I have observed Charlie lose control of emotions on many occasions appearing to be triggered by a seemingly trivial event. Managing the trajectory of maladaptive emotional responses was a goal for the participants of this program and despite Charlie only attending 2 of the mindfulness sessions, there appears to have been a moment of awareness as to how stress and tension affects their physical body.

In my opinion, Charlie has the tendency to find a “quick fix” to manage stress and intense emotions because they have historically been drawn to the more pleasurable aspects of coping as opposed to embracing sustained joy in life that is attained by implementing healthy strategies. This is evident in Charlie’s inability to fully commit to the mindfulness sessions. This approach to well-being could have provided Charlie with tools to grasp what it means to be present. I have observed Charlie resist adopting healthy strategies for many years that have been an effective strategy of avoidance for. I believe that one of Charlie’s greatest fears is changing habits because they will have to face many emotionally challenging and uncomfortable realities about the past and it is easier to manage discomfort with an immediate release as opposed to working through something. I believe this practice could be quite useful for Charlie to experience given that they have the tendency to become over reactive and obsessive in response to even the smallest challenge. I suspect that Charlie has a repertoire of firmly established dysfunctional coping skills that will take more than a short-term mindfulness and yoga program to effectively address.

Dakota

Dakota has grown up in a two-parent home, and has belonged to the school community for all of their educational experience. Dakota is a junior student and self-reported medium achiever whom I have known for more than five years. I have assisted Dakota with various issues including social conflict, cutting, suicide ideation, parent child conflict, teacher conflict, drugs and alcohol, depression and anxiety. In my experience with Dakota, the struggle to ‘fit in’ and to maintain a sense of belonging has been their greatest source of difficulty. Dakota can be described as a “pleaser” and a “charmer”. Dakota demonstrates a strong desire to be perceived positively by both peers and adults. I view them to be a “chameleon” type of person; this is evident in observing Dakota’s constant adaptation of self, according to the social setting. For example, Dakota’s strong desire to be liked and accepted tends to manifest itself through their fabrication of details when discussing events, or communicating with a lack of honesty. It appears that Dakota seeks the approval of adults and works hard to avoid appearing socially unacceptable. Throughout the years, I have witnessed Dakota change peer groups multiple times as well as maintain a tumultuous parent-child relationship. For example, in one situation, Dakota’s parents were made aware of their dishonesty and their parents were blindsided by Dakota’s negative behaviour which drastically changed

their perspective. Throughout the past few years Dakota's social difficulties, anxiety and depression as well as parental-child conflict were an opportunity for counselling and support, where I was able to prescribe yoga for the management of these challenges. Dakota and parents began building habits of consistent yoga practice and found it to be extremely effective in managing mood, finding balance as well as notably maintaining more positive family dynamics. The progress of Dakota's practice diminished over time, despite the effective strategies and positive outcomes, given that they stopped attending to their practice. As time passed, the issues that brought Dakota to my office initially began to creep back, with them feeling a sense of helplessness and family discord.

Dakota cited intense emotions such as anxiety, frustration and anger as indicators of stress before the YWP. When they experience these intense emotions, Dakota described the process as follows:

It's like you have no control, it's just you're heating up and you're working up and it's like, you feel like you're going to explode 'cause there's nothing you can do. So, to cope you just kind of have to find something that really, let's you slow down and think, it could really be anything, it doesn't have to be something necessarily that your passionate about or anything but it has be something that you know will calm you down. It really doesn't even have to be anything you like as long as you know that it works for you.

Dakota described a sense of helplessness during challenging situations before the YWP as cited above. It should be noted that Dakota identified emotional and mental responses to stress, and reported general strategies to be accessed during turbulent encounters. Dakota described situations which cause stress to include: test taking, the inability to meet a deadline, getting into arguments with family or peers and negative thinking. Dakota suggested that peer stress tends to be the biggest source of distraction from their focus on academics due to the emotional intensity that they experience in these situations. When in conflict with a peer, Dakota reported that emotional and physical responses include: anger, muscular tension, inability to focus and a vibrating sensation in the throat. Dakota's awareness of these responses seemed helpful in the management of these challenging situations through the following methods: removing oneself or creating a distraction to avoid the negative effects of stress. Specific strategies described by Dakota included: taking a step back, doing something they enjoy, doing something physical, going outside, going for a walk in the forest, sitting

down and watching some Netflix or eating a favourite food. It would appear that Dakota utilizes many healthy strategies for coping with stress, anxiety, conflict and negativity although having the previous history with Dakota; I have observed these strategies as a contradiction to the reality of their choices. An example of peer conflict, provided by Dakota, was an occasion when they had romantic feelings for a friend's partner and despite having these feelings, Dakota could not act on it. They reported that they did not pursue the relationship as it was in the best interest of everyone and not something a "real friend" would do. It should be noted that this is not accurate description of events. I am aware that Dakota further pursued the individual whom they liked without any remorse, and in turn lost a long-standing friendship. Dakota described unhealthy coping to include drugs and alcohol. They reported that peers use these methods of coping to "forget about their problems". They reported that they do not use these methods of coping, nor does Dakota associate with people who do. It should be noted that through privileged information as the school counselor, I know, factually, that this is not the case and therefore believe that many of the reflections and reports made by Dakota may not be an accurate depiction of what they value in terms of well-being. This information was considered when creating this account in an effort to provide as complete a depiction as possible of this participant.

Quantitative Data

The following section outlines quantitative data comparing Dakota's scores to the mean of the other participants. Stress (PSS), Self-Regulation (SRQ), Emotion Regulation (DERS), Mindfulness (MAAS), Post-Pre- Retrospective Assessment, Pre-Post session perceived stress scores and Positive Youth Development (PYD) are included in the table. When Dakota heard about the program, they were the first participant to sign up and have all of the paperwork completed within a day of receiving it. Dakota's enthusiasm and eagerness was evident, and Dakota attended more sessions than any other participant, as well as helping to set up and clean up after each session of yoga. Dakota attended 7 mindfulness sessions and 8 yoga sessions, and the optional week 10. On average, participants attended 6 of 8 mindfulness sessions and 5 of 8 yoga sessions therefore Dakota was above the average in terms of attending weekly sessions.

Table 4.17. Dakota's Quantitative Scores

Perceived Stress Scale (PSS) 10 item version	Dakota's Total Score		Difference (post minus pre)	Total Participant Mean & SD		Difference from the total participant mean	
Rated on a 5-point scale. High numbers indicate high perceived stress. Minimum score of 0 maximum score of 40 Range 0 – 13 low stress 14-26 moderate 27-40 high perceived stress	Pre 19.0	Post 16.0	-3.0	Pre 23.3 (5.7)	Post 20.0 (5.6)	Pre -4.3	Post -4.0
Self-Regulation (SRQ)	Dakota's Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference from the total participant mean	
Rated on a 5-point scale. Minimum score of 63 maximum score of 315 Range 63-213 low or impaired capacity 214-238 intermediate/mod capacity 239-315 high intact capacity	Pre 217.0	Post 211.0	-6.0	Pre 210.0 (23.7)	Post 215.4 (22.7)	Pre +7.0	Post -4.4
Difficulties with Regulation (DERS)	Dakota's Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference from the total participant mean	
Rated on a 5-point scale. Range: higher numbers indicate greater difficulty in regulating emotions.	Pre 103.0	Post 100.0	-3.0	Pre 102.5 (23.5)	Post 93.0 (19.2)	Pre +0.5	Post +7.0

Mindful Attention and Awareness Scale (MAAS)	Dakota's Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference From the total participant mean	
Rated on a 6-point scale. A higher score reflects higher level of mindfulness. Minimum score of 1 and a maximum score of 6. An average score is 3.86	Pre 3.3	Post 3.9	+0.6	Pre 3.5 (0.9)	Post 3.8 (0.8)	Pre -0.2	Post +0.1
Post-Pre- Retrospective Assessment	Dakota's Total Score		Difference (post minus pre)	Total Participant Mean & SD		Difference From the total participant mean	
Rated on a 6-point scale Measures perceived emotion regulation, stress and well-being pre- and post program. Minimum score of 0 and a maximum score of 80. An increase in score from pre- to post would indicate increased perception.	Pre 32.0	Post 62.0	+30.0	Pre 29.7 (10.8)	Post 59.8 (7.1)	Pre +2.3	Post +2.2
Mindfulness Sessions Stress Scores	Dakota's Mindfulness Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference From the total participant mean	
Rated stress on a 10-point scale. Range: higher numbers indicate greater perceived stress 1 not stressed at all and 10 being extremely stressed.	Pre 4.8	Post 1.5	3.3	Pre 6.0 (2.3)	Post 3.0 (1.2)	Pre -1.2	Post -1.5

Yoga Sessions Stress Scores	Dakota's Yoga Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference From the total participant mean	
Rated stress on a 10-point scale. Range: higher numbers indicate greater perceived stress 1 not stressed at all and 10 being extremely stressed.	Pre 4.5	Post 1.4	+3.1	Pre 5.4 (1.5)	Post 2.7 (1.1)	Pre -0.9	Post -1.3
Positive Youth Development Questionnaire (PYD)	Dakota's Score for Self Confidence (Pre-Program only)	Total Participant Mean & SD	Dakota's Score for Empathy (Pre-Program only)	Total Participant Mean & SD			
Rated on a 4-point scale. A maximum score of 32 indicates self-confidence and empathy. A minimum score of 8 indicates low self-confidence and lack of empathy.	24.0	24.7 (3.9)	27.0	25.9 (4.1)			

Summary of Quantitative Data

The data from Table 4.17 indicates that after attending the YWP, Dakota experienced a positive impact on emotion regulation, stress and mindfulness. Dakota reported a decrease in perceived stress (PSS) while self-regulation was not impacted and possibly impaired Dakota's score demonstrated a move in the opposite direction from moderate to impaired or low capacity. In terms of emotion regulation (DERS), Dakota's pre-program score indicated an improvement in their ability to regulate emotions over the 8-week program although it did not have as much of an impact on improving emotion regulation for Dakota as it did for others. Their mindfulness score indicates an increase of mindfulness but within the combined participant mean. The difference in scores for Dakota's Post Pre- Retrospective Assessment is within the same range of the rest of the population in terms of increased perception of emotion regulation, stress and well-being. Dakota reported that the mindfulness and yoga sessions were more effective in reducing stress than the average participant. It should be noted that their pre- session rating was also lower than the average participant. Overall, the quantitative data suggests that Dakota experienced a positive shift in all

areas except self-regulation. However, it is important to note that the decrease in Dakota's self-regulation (SRQ) may be considered an anomaly, I offer a possible interpretation of this to be: (a) Dakota responded to the questions in order to gain validation and acceptance from me and (b) Dakota was rushing to get through the package of questionnaires and misread the questions. I suspect that Dakota did not understand the question, was untruthful or answered the questions as per a specific situation. The Positive Youth Development Questionnaire (PYD) score indicated levels of self-confidence that fall slightly below the mean while empathy score is above the combined participant mean. Dakota reported that *doing what is right regardless of the consequences socially* as well as *standing up* for what they believe in even when though peers disagree is important. Although Dakota finds these values important, there are some conflicting views, as noted in some of their responses regarding self-confidence. Dakota reported *disliking self as well as being no good at all*. On another occasion, Dakota reported that *they have much to be proud of, is glad to be who Dakota is*. They also *view life as having purpose with a bright future as an adult*. From an empathic perspective, Dakota reported the following statements described them well: *It bothers me when bad things happen to any person; When I see someone being treated unfairly I don't feel sorry for them; I feel sorry for people who don't have what I have; It makes me sad to see a person who doesn't have friends*. Dakota reported *feeling sad when others are without the things they have in life, or are hurt or upset in anyway*. Information gathered from the PYD suggested that Dakota's self-confidence and empathy are within the range of the combined participant mean. My observations align with Dakota's lack of self-confidence and viewing Dakota's sense of self in an unfavourable light while also wanting to be viewed as positive and hopeful. These responses parallel Dakota's need to be accepted by others even at the expense of their own happiness as well as their concern about upsetting others. I believe that Dakota's empathy score to be an inaccurate depiction of them as observed during their interaction with a good friend and the friend's partner as well as various other circumstances which cannot be mentioned due to possible identification.

Qualitative Data

Qualitative data includes pre- and post-program interview data as well as weekly reflections from both mindfulness and yoga sessions. The pre-program interview was summarized to provide a brief description of Dakota's views of emotion regulation and

stress prior to participating in the program as outlined in the introduction of this vignette. Dakota's post-program interview and reflections were summarized to provide a fuller understanding of the effects of program participation.

Summary of Mindfulness Reflections

The reflective process, for Dakota after each mindfulness session, focused on all three layers of well-being. They reported a curiosity to learn the concepts which encourage relaxation and a calm state of mind. They identified the benefits of using the breath to create a relaxed and calm physical state. They reported and a deeper understanding of how and why Dakota experienced stress as well as identifying that they tend to become emotionally reactive in stressful situations. The major themes Dakota reported include: total body relaxation, a sense of calm, breath work, visualizations, the identification of physical symptoms from stress, the recognition of emotional reactions during difficult situations and a curiosity to learn more.

Summary of Yoga Reflections

The reflective process, for Dakota after each yoga session, focused on the realization that Dakota has control over how to manage stress by identifying the situations which cause stress and how that stress impacts them from a mental, emotional and physical perspective. Distraction, and the ability to focus, continued to be a challenge, although the awareness of that struggle is important in improving this area. In week 9, Dakota reported the ability to predict what was coming next which is contradictory to the concept of being present. Dakota also reported a decrease in stress and increase in forgiveness which is in line with the goal of improved mental and emotional well-being.

I found that I was able to keep up with the poses and was able to predict what was to come next. I also see a change in the amount of stress I experience and that stress does not weigh on me so much anymore. I am also able to let go and forgive myself and others about things that are causing me stress or have the potential of causing me stress.

Dakota reported that the combination of mindfulness and yoga were effective in encouraging their ability to experience "maximum benefits of the mind body connection in order to recognize stress, improving kindness to self and promote relaxation".

Summary of Post-Program Interview

After the program, the general theme for Dakota consisted of recognizing feelings as emotions, and learning to slow down and refocus by taking a moment before acting or reacting stating that: “With those mindfulness lessons now I can recognize feelings as emotions rather than things that I need to, or immediately act on. Now I know I can take my time with them and breathe and take in everything.” Dakota described a sense of appreciation for things that they didn’t have prior to participation in the YWP with the ability to accept things as they are rather than formulate an immediate judgement. Dakota reports a decrease in perceived stress particularly directly after a mindfulness or yoga sessions.

Summary of Qualitative Data

The qualitative reflections and post-program interview data provided an in-depth perspective of Dakota’s journey through mindfulness and yoga education with a goal to decrease perceived stress and increase the ability to regulate emotions. Common themes within the qualitative data included: relaxation, a sense of calm, breath work, visualizations, and the identification of physical symptoms from stress, the recognition of emotional reactions during difficult situations, recognizing feelings as emotions, the ability to focus and an improved appreciation for self. In my experience, Dakota appears to be very enthusiastic and willing to try anything to experience a peaceful existence which is portrayed throughout every reflection and interaction with Dakota throughout the program. Dakota has practiced yoga in the past and described having experienced the benefits of the practice in terms of mood regulation and overall improved physical and mental health. In my opinion, Dakota has benefited from participation in the program despite that I also suspect that some of the descriptions of improved emotion regulation and perceived stress may be over inflated to please me. This suspicion should be kept in consideration throughout this account in an effort to provide as complete a depiction as possible of this participant.

Converging the Data – Quantitative and Qualitative

Dakota’s quantitative data initially depicts a moderate level of perceived stress which decreases over time. Dakota reported in week 9 of Mindfulness and Yoga combined: “I see a change in the amount of stress I experience and that stress does not

weigh on me so much anymore.” Post-program interview and reflective data indicated that Dakota embraces many of the strategies introduced in the YWP such as: working through the stress, finding resolution in what is causing the stress, experiencing the stress and allowing for it to pass:

I learned to trust in the breath it will draw you back. I recognize common thoughts that distract me. The breath helped me to accept a thought I commonly struggle with. I am able to acknowledge its effect on me and was able to move past it or just keep swimming. I recognize that rumination is a big part of my thoughts especially at night when I am alone. I constantly dwell and worry about conflicts and insecurities. Now I am able to get comfortable and mindfully relax. I noticed that stress slows my ability to think rationally and that emotions affect not only my mind but my entire body.

In the pre-program interview, Dakota described self-regulation as follows: “being more like aware of yourself, knowing how you, you deal with things and like how to calm yourself down, knowing your boundaries, um, knowing your limits with different things, what your breaking point is.” Dakota’s self-regulation (SRQ) score was suggests impaired self-regulation moving from moderate to impaired or low capacity. In my opinion, this post-program score is not representative of Dakota’s ability to self-regulate which is demonstrated in their identification of thought patterns and the impact these patterns have from a physical and mental perspective throughout the program. Having the realization that Dakota had control over their body and reactions to emotions was something Dakota considered to be *very cool*. During week 6 of mindfulness, Dakota reported: “I didn’t know until today that my mind could zone in on spots where I am feeling stress and almost eliminate it entirely.” In my opinion, Dakota’s response indicated an improved ability to self-regulate literally removing the effects of stress through visualization; therefore, I do not believe that the scores are reflective of the shift in perspective observed and reported by Dakota.

Dakota’s emotion regulation (DERS) score indicated an improvement in their ability to regulate emotions over the 8-week program. Reflecting on the pre-program interview, Dakota was asked about the process when experiencing intense emotions was a sense of being out of control, feeling like an explosion was going to occur while being helpless searching for a method to slow the process down. Dakota’s process indicates a lack of control over emotional intensity with no concrete accessible

strategies. When asked what Dakota learned or gained from participation post-program, their response was:

I learned a lot about like patience even because like when you're breathing slowly, taking that in and that's just kind of in a way to me, it means taking everything in the situation around you, so if you're in a conflict with someone then looking at every aspect, breathing, taking your time, before you make a direct decision. I just think I'm having more appreciation for things now. Like I can take in things for what they are instead of making judgments immediately.

This response shows that Dakota utilizes specific techniques such as: breathing slowly, taking your time and looking at every aspect of a situation before you make a decision. Dakota's response suggests that they have learned how to gain control or regulate physical and emotional responses when experiencing intense emotions through the implementation of skills acquired during the YWP. Over the course of the program, Dakota reported an improvement in the ability to regulate emotions which is apparent in the decrease of their emotion regulation score. Week 5 of Mindfulness, Dakota reflects on noticing and experiencing feelings physically which is required in order to recognize the process and therefore access strategies to interrupt the trajectory of the experience: "I noticed a lot of different feelings I experienced in my body during the lesson about 'surfing the waves of emotion' and I experienced frustration, anger and restless were present in my stomach and mouth."

Dakota's mindfulness scores reflect an increase in mindfulness which is also observed through their description of present moment awareness. This awareness encourages Dakota to utilize techniques introduced during the YWP for example: focusing on the breath or the visualization of thoughts passing like waves. Dakota described the benefits of implementing visualization skills which were introduced to them throughout the program as meaningful and valuable when experiencing stress or intense emotions.

I guess the main thing that really stuck out with me that I really, liked was, the thing where we were, you said that we were, at the bottom of the ocean and we were watching our thoughts like float past us.

Dakota was able to make the connection of how the breath can be utilized to calm the mind and the body. They referred to the breath and the visualization of the

mind being like the ocean as particularly powerful techniques to create a sense of calm in stressful situations.

Dakota's Post Pre- Retrospective Assessment score indicated an improvement in the area of perception of well-being that is within the range of the rest of the participant. This improvement suggested that they gained knowledge as a result of participation in the program. In the post-program interview, Dakota reported that their parents have noticed a difference in how they manage stress and that they feel confident in the ability to access resources during emotionally challenging situations. In my opinion, Dakota is motivated to live a happier healthier life, which is observed in Dakota's willingness to participate openly therefore observing an improvement in the perception of well-being.

Despite the fact that Dakota's post mindfulness and yoga session scores appear to indicate that sessions were more effective in reducing stress than the average participant, it should be noted that Dakota's pre- session rating was also lower than the average participant. In Dakota's reflections for both mindfulness and yoga a common theme is a sense of calm, relaxation and peace. I suspect that due to their willingness to learn encouraged Dakota to be open minded to the process which was very helpful in reducing perceived stress. During week 2 of yoga, Dakota reported: "I came to the session under stress and as a result of the session I experienced a sense of peace and feel ready to address the source of stress from a responsible and calm manner." Throughout the program, I observed Dakota's curiosity to recognize and manage stress more effectively by accessing strategies discussed from week to week.

Dakota's scores for Positive Youth Development Questionnaire (PYD) indicated levels of self-confidence that fall slightly below the mean. Throughout the program, they referred to insecurities which parallel Dakota's responses in the PYD and matches my observations. During week 7 of mindfulness, Dakota reported: "I recognize I need to be kinder to myself and should practice kindness more." The practice of loving kindness did not come naturally to them and through discussion during the session, Dakota had the realization that this was something almost foreign to them. I am curious to see if there would have been an improvement in self-confidence post-program. Dakota's empathy score was above the mean indicating that Dakota is more empathetic than the average participant. It is in my opinion that this score may be the result of responding in a socially desirable way. As the school counselor, I am aware of Dakota's lack of

empathy, which has been observed on a number of occasions. Due to the possibility of identifying Dakota, I will not be able to expand upon the example any further.

Overall Observations and Conclusions

Prior to participation in the program, Dakota described valuing yoga and having had positive experiences in Dakota's yoga practice: "I like yoga because I like the way it makes me feel. I like the mindset I get into. I like having a clear and cleansed body, mind". Dakota was an enthusiastic participant who displayed tremendous growth throughout the program evident through the ability to identify where they hold stress and how it affects them physically, emotionally and mentally. Dakota reported many moments of realization and recognition throughout the program regarding understanding emotions Dakota had not previously viewed as emotions and the skill of being able to wait or slow responses down while realizing they do not have to react immediately. This shows an improvement in the ability to regulate emotions which was not evident in the pre-program interview. Similarly, these personal acknowledgements may help to demonstrate a reasonable argument that self-recognition improved throughout the program, despite the SRQ scores indicating otherwise.

Throughout the program, Dakota remained in the office after each mindfulness session to discuss concepts delivered that day and the impact of the session. Dakota was eager to share the new-found appreciation for learning to be present and would often disclose moments within the lesson which shifted their perspective. The desire to learn and participate was evident from week to week as displayed through their constant interaction within the group offering suggestions and examples to others during each session. This strong desire to be part of something along with the need for validation from myself and others was observed throughout the program.

Dakota helped to set up and clean up after each session of yoga. During this time, I was able to create a dialogue with them regarding Dakota's experience during the session as well as an opportunity to discuss other issues. I viewed each interaction as one where Dakota was looking for validation and acceptance by me through constant compliments about the session. I took this time to explore deeper into other issues going on at the time which I was aware of as the school counselor. I did observe that Dakota appeared to display a strong desire to benefit from the program although I am

not sure the desire to please did not ultimately overshadow the desire to gain insight into well-being.

4.15.2. Senior Grade Level

Sky

Sky has grown up in a two-parent home, and has belonged to the school community for all of Sky's secondary educational experience. Sky is a senior student and self-reported low achiever whom I have known for more than three years. I have assisted Sky with various issues including: school avoidance, social conflict, cutting, suicide ideation, parent child conflict, teacher conflict, smoking, drugs and alcohol, anxiety attacks, depression and anxiety. In my experiences with Sky, the struggle to improve self-esteem has been one of their greatest challenges. Throughout the years, I have witnessed Sky shift peer groups multiple times. They are very supportive of peers and they take pride in having the ability to get along with a variety of different groups. Sky can be described as a loud and rambunctious type of person; this is evident through observing their attention seeking behaviour. For example, Sky's strong desire to fit in and be accepted by peers tends to manifest itself in Sky's aggressive opinions, particularly when they feel an injustice has occurred between teacher and student. Sky attempts to become the crusader for other students, by becoming involved unnecessarily and inappropriately. Although Sky has been viewed as a support for their peers, these situations of conflict have caused difficulties for Sky with school administration. Over the past few years, I have witnessed that Sky as the source of problems that could have been avoided. It has been my observation that Sky experiences discomfort when life is conflict-free. Being raised in a household with unhealthy communication, Sky has become accustomed to highly volatile situations. Although they have expressed experiencing high anxiety as a result of exposure to their chaotic environment, it should also be noted that Sky has the tendency to activate problems within the family unit, and then uses these situations as a reason to visit the counselling office, and missing academic time. Teachers are keenly aware of Sky's avoidance strategies, further causing tension between the teachers and the counseling department. For example, I have observed that when Sky is trying to avoid work, they will visit the counseling department and ask to speak to a counselor. The counselor will ask Sky if the teacher is aware of their reasons for missing class and they will assure the counsellor that the

teacher is aware of the situation. This is, in fact, not true and the teacher is not aware of the circumstances concerning why Sky is not attending class. As a result, the teacher may become upset with the counselor given his/her feelings that the counselor is enabling Sky's behavior and thus affecting the teacher's workload. It should be noted that I have observed that Sky has the tendency to fall "victim to circumstance" maintaining that everything bad that happens to them is the result of the actions of others. In my opinion, Sky does not take responsibility for their actions, generally blaming others for the obstacles that they create in their own life experience.

Sky described situations that cause stress to include: their health, homework, extra-curricular activities, inability to manage time, procrastination, inability to sleep and family conflict. Sky suggested that family conflict was the biggest source of stress for them:

I get pretty angry easily and so my mom would fight all the time. My dad works all the time so he was never there for the fight so it was just me and my mom going at it. We don't fight as often anymore but, sometimes we just kind of throw massive shit at each other, or just be like really passive aggressive to each other. But that's usually only when we're both in a bad mood.

Sky cited emotions such as anger, anxiety, frustration and sadness as indicators of stress before the YWP. When they experience anger, Sky describes the process as becoming physically oriented, including throwing things, physical tension and becoming argumentative. Although Sky reported not dealing with emotions when stressed, because they believe it to be unnecessary, Sky reported the effects of stress including: becoming tired, a lack of concentration, inability to focus in and becoming sick due to a low immune system. Sky described that the escalation of their stress response has the tendency to activate what they described as an anxiety attack.

Sky described isolation to be one of their main methods of coping with challenging, stressful or emotional situations. "Well there's a lack of interaction with others when I'm stressed out. Usually I just hide myself away; I don't really go out or talk to people." Sky also described other strategies including: watching movies, reading, sleeping, listening to or playing music, writing, eating, drinking tea and smoking cigarettes. In the pre-program interview, when asked what they would like to take away

from participation in the YWP, they responded with scepticism and acknowledged low expectations of change:

I think anything would really help me at this point 'cause I tend to be a very stressed out high anxiety person so anything would help at this point. But I like to keep my hopes at like a mediocre level for everything that I do because either I'll be pleasantly surprised or I'll be proven right. So, um, I'm not expecting like a life changing experience but nothing really negative can come out of this so...

It is evident through observations and pre-interview information that Sky has difficulty managing stress as well as emotional reactions to stress. Anxiety attacks were a common response along with anger outbursts which become physical and often led to isolation. It appears that despite Sky's desire for help in managing both emotions and stress, this is overshadowed by their skepticism of the process. It should be noted that as the school counselor, I have had experiences where Sky has confided in me that they use food, cigarettes, drugs and alcohol in order to manage stress, anxiety and depression. This information was considered when creating this account in an effort to provide as complete a depiction as possible of this participant.

Quantitative Data

The following section outlines quantitative data comparing Sky's scores to the mean scores of the other participants. Stress (PSS), Self-Regulation (SRQ), Emotion Regulation (DERS), Mindfulness (MAAS), Post-Pre- Retrospective Assessment, Pre-Post Mindfulness and Yoga session perceived stress scores and Positive Youth Development (PYD) are included in the table. When Sky heard about the program, they were the third participant to submit all the documentation required to participate in the program. Sky attended 7 of the 8 mindfulness sessions and 7 of the 8 yoga sessions. They missed week 6, in addition to the optional weeks of mindfulness and yoga, for a variety of reasons such as illness, forgetfulness, school absence and other commitments. On average, participants attended 6 out of 8 mindfulness sessions and 5 out of 8 yoga sessions therefore Sky was above the average in terms of weekly attendance.

Table 4.18. Sky's Quantitative Scores

Perceived Stress Scale (PSS) 10 item version	Sky's Total Score		Difference (post minus pre)	Total Participant Mean & SD		Difference from the total participant mean	
Rated on a 5-point scale. High numbers indicate high perceived stress. Minimum score of 0 maximum score of 40 Range 0 – 13 low stress 14-26 moderate 27-40 high perceived stress	Pre 28.0	Post 21.0	-7.0	Pre 23.3 (5.7)	Post 20.0 (5.6)	Pre +4.5	Post +1.0
Self-Regulation (SRQ)	Sky's Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference from the total participant mean	
Rated on a 5-point scale. Minimum score of 63 maximum score of 315 Range 63-213 low or impaired capacity 214-238 intermediate/mod capacity 239-315 high intact capacity	Pre 158.0	Post 220.0	+62.0	Pre 210.0 (23.7)	Post 215.4 (22.7)	Pre -52.0	Post +4.6
Difficulties with Regulation (DERS)	Sky's Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference from the total participant mean	
Rated on a 5-point scale. Range: higher numbers indicate greater difficulty in regulating emotions.	Pre 145.0	Post 94.0	-51.0	Pre 102.5 (23.5)	Post 93.0 (19.2)	Pre +42.5	Post +1.0

Mindful Attention and Awareness Scale (MAAS)	Sky's Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference From the total participant mean	
Rated on a 6-point scale. A higher score reflects higher level of mindfulness. Minimum score of 1 and a maximum score of 6. An average score is 3.86	Pre 3.5	Post 4.5	+0.1	Pre 3.5 (0.9)	Post 3.8 (0.8)	Pre 0	Post +0.7
Post-Pre- Retrospective Assessment	Sky's Total Score		Difference (post minus pre)	Total Participant Mean & SD		Difference From the total participant mean	
Rated on a 6-point scale Measures perceived emotion regulation, stress and well-being pre- and post program. Minimum score of 0 and a maximum score of 80. An increase in score from pre- to post would indicate increased perception.	Pre 25.0	Post 61.0	+36.0	Pre 29.7 (10.8)	Post 59.8 (7.1)	Pre -4.7	Post +1.2
Mindfulness Sessions Stress Scores	Sky's Mindfulness Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference From the total participant mean	
Rated stress on a 10-point scale. Range: higher numbers indicate greater perceived stress 1 not stressed at all and 10 being extremely stressed.	Pre 7.4	Post 3.6	-3.8	Pre 6.0 (2.3)	Post 3.0 (1.2)	Pre +1.4	Post +0.6

Yoga Sessions Stress Scores	Sky's Yoga Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference From the total participant mean	
Rated stress on a 10-point scale. Range: higher numbers indicate greater perceived stress 1 not stressed at all and 10 being extremely stressed.	Pre 6.7	Post 3.4	+3.3	Pre 5.4 (1.5)	Post 2.7 (1.1)	Pre +1.3	Post +0.7
Positive Youth Development Questionnaire (PYD)	Sky's Score for Self Confidence (Pre-Program only)		Total Participant Mean & SD	Sky's Score for Empathy (Pre-Program only)		Total Participant Mean & SD	
Rated on a 4-point scale. A maximum score of 32 indicates self-confidence and empathy. A minimum score of 8 indicates low self-confidence and lack of empathy.	22.0		24.7 (3.9)	21.0		25.9 (4.1)	

Summary of Quantitative Data

The data from Table 4.18 indicate that after attending the YWP, Sky experienced a positive impact on stress, self-regulation, emotion regulation, mindfulness, and perception of well-being. Further, the data demonstrate a positive impact on Sky's stress immediately following mindfulness and yoga sessions. Sky reported a greater overall decrease in perceived stress compared to the combined participant mean. In the area of self-regulation (SRQ), the average participant progressed from impaired to moderate capacity, which was similar to Sky's scores while their emotion regulation (DERS) score indicated an increase in their ability to regulate emotions over the 8-week program comparable to the combined participant mean. Sky's mindfulness score shows an increase in mindfulness and is above the combined participant mean. Post-Pre-Retrospective Assessment scores indicated an increase in emotion regulation, perception of stress and well-being that is within the combined participant mean. Sky reported similar perceived stress pre- and post mindfulness and yoga sessions as the average participant, although it should be noted that Sky's pre-session rating for both mindfulness and yoga were higher than the average participant. Sky's Positive Youth

Development Questionnaire (PYD) scores indicated lower levels of self-confidence and empathy as compared to the combined population mean. Questions from the PYD were chosen which related to the participants' self-confidence and acted as an indicator of mental well-being. Sky reported that *doing what is right regardless of the consequences socially* as well as *standing up* for what Sky believes in even when peers disagree was important. While Sky holds these values as important, there were conflicting views in several of their responses regarding self-confidence. For example, Sky reported *not having much to be proud of as well as being no good at all*. They also reported being *glad to be who they are, on the whole likes themselves, and views life as having purpose with a bright future as an adult*. From an empathic perspective, Sky reported that the following statements describe them well: *It bothers me when bad things happen to any person; When I see someone being treated unfairly I don't feel sorry for them; I feel sorry for people who don't have what I have; It makes me sad to see a person who doesn't have friends*. Sky reported *feeling sad when others are without the things they have in life, or are hurt or upset in anyway*. Information gathered from the PYD suggested that Sky struggles with self-confidence and empathy. I suspect that Sky is often conflicted in their self-perception and in the perception of others. These observations are confirmed by Sky's lack of self-confidence as well as Sky's view of sense of self in an unfavourable light while also maintaining the desire to be positive and hopeful. In my opinion, the responses to statements of the PYD parallel Sky's need to be accepted by others.

Overall, the quantitative data suggest that Sky experienced a positive shift in all areas of interest for this research. When compared to the other quantitative findings it would be feasible to assume that prior to the YWP, their coping skills were limited showing an improvement as a result of participation in the program. Although I am hopeful that Sky experienced the benefits from participating in the YWP, it is important to note that in the past, they have tended to be unmotivated when it comes to making changes in all areas of their life.

Qualitative Data

Qualitative data include pre- and post-program interview data as well as weekly reflections from both the mindfulness and yoga sessions. The pre-program interview was summarized to provide a brief description of Sky's views of emotion regulation and stress prior to participating in the program, as outlined in the introduction of this vignette.

Sky's post-program interview and reflections were summarized to provide a fuller understanding of the effects of program participation.

Summary of Mindfulness Reflections

Following each mindfulness session, Sky's reflective process focused mainly on the identification of their physical response to stress. This awareness encouraged Sky to utilize breathing techniques which they described as effective in assisting in the releasing of muscular tension. During Week 1, Sky reported: "I went back and forth between frustration and relaxation," which is the beginning of Sky's process of identifying different emotions while further recognizing how they are affected by them both physically and mentally. By week five, Sky reported: "I have a very weird relationship with my emotions. I have a hard time understanding them and describing them. This session helped me to see them and understand them more clearly." Several other themes reflected upon by Sky included: visualizations, self-talk, understanding rumination and the effect rumination had on D's level of stress.

Summary of Yoga Reflections

In week 1, Sky reflected on a realization that they live on autopilot, living mindlessly on a daily basis. Sky reported experiencing "energy in places there tends to not be, I feel at peace" during the session. Letting go of anxiety and anger allowed them to feel physically lighter, which Sky described as a sensation that they were not comfortable with at this point. Sky demonstrated a sense of curiosity with their exploration of why their body holds tension in places such as the face and jaw; this recognition was also described as uncomfortable by Sky. Sky perceives a notable difference in how they experience stress from the beginning of the session to the end reporting "coming into today's class I was quite stressed and a bit upset but while I'm writing this I am very happy very calm I really hope we do something along the lines of this again." Further themes described include: relaxation, visualizations, self-soothing strategies, learning to calm down using breathing exercises, and the experience of a sense of warmth and comfort. During week 7, Sky reported that practicing meanness is much easier for them than practicing kindness, but, that with practice self-compassion was becoming easier. Sky recognized feeling significantly better when practicing kindness and acknowledged a desire for that feeling to return more often: "Now that I know the feeling of practicing kindness, I want that feeling back." Towards the end of

the program, Sky reported a wandering mind to be the reason for their ongoing distraction from life. Sky mentioned consistent daydreaming of a perfect life that has been concerning, although Sky reported that strategies such as breathing exercises and visualization presented in the YWP helped them to stay in the present.

Summary of Post-Program Interview

In the post-program interview, Sky reported a shift in coping strategies, such as taking a nap or getting a glass of water rather than binge eating, smoking or using drugs and alcohol. Sky credits loving-kindness practice for making better decisions. For example, they reported becoming more aware of instances when peers were treating them disrespectfully, causing Sky to reassess several friendships. I would consider this a pivotal moment given that most of Sky's way of life comes from social acceptance at any cost. As noted in the pre-program interview Sky has the tendency to turn to anger as an expression of frustration, sadness and intense anxiety. During the post-program interview, Sky described a newly acquired method of coping with anger in the YWP:

I have a pretty short temper and so when I get like really angry I tend to get really high anxiety, like they come hand in hand. And so like now when I get really, really angry I do some of the visuals when I'm really, really angry and then it helps me calm down which in turn helps my anger to subside, like it becomes less. I noticed I'm not as angry now when I get stressed.

Sky reported having learned a significant amount of strategies during the YWP including: self-compassion, management of intense emotions through breathing exercises and visualizations.

Summary of Qualitative Data

Sky's reflective data provide a detailed account of their journey of self-discovery. Sky transitions from a self-loathing individual with dysfunctional coping skills to an individual who has acquired skills to develop self-appreciation through loving-kindness meditation. Sky reported a clearer understanding of their tendency to ruminate as a result of negative self-talk. During week 5 of mindfulness, Sky experienced what I would consider a turning point through a new-found appreciation and desire to understand emotions and emotion regulation. Although Sky reported feeling frustrated regarding the physicality of some of the yoga postures, the frustration did not affect their willingness to

participate; in fact, at the end of the YWP, Sky reported an intention to pursue mindfulness and yoga within the community.

Converging the Data – Quantitative and Qualitative

Sky's pre-program quantitative data indicated a high level of perceived stress which decreased over time. In my opinion, an individual must begin with a certain level of self-awareness in order to alter one's experience. Over the years, I have observed that Sky has been disconnected from the consequences of their actions or reactions to stress. During the YWP, Sky reported moments of recognizing causes as well as the impact of stress from all aspects of well-being. Gaining an understanding of how stress is cyclically generated, the anxiety and subsequent anxiety attacks that Sky described as rumination encouraged them to make a shift in perspective as described in week 4 of mindfulness:

I think that rumination is very prominent in my life once it was explained I noticed that I do that a lot. Learning how to undo it is very helpful because I feel rumination is the cause of a lot of my stress.

Sky reported using mindfulness meditations, apps on the phone, breathing exercises and visualizations as methods of relieving the effects of stress. Visualizations were particularly effective as noted in week 4 of yoga:

I love the visualization practice when I'm really stressed out I tend to visualize my happy place. Which can be a few different places. But it really does make me happy, mentally removing myself from a stressful moment. I felt warm and comforted. When I brought myself back, I had new energy, I loved today's practice, and I really see myself using these strategies during stressful moments.

Sky's scores for self-regulation (SRQ) indicated an improvement from low or impaired capacity to intermediate/moderate capacity. It is important to note that I have observed their impaired capacity to self-regulate for a number of years and in fact have spent many counseling sessions addressing this issue. Sky has historically chosen unhealthy strategies to manage the ups and downs of emotions, stress and life in general. During the pre-program interview, Sky described situations of feeling out of control with emotions and using physical methods such as breaking things or throwing things to release their pent up energy. In the post-program interview, Sky reported

finding healthier alternatives for managing stress and acquiring a greater level of awareness for their treatment of others and in turn how they treat Sky. During the program, I was able to observe Sky maintain control during a difficult situation with a teacher. This observation was confirmed by Sky's parents, as well as the teacher, which suggested Sky's growth in the area of self-regulation and emotion regulation.

Over the course of the program, Sky reported an improvement in the ability to regulate emotions, which is apparent in the decrease of their emotion regulation score. During week 5 of yoga, Sky reflects on experiencing feelings of sadness. It is important to note that this is the first time Sky reported experiencing emotions other than anger, anxiety or frustration before or during the YWP.

In pigeon position, I felt a lot of release of sadness. It came in waves it was almost uncomfortable, it felt very surreal. My thoughts were everywhere but they quieted down which was nice I would just breathe and think about my happy place. I felt a lot of emotional release, but now I'm going to deal with the aftermath of that.

Sky reported being curiously uncomfortable with this experience although able to remain in this discomfort and access strategies to self-sooth such as deep breathing and positive visualizations. Sky also reported having to "deal with the aftermath," a statement that appears to be negative, but one that I see as a productive change. In the past, Sky would have lashed out or avoided difficult emotions, which suggests an improvement in their ability to regulate emotions

Sky's mindfulness scores reflect an increase in mindfulness observed through their awareness of difficulty focusing in week 8. Despite this challenge, Sky was able to access techniques such as focusing on the breath and visualizations in order to encourage present moment awareness as reflected upon in the post-program interview:

My breaths being waves, my thoughts being clouds my awareness being an anchor. I learned a lot about my own thoughts and how I don't have to believe everything I tell myself. I like how positive self-talk feels, and the way I feel. I plan to try it more often.

Sky described the benefits of implementing visualization skills as meaningful and valuable when experiencing stress or intense emotions. Sky was able to connect how the breath can be utilized to calm the mind and the body. They referred to the

visualization of “the mind is like the ocean” as a particularly powerful technique they use to create a sense of calm, resulting in increased mindfulness.

Post-Pre- Retrospective Assessment scores indicated an increase in emotion regulation perception of stress and well-being that was similar to the mean of the population. This increase was both observed and reflected upon during and after the program. Sky reported an improvement in managing stress and emotions as well as the identification of self-care which was not evident prior to the YWP. In the post-program interview, they described their experience as follows: “I learned a lot of things that have helped me, such as visualizations and breathing techniques. Those have helped me a lot, when I’m in stressful situations. I also learned that taking care of yourself isn’t a bad thing.” In my opinion, Sky gained great insight through participation in the YWP, which is likely to help Sky in continuing to develop, particularly in the area of self-care

Although Sky’s perceived stress scores pre- and post mindfulness and yoga sessions indicated a decrease in perceived stress, their mean stress rating before mindfulness and yoga sessions was higher than the mean for all participants. This suggests that Sky’s perceived stress was higher than the average for all participants before the session and decreased as a result of participation in the session, as suggested by Sky. Throughout the program, Sky’s reflections of the mindfulness and yoga sessions were positive. This suggests that they valued the new knowledge that was developed throughout the program, and/or that they were looking for validation from me. Still, the reflections and the decrease in scores reflected one another in terms of demonstrating Sky’s experience of decreased stress as well as a sense of calm and relaxation after each session.

Sky’s Positive Youth Development Questionnaire (PYD) scores indicated lower levels of self-confidence and empathy. Sky referred to insecurities that parallel their responses in the PYD and my observations. Sky’s exploration of self is evident in their ability to identify thought patterns and the impact these patterns have from a physical and mental perspective as the program progressed. As a result of program participation, Sky became aware that much of their energy was put into the happiness of others and working toward social acceptance. Sky described this realization as a sudden moment of insight. I have observed low levels of self-confidence for a number of years and Sky reflected this during week 7 of yoga:

Practicing meanness is much easier for me to do, but I feel significantly better when I practice kindness even if it's just for a minute I feel light and at peace, as if I could go do anything and still come out OK. I generally don't have very positive feelings towards myself, but what teenager does?

In terms of empathy, Sky's scores are an accurate depiction of what has been observed at the school. In my opinion, although Sky advocates for their fellow students, I believe that they are motivated by the need for acceptance and approval, which is lacking within Sky's family unit and confirmed by their self-confidence scores. As the program progressed, there was a notable improved shift in self-perception as reported in week 7 of mindfulness: "Now that I know the feeling of practicing kindness, I want that feeling back."

Overall Observations and Conclusions

During the pre-program interview, Sky indicated feeling a lack of control over emotional intensity with no effective accessible strategies. In the post-program interview, when Sky was asked what they learned or gained from participation in the YWP, their response described specific strategies such as visualizations, breathing techniques and the concept of rumination. Sky appears to have been able to incorporate many of these strategies while becoming more aware of the importance of self-care in the process. In my opinion, Sky's struggle to find a place in their peer group and family is what drives their behaviour, in order to gain some sense of validation. I have observed Sky jockeying for a position among both friends and family in order to gain a sense of belonging. Sky's need to be validated and accepted is what influences their poor choices and inability to cope with stress. Sky has very low self-esteem and is searching for someone to affirm their existence; unfortunately, Sky tends to take the path of most resistance, resulting in a great deal of conflict by forcing views and opinions in a bully-like fashion. Learning the art of self-love and self-compassion may have been a turning point for Sky as they reported never really having practiced it before.

Taylor

Taylor has grown up in a single parent home, and has belonged to the school community for all of their educational experience. Taylor is a senior student and self-reported medium achiever whom I have known for more than five years. I have assisted

Taylor with various issues including: bullying, social conflict, parent child conflict, teacher conflict, smoking, drugs and alcohol and blended family issues. In my experience with Taylor, the struggle to develop self-confidence has been their greatest source of difficulty. Taylor can be described as a mature and conscientious student with poor coping skills. Taylor's journey to develop self- confidence coupled with trying to make sense of their role within the complicated family has been a challenging task for them. I would describe Taylor as an "old soul", having observed them taking care of younger siblings as well as being a confidante to both parents. Taylor played the role of mediator between parents throughout childhood which caused confusion, conflict and anxiety for them. I have observed Taylor as more of a parent to their parents than a child. Taylor reported the causes of stress to include: homework, academic expectations and family dynamics. Taylor suggested that family dynamics tend to be the biggest source of stress:

Since my parents are divorced trying to figure out logistics of when I'm going to see my dad, plus me and my stepmom don't get along but with my little sister being with my dad, I feel obligated to go so, just trying to work up the nerve I guess to go over there and keep my mouth shut which is very hard I still get very angry.

In the pre-program interview, Taylor reported that anxiety was their main indication of stress before the YWP. When asked to reflect upon what happens physically in a stressful situation, Taylor reported: "I think it's the nerves building up inside and when I wait for things, I just get really nervous." During the interview, Taylor described the main method of coping, "I don't have a method, I just find it kind of will go away but I don't really do anything. I just kind of have to walk it off and wait until it leaves." Although Taylor disclosed having no strategies to cope with stress, upon further discussion, they reported: eating, running, watching a show, going outside, listening to music, sitting in the sun and positive thinking as effective methods of coping with stress. Taylor described the escalation of their stress response as a process which builds over a few months. Taylor reported that minor issues build over time and because they do not like to express their emotions by crying, Taylor will internalize feelings until suddenly there is an "explosion of emotions." When this occurs, they reported finding comfort in: isolation, crying for hours, watching movies and lying in bed. Taylor described the recovery process to require 24 hours; they also described unhealthy coping such as: smoking marijuana, drinking and over eating. It should be noted, that as the school

counselor, I have had experiences where Taylor has confided in me that they drink alcohol and experiments with a variety of drugs in order to manage stress and anxiety. Although this information was considered when creating this account, in an effort to provide as complete a depiction as possible of this participant, the details were not provided to ensure anonymity.

Quantitative Data

The following section outlines quantitative data comparing Taylor's scores to the mean of the other participants. Stress (PSS), Self-Regulation (SRQ), Emotion Regulation (DERS), Mindfulness (MAAS), Post-Pre- Retrospective Assessment, Pre-Post Mindfulness and Yoga session perceived stress scores and Positive Youth Development (PYD) are included in the table. When Taylor heard about the program, they were the fifth participant to submit all the documentation required to participate in the program. Taylor attended 7 out of the 8 mindfulness sessions and 7 out of the 8 yoga sessions. They attended optional weeks 9 and 10 but missed weeks 11 and 12 for a variety of reasons such as illness, and other commitments. On average, participants attended 6 of 8 mindfulness sessions and 5 of 8 yoga sessions, therefore Taylor was above the average in terms of attending weekly sessions.

Table 4.19. Taylor's Quantitative Scores

Perceived Stress Scale (PSS) 10 item version	Taylor's Total Score		Difference (post minus pre)	Total Participant Mean & SD		Difference from the total participant mean	
Rated on a 5-point scale. High numbers indicate high perceived stress. Minimum score of 0 maximum score of 40 Range 0 – 13 low stress 14-26 moderate 27-40 high perceived stress	Pre 27.0	Post 16.0	-11.0	Pre 23.3 (5.7)	Post 20.0 (5.6)	Pre +3.7	Post -4.0
Self-Regulation (SRQ)	Taylor's Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference from the total participant mean	
Rated on a 5-point scale. Minimum score of 63 maximum score of 315 Range 63-213 low or impaired capacity 214-238 intermediate/mod capacity 239-315 high intact capacity	Pre 240.0	Post 214.0	-26.0	Pre 210.0 (23.7)	Post 215.4 (22.7)	Pre +30.0	Post -1.4
Difficulties with Regulation (DERS)	Taylor's Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference from the total participant mean	
Rated on a 5-point scale. Range: higher numbers indicate greater difficulty in regulating emotions.	Pre 105.0	Post 125.0	+20.0	Pre 102.5 (23.5)	Post 93.0 (19.2)	Pre +2.5	Post +32.0

Mindful Attention and Awareness Scale (MAAS)	Taylor's Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference From the total participant mean	
Rated on a 6-point scale. A higher score reflects higher level of mindfulness. Minimum score of 1 and a maximum score of 6. An average score is 3.86	Pre 3.8	Post 4.1	+0.3	Pre 3.5 (0.9)	Post 3.8 (0.8)	Pre +0.3	Post +0.3
Post-Pre- Retrospective Assessment	Taylor's Total Score		Difference (post minus pre)	Total Participant Mean & SD		Difference From the total participant mean	
Rated on a 6-point scale Measures perceived emotion regulation, stress and well-being pre- and post program. Minimum score of 0 and a maximum score of 80. An increase in score from pre- to post would indicate increased perception.	Pre 12.0	Post 58.0	+46.0	Pre 29.7 (10.8)	Post 59.8 (7.1)	Pre -17.7	Post -1.8
Mindfulness Sessions Stress Scores	Taylor's Mindfulness Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference From the total participant mean	
Rated stress on a 10-point scale. Range: higher numbers indicate greater perceived stress 1 not stressed at all and 10 being extremely stressed.	Pre 5.6	Post 3.2	-2.4	Pre 6.0 (2.3)	Post 3.0 (1.2)	Pre -0.4	Post +0.2

Yoga Sessions Stress Scores	Taylor's Yoga Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference From the total participant mean	
Rated stress on a 10-point scale. Range: higher numbers indicate greater perceived stress 1 not stressed at all and 10 being extremely stressed.	Pre 6.0	Post 3.0	-3.0	Pre 5.4 (1.5)	Post 2.7 (1.1)	Pre +0.6	Post +0.3
Positive Youth Development Questionnaire (PYD)		Taylor's Score for Self Confidence (Pre-Program only)	Total Participant Mean & SD	Taylor's Score for Empathy (Pre-Program only)	Total Participant Mean & SD		
Rated on a 4-point scale. A maximum score of 32 indicates self-confidence and empathy. A minimum score of 8 indicates low self-confidence and lack of empathy.	26.0	24.7 (3.9)	28.0	25.9 (4.1)			

Summary of Quantitative Data

The data from Table 4.19 indicate that after attending the YWP, Taylor experienced a positive impact on stress, mindfulness, perception of well-being and a positive impact on stress from participation in mindfulness and yoga sessions. Overall, the quantitative data suggest that Taylor experienced a positive shift in all areas except self-regulation and emotion regulation. Their perceived stress score (PSS) indicated a decrease in perceived stress. It is important to note that the decrease in Taylor's self-regulation (SRQ) and increase in emotion regulation (DERS) may be considered an anomaly; I offer a possible interpretation of this to be: (a) post-program questionnaires were conducted a week before final exams which Taylor described as a highly stressful time of the year and (b) Taylor had serious family and personal relationship challenges near the end of the program, (c) there is also the possibility that Taylor may have overly inflated pre-program responses which may have been reassessed at program completion. The reason for this over inflation may be related to the premise that "you don't know what you don't know", which was why I decided to develop and administer the post-pre- retrospective assessment and (d) the increase in scores may be a

reflection of Taylor's recently discovered appreciation for the ability to manage emotions which perhaps offered them a new perspective in both the area of self-regulation and emotion regulation. Taylor's mindfulness score indicated an increase of mindfulness and is within the combined population mean. The Post Pre- Retrospective Assessment scores indicated an increase in, emotion regulation, perception of stress and well-being that is within the mean of the population. Scores reported by Taylor for perceived stress pre-post mindfulness and yoga sessions were within the combined participant mean. Taylor's pre-program scores for the PYD indicated higher self-confidence and empathy. They reported that *doing what is right regardless of the consequences socially* as well as *standing up for what they believe in even though peers disagree* was important. While Taylor holds these values as important there were conflicting views in one of their responses regarding self-confidence. For example, Taylor identified that at times *they think that they are no good at all* while on another occasion Taylor reported that they are *glad that Taylor is Taylor* and that *they have much to be proud of viewing life as having purpose with a bright future as an adult*. From an empathic perspective, Taylor *dislikes the idea of others being taken advantage of, being treated unfairly or when bad things happen to them*. Taylor *reported feeling sad when others are without the things that they have in life as well as when people do not have friends, or are hurt or upset in anyway*. My observation of Taylor's self-confidence conflicts with how they responded to the questionnaire. I believe that Taylor strives to become more confident and is often in conflict as to how to achieve it. The responses to empathy are in line with Taylor's observed behaviour with friends and others around them. In my opinion, Taylor has more empathy for others than Taylor does for Taylor as noted through discussion and observation throughout the program.

Qualitative Data

Qualitative data include pre- and post-program interview data, as well as weekly reflections from both mindfulness and yoga sessions. The pre-program interview was summarized to provide a brief description of Taylor's views of emotion regulation and stress prior to participating in the program as outlined in the introduction of this vignette. Taylor's post-program interview and reflections were summarized to provide a fuller understanding of the effects of program participation.

Summary of Mindfulness Reflections

The reflective process for Taylor, after each mindfulness session, focused on the application of methods that encourage relaxation and a calm state of mind. The major themes Taylor reported included the identification of techniques such as (a) using the breath to relax the muscles, remain calm, release tension and stop wandering thoughts, (b) recognizing thoughts are just thoughts and a person does not have to believe all thoughts, (c) methods of reassessing situations in order to implement effective strategies to manage it. Throughout the program, I have observed Taylor demonstrate a lack of self-appreciation and self-compassion; for example, in week 7 of mindfulness, participants were asked to practice loving kindness (self-compassion) and Taylor described the exercise to be “difficult” causing them to feel “discomfort.” Taylor reported, through written reflections and discussion within the group, that although they enjoy practicing loving kindness to others, it did not occur to Taylor to practice love and kindness:

When being asked to pay attention to my thoughts and feelings when practicing kindness to myself I felt discomfort. I feel the desire to be able to access self-love but not being able to allow myself to feel that way. Practicing kindness to others is what I love to do and I just never thought I needed to have love and kindness for myself.

Taylor described the realization of avoiding emotionally intense responses for fear of becoming vulnerable or losing control. Taylor reported being fearful that some of the memories they may recall will be “too difficult to handle.” As a result, Taylor tends to avoid thinking about these experiences by mentally shutting down and becoming isolated.

Summary of Yoga Reflections

Each reflective process for Taylor, following each yoga session, focused on recognizing where they hold tension in the body. Taylor reported that using breathing techniques helped with releasing tension and provided them with “a sense of grounding.” One of the major themes included learning to be more present and less distracted by focusing on the breath or visualizing thoughts passing like clouds in the sky:

When a stream of thoughts would come to my mind I would let go of those thoughts by focusing on my breathing. To remain present even I

would remember to focus on the in and out of my breath. I have become less distracted because I find that through this class I learned to become more aware of my thoughts and just let them pass through my mind like clouds in the sky.

Taylor reported an improved understanding of the difference between doing things mindlessly as opposed to mindfully (present moment awareness) in the first yoga session. Although Taylor reported that certain postures were more effective at releasing physical tension than others, they also reported some postures left them feeling vulnerable. Over time, Taylor discovered the association between the strength of the mind versus the body:

I have found it easier to hold uncomfortable postures and understand that it's not just about being able to hold it but to know that if I can deal with uncomfortable things and come to terms with them.

Lastly, Taylor reported enjoying the optional additional session format of yoga and mindfulness during week 10, suggesting the two approaches are complementary to one another.

Summary of Post-Program Interview

In the post-program interview, Taylor reported recognizing the value of being present and appreciating each moment. The major themes included: breathing exercises, physical response to stress, thought recognition and effective strategies. During the post-program interview and throughout the program, Taylor has reported sharing knowledge with friends and family while also practicing the skills in real life situations. For example, they returned to school after a weekend out with friends and was eager to discuss how they applied breathing techniques learned during the YWP. Taylor reported the ability to remain calm in an anxious situation by accessing breathing techniques described in the YWP:

In a lot of situations I get myself into, I come back to breathing, which is really weird because I'm usually like oh my God, I'm going to get in trouble for this and then I, I freak out even more about what's going on and instead I just think breathe, relax, it's okay, everything will be okay eventually just own up, be responsible and recognize it

Although Taylor reported that loving kindness was a challenge, they described experiencing an increased awareness of how “unkind” Taylor was to Taylor. They further suggest that by practicing mindfulness people would be calmer, there would be less self-harm amongst teens and families would communicate more effectively with more appreciation for those around them:

People would be so much calmer. And I don't think there would be as much self-harm in teenagers or youth I guess. I honestly don't think it would be as high as it is now, and I think there'd be less, less yelling in families and kind of more appreciation for everybody and everything around people.

It is important to note that Taylor also described recognizing personal responsibility for their self-care as suggested by the following response: “Before this, it didn't feel like I had an option to participate in taking care of myself or learning how to, and it was cool to take responsibility and do it on my own.” Throughout the program, Taylor described having a new-found appreciation for self-care during discussions within the group and one on one.

Summary of Qualitative Data

The qualitative reflections and post-program interview data provided an in-depth perspective of Taylor's journey through mindfulness and yoga education with a goal to decrease perceived stress and increase the ability to regulate emotions. Common themes within the qualitative data included: relaxation, a sense of calm, breath work, visualizations, and the identification of physical symptoms from stress, the recognition of emotional reactions during difficult situations, recognizing feelings as emotions, the ability to focus and an improved appreciation for self. Throughout the program, Taylor would visit my office to discuss situations where they utilized strategies discussed in the YWP. Taylor was eager to share the new-found appreciation for learning to be present using breathing techniques to remain calm during emotionally and mentally challenging moments. Taylor shared the desire to provide the recently acquired knowledge with others which I believe was important in assisting them to learn how to transfer the skills from the YWP from one setting to another. Taylor's struggle with self-compassion is not unforeseen as this has been an issue I have been assisting Taylor with for many years. Despite the difficulty adopting the concept of loving kindness, I have observed that

Taylor has achieved a firm grasp of the concepts with a willingness to use the strategies as well as share them with others.

Converging the Data – Quantitative and Qualitative

Taylor's perceived stress score (PSS) indicated a decrease in perceived stress from high to moderate that is evident throughout the YWP as seen in reflections, observations and discussions. In the post-program interview, Taylor reported:

I liked learning how to relieve stress, in no matter what situation it is, and the, the box breathing is probably the most useful thing I've taken from this. I do it all the time. Um, I've learnt how to cope with things and when I take stress, I just, I put it in my head and I put it on a piece of paper, I look at it and realize I have to do it and just come to terms, that's life and I can't stress about it because stressing isn't going to do anything for me except drive me crazy.

Self-regulation (SRQ) was not impacted and possibly impaired. Taylor's SRQ score demonstrated a move in the opposite direction from the lower end of high to lower end of moderate capacity. This post-program score does not reflect the data provided in the post-program interview. Taylor described a new-found perspective and empowerment directly related to the YWP: "Before the program, it didn't feel like I had an option to participate in taking care of myself or learning how to, and it was cool to take responsibility and do it on my own." Taylor was eager to discuss all of the benefits they experienced from program participation weekly and provided detailed accounts of utilizing many of the techniques presented during the YWP.

Rumination can just pile up for me until it's too much and my body breaks down. I become closed off and see the bad in everything. When learning how to let go of thoughts that weigh me down, it sounds so easy yet when trying it can be difficult. Just knowing I'm in control of how bad/good a situation is and why am I letting it affect me when I could be a positive person

In terms of emotion regulation (DERS), Taylor's score indicated a decrease in their ability to regulate emotions over the 8-week program, suggesting that the program has had a negative impact on emotion regulation moving from what appears to be an average ability to regulate emotions to difficulty regulating emotions. Throughout the program, Taylor reported that they were expected to internalize emotions to avoid

experiencing or displaying negative emotional responses therefore the increase in score is not surprising. In week 5 of mindfulness, Taylor disclosed the following:

Going through the waves of emotions made me nervous. I didn't want to acknowledge my negative thoughts and feelings. I'm not good with feeling upset because I was always told not to cry when I was upset. To have to go on a wave of emotion through my hardest/roughest memories would be very hard to handle.

For many years, I have observed Taylor conceal intense emotions related to stress. Although the DERS scores do not reflect an improvement in emotion regulation, I believe that Taylor's ability to deal with difficult emotions more effectively has improved as a result of participation in the YWP. In the post-program interview, Taylor described a new-found appreciation for living in the moment which they believe is recognized by others:

The people around me notice that just in general my heightened stress and always being like really bouncy, I have to get this done, I have to get this done, I've just kind of mellowed out a lot.

Taylor's mindfulness score indicated an increase of mindfulness as observed throughout their reflections during the program. Present moment awareness is a concept that Taylor referred to often citing a focus on the breath to return to the present as one of many of the techniques Taylor embodied throughout the 8 weeks. During week 3 of mindfulness, Taylor described following the breath to experience present moment awareness:

Strategies I've learned to stop wandering thoughts are to focus on the movement of my breath. From the rise of my stomach to the rise of my rib cage to the expansion of my lungs. To just dismiss negative thoughts, I let them pass through like clouds in the sky.

Throughout the program, both in the reflection process and through conversation, Taylor was able to articulate specific examples of applying the techniques learned in the YWP to remain in the present moment therefore I believe that the increase in mindfulness is an accurate depiction of their ability to practice mindfulness

The Post Pre- Retrospective Assessment scores indicated an increase in emotion regulation, perception of stress and well-being. This is evident in conversations,

as well as written reflections throughout the YWP. Weekly, Taylor reported the impact the program was having on their improved ability to manage stress and emotions. Taylor made a point of connecting with me on a daily basis to describe situations in which they were able to utilize techniques from the YWP. As new concepts were introduced, Taylor described being “blown away” with what they did not know about themselves and their management of stress and emotions prior to the program. Taylor reported that as a result of participation in the YWP, “My quality of life has changed. I just appreciate everything a lot more.”

Scores reported by Taylor for perceived stress pre-post mindfulness and yoga sessions indicated a decrease in stress as a result of session participation. Throughout the program every reflection provided a detailed explanation of what they gained from the session. Taylor was able to articulate a response that made me feel like I could picture exactly what they were experiencing. The process allowed Taylor to describe challenges and triumphs from session to session. Many of the reflections were cathartic in nature, which may have allowed Taylor to shift perspective for many of the topics; for example, during week 4 of mindfulness Taylor recognized having control of how they respond in challenging situations and that their thoughts are just thoughts, not fact. In my opinion, these realizations freed Taylor from feeling trapped in the old ways of coping perhaps improving perceived stress. I see this process as having been a very powerful one for Taylor, which is evident in continued discussion about mindfulness long after program completion.

Concerning the Positive Youth Development Questionnaire (PYD), Taylor’s scores indicated an elevated level of self-confidence, which conflict with my observations. The PYD was administered prior to program participation, and I speculate that Taylor reported an over inflated view of self which was made more apparent throughout the program and is reflected within the post- pre-retrospective assessment. Self-confidence has historically been an area of concern for Taylor, which is not reflected in the PYD questionnaire. Empathy scores were above the mean of the rest of the population, which is line with reflections provided during loving kindness meditations, as well as through years of interaction and observation. Taylor is the type of person to put the needs of others first regardless of the impact it has on their happiness.

Overall Observations and Conclusions

In my opinion, Taylor has evolved from an internalizing individual to having made the most significant change of all participants, despite the corresponding scores. Initially, Taylor internalized stress and emotions until an explosion would occur, which was debilitating for at least 24 hours and currently, I am observing an individual with a tool box of strategies to pick from given all situations. I have observed Taylor's mental shift from avoiding to recognizing, observing, understanding, and managing emotions in a variety of settings. Taylor has taken this learning a step further and shared the wealth of knowledge with those around them. The sharing of knowledge is a powerful indicator that Taylor values the skills, strategies and techniques acquired through participation in the YWP. Before the YWP, Taylor never considered the impact of loving kindness and self-compassion on self-confidence. It has been through this practice that Taylor has developed the understanding that they deserve loving kindness as much as anyone else.

Dale

Dale has grown up in a two-parent home, and has belonged to the school community for most of their educational experience. Dale is a senior student and self-reported high achiever whom I have known for more than five years. I have assisted Dale with various issues including: cutting, suicide ideation, sibling conflict, and self-reported anxiety attacks. In my experience with Dale, the struggle to manage emotions has been their greatest source of difficulty. Dale can be described as an insecure, vulnerable and fragile student with extremely poor coping skills. They demonstrate a strong desire to be accepted by both peers and adults, made evident in their constant apologetic nature. I view Dale to be a "pleaser" type of personality; this has been observed through their consistent apologizing for situations unrelated to themselves. For example, I have observed social situations where a peer is upset about something where Dale is uninvolved and they will apologize and cry as though it was their fault. I have also had many conversations with Dale's peers regarding how exhausting it is in dealing with all of their insecurities. During the pre-program interview, Dale described situations which cause stress, including, parent expectations, planning for university, family issues, social and academic aspects of life. Dale suggested that parent expectations of academic achievement tend to be the biggest source of stress:

I feel like you're already stressed about school and getting the grades that you need to make your parents happy. And then if you get a B, your parents will be like well if you got a B, why couldn't you have gone that extra step and got an A?

Dale cited emotions such anxiety as an indicator of stress before participation in the YWP. They described the escalation process of their stress response linking stress to anxiety and ultimately the activation of an anxiety attack particularly related to academic failure:

If I'm stressed about something, it's going to cause me to be anxious about it at the same time, which could result in me having an anxiety attack. And if the stress is related to something academic, the stress and anxiety of failing is definitely bad for my anxiety and just 'cause I just don't want to fail and I don't want to not do well, which causes like anxiety of like being not good enough I guess, and then just like this kind of snowball effect that intertwines with stress and anxiety.

Dale reported accessing tools such as four-square breathing (box breath), isolation, and clearing the mind to manage anxiety attacks. It should be noted that their mental health symptoms do not require medication; therefore, talk therapy in the school setting was implemented as a solution to Dale's anxiety affecting their academic success. As the school counselor, I worked with Dale extensively over the past few years with the goal of teaching Dale effective methods for managing the effects of high anxiety, stress and anxiety attacks. Although it appears that the majority of stress and anxiety is rooted in academic experiences and parental expectations, it should be noted that I have observed a variety of other areas that have historically caused anxiety for Dale. For example, I have worked with Dale around every possible relationship configuration such as friends, siblings, parents, teachers, community members and even strangers. Dale is overly sensitive and often negatively perseverates on comments made during conversations that Dale has with peers and adults. They have struggled with social perception for as long as I have worked with Dale, and it is important to note that although Dale appears to be motivated to change, it has been years of processing to get to this point.

During the pre-program interview, Dale could not report any methods of coping with stress as suggested by Dale's response: "I don't think I've found a way to cope with stress yet. I feel like I just kind of put up with being overwhelmed and overstressed and

overtired and stuff." Despite Dale's inability to identify strategies, as the interview progressed, they reported that in the past, they would use self-injurious strategies such as cutting which has been replaced with purposeful sleep deprivation:

I think it would have used to be cutting but I haven't done that in months and months and months. Also I think just focusing harder and putting extra stress to, like an extra pressure on myself to not cut myself. And then I think I replaced that with not sleeping, so just staying up later to do everything I need to do to eliminate my stress and then, but that always can result in being like overstressed because you didn't get enough sleep and it's kind of this negative snowball.

As Dale's school counselor, their self-injurious behaviours have been assessed using SD #35 protocol. All observations and recommendations have been reported to Dale's parents as well as the appropriate outside agencies to ensure the safety of Dale. It should be noted that, as the school counselor I have had experiences where Dale has confided in me that they have difficulty adopting the practice of strategies in part because Dale has been enabled to continue to utilize poor strategies by both family and friends. On many occasions, I have spoken to Dale's parents to reinforce strategies discussed in talk therapy at home, where there has been no follow through by Dale or parents. This situation has been observed from the countless interactions regarding issues around mental health symptoms and sibling conflict over the duration of my time as Dale's school counselor. This information was considered when creating this account in an effort to provide as complete a depiction as possible of this participant.

Quantitative Data

The following section outlines quantitative data comparing Dale's scores to the mean of the other participants. Stress (PSS), Self-Regulation (SRQ), Emotion Regulation (DERS), Mindfulness (MAAS), Post-Pre- Retrospective Assessment, Pre-Post Mindfulness and Yoga session perceived stress scores and Positive Youth Development (PYD) are included in the table. When Dale heard about the program, they were the ninth participant to submit all the documentation required to participate in the program. Dale attended 8 of the 8, mindfulness sessions and 4 of the 8, yoga sessions. Dale attended optional weeks 9, 10 and 12 but missed week 11 due to other commitments. On average participants attended 6 of 8, mindfulness sessions and 5 of 8 yoga sessions; therefore, Dale was above the average in terms of attending weekly mindfulness sessions, but below the average in terms of attending yoga sessions.

Table 4.20. Dale's Quantitative Scores

Perceived Stress Scale (PSS) 10 item version	Dale's Total Score		Difference (post minus pre)	Total Participant Mean & SD		Difference from the total participant mean	
Rated on a 5-point scale. High numbers indicate high perceived stress. Minimum score of 0 maximum score of 40 Range 0 – 13 low stress 14-26 moderate 27-40 high perceived stress	Pre 21.0	Post 13.0	-8.0	Pre 23.3 (5.7)	Post 20.0 (5.6)	Pre -2.3	Post -7.0
Self-Regulation (SRQ)	Dale's Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference from the total participant mean	
Rated on a 5-point scale. Minimum score of 63 maximum score of 315 Range 63-213 low or impaired capacity 214-238 intermediate/mod capacity 239-315 high intact capacity	Pre 217.0	Post 230.0	+13.0	Pre 210.0 (23.7)	Post 215.4 (22.7)	Pre +7.0	Post +14.6
Difficulties with Regulation (DERS)	Dale's Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference from the total participant mean	
Rated on a 5-point scale. Range: higher numbers indicate greater difficulty in regulating emotions.	Pre 99.0	Post 64.0	-35.0	Pre 102.5 (23.5)	Post 93.0 (19.2)	Pre -3.5	Post -29.0

Mindful Attention and Awareness Scale (MAAS)	Dale's Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference From the total participant mean	
Rated on a 6-point scale. A higher score reflects higher level of mindfulness. Minimum score of 1 and a maximum score of 6. An average score is 3.86	Pre 4.3	Post 4.7	+0.4	Pre 3.5 (0.9)	Post 3.8 (0.8)	Pre +0.8	Post +0.9
Post-Pre- Retrospective Assessment	Dale's Total Score		Difference (post minus pre)	Total Participant Mean & SD		Difference From the total participant mean	
Rated on a 6-point scale Measures perceived emotion regulation, stress and well-being pre- and post program. Minimum score of 0 and a maximum score of 80. An increase in score from pre- to post would indicate increased perception.	Pre 28.0	Post 74.0	+46.0	Pre 29.7 (10.8)	Post 59.8 (7.1)	Pre -1.7	Post +14.2
Mindfulness Sessions Stress Scores	Dale's Mindfulness Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference From the total participant mean	
Rated stress on a 10-point scale. Range: higher numbers indicate greater perceived stress 1 not stressed at all and 10 being extremely stressed.	Pre 5.6	Post 1.6	+4.0	Pre 6.0 (2.3)	Post 3.0 (1.2)	Pre -0.4	Post -1.4

Yoga Sessions Stress Scores	Dale's Yoga Mean Score		Difference (post minus pre)	Total Participant Mean & SD		Difference From the total participant mean	
Rated stress on a 10-point scale. Range: higher numbers indicate greater perceived stress 1 not stressed at all and 10 being extremely stressed.	Pre 5.4	Post 3.0	-2.4	Pre 5.4 (1.5)	Post 2.7 (1.1)	Pre 0	Post +0.3
Positive Youth Development Questionnaire (PYD)	Dale's Score for Self Confidence (Pre-Program only)		Total Participant Mean & SD	Dale's Score for Empathy (Pre-Program only)		Total Participant Mean & SD	
Rated on a 4-point scale. A maximum score of 32 indicates self-confidence and empathy. A minimum score of 8 indicates low self-confidence and lack of empathy.	23.0		24.7 (3.9)	26.0		25.9 (4.1)	

Summary of Quantitative Data

The data from Table 4.20 indicates that after attending the YWP, Dale experienced a positive impact on stress, self-regulation, emotion regulation, mindfulness, perception of well-being as well as a positive impact on stress immediately following mindfulness and yoga sessions. Overall, the quantitative data suggests that Dale experienced a positive shift in all areas of interest for this research. Dale reported a decrease in perceived stress from moderate to low and although they reported an increased capacity to self-regulate (SRQ), they remained in the range of moderate capacity as a result of program participation. In terms of emotion regulation (DERS), Dale's score indicated an increase in their ability to regulate emotions over the 8-week program suggesting that participation in the program had a significant impact on improving emotion regulation. Dale's mindfulness score indicated an increase of mindfulness and is within the combined participation mean. The Post Pre- Retrospective Assessment scores indicated an increase emotion regulation, perception of stress and well-being that is slightly above the mean of the population. Scores reported by Dale for perceived stress pre-post mindfulness and yoga sessions were within the mean of the

population but lower post mindfulness sessions as compared to the mean of the population. The Positive Youth Development Questionnaire (PYD) scores indicated below average levels of self-confidence while empathy is slightly above the mean. Dale reported that *doing what they believe is right regardless of the consequences socially* as well as *standing up for what Dale believes in even though peers disagree* was extremely important. While Dale holds these values as important, there were conflicting views in one of Dale's responses regarding self-confidence. For example, Dale identified that at times *they think that they are no good at all* while on another occasion Dale reported that Dale is *glad that Dale is Dale* and that *they have much to be proud of viewing life as having purpose with a bright future as an adult*. From an empathic perspective, Dale *dislikes the idea of others being taken advantage of, being treated unfairly or when bad things happen*. Dale reported *feeling sad when others are without the things that they have in life as well as when people do not have friends, or are hurt or upset in anyway*. My observation of Dale's self-confidence conflicts with how they responded to the questionnaire. I believe that Dale lacks self-confidence as observed throughout the years of counselling. Dale's responses for empathy are in line with their observed behaviour with friends and others around them. In my opinion, Dale has more empathy for others than self-compassion as noted through discussion and observation throughout the program. Although Dale reported having benefited from participation in the YWP, I view Dale as a "pleaser" type personality and suspect that their scores may be inflated for social acceptability which should be kept in consideration throughout this account.

Qualitative Data

Qualitative data includes pre- and post-program interview data as well as weekly reflections from both mindfulness and yoga sessions. The pre-program interview was summarized to provide a brief description of Dale's views of emotion regulation and stress prior to participating in the program as outlined in the introduction of this vignette. Dale's post-program interview and reflections were summarized to provide a fuller understanding of the effects of program participation.

Summary of Mindfulness Reflections

During Dale's reflective process after each mindfulness session, they focused on the physical aspects of stress, describing how the practice of mindfulness helped to relieve muscular tension as a result from stress. The major themes included: the

recognition of tension, present moment awareness, a sense of calm, breathing exercises, an improvement in the ability to refocus, and the identification of physical and emotional symptoms from stress. In week 6, Dale reported:

I have learned that I feel tension throughout my body when I am stressed especially in my joints, wrists and calves. I also feel it emotionally because I know and feel my emotions being all over the place and hard to control, and I won't be able to form proper sentences and responses because I can't pull them out of my mind. I now practice a lot more breathing when I'm stressed. I know I tend to forget to breathe and not be in the moment, and now I try to be more mindful, and take a moment to refocus and de-stress.

Dale identified the benefits of using the breath to create a relaxed and calm physical state throughout the reflective process. The desire to learn and participate was evident from week to week as displayed through Dale's promptness to each session and willingness to contribute to group discussions; further, Dale attended two mindfulness sessions in week 7 in order experience the lesson a second time, highlighting their motivation to learn.

Summary of Yoga Reflections

Dale's reflective process, after each yoga session, focused on the realization how stress affects them from a mental, emotional and physical perspective. There was acknowledgment of tension in the physical body in the first week of yoga. Attention and awareness to the difficulty of some postures due to feeling tired causing frustration for Dale. Dale reported that although the sessions were calming, there were moments they were challenged by some of the visualizations. For example:

In today's session, I felt rejuvenated and calm and just really present. When we pictured ourselves on the beach and all the details of it I started to get really anxious and had to reassure myself that everything was going to be ok and that I was ok.

During optional week 9, Dale described feeling an improvement in the awareness of surroundings, becoming more grounded as well as experiencing a decrease in stress. Dale reported feeling confident and calm for provincial exams knowing that they will be "breathing properly and thinking clearly". Lastly, Dale reported that although they enjoyed the optional additional session format, it was too short in duration.

Summary of Post-Program Interview

Post-program interview data indicated that Dale has learned “what it’s like to feel more centered, grounded and focused.” Dale described observing the breath and being generally more observant specifically in test taking situations to relieve the effects of stress and boredom. Dale reported being calmer with a notable decrease in anxiety attacks over the duration of the program. When Dale had the realization that the occurrence of anxiety attacks has decreased, they were surprised as described in the following:

I have not had as many anxiety attacks actually. Like I haven't really even noticed until now, I haven't thought about it because they haven't been happening. I used to go from like a couple of them a week to maybe like only one or two, like and like, or none at all. Oh, oh-I just noticed that. Oh.

Dale reported that the combination of yoga and mindfulness assisted them to “de-stress and feel calm like I've been put back into my own body.” Dale described an ease to breathing, walking and living in general after practicing yoga and mindfulness together. Dale also reported that the YWP taught them how to use the breath to calm the mind and relax the body. Although Dale reported many benefits to participation, they also described negative experiences during a yoga class

There was this one day in, in yoga where we were lying on our backs and we had to envision we were in the ocean and like all our thoughts were waves that went by and I like had an anxiety attack and I thought like I was dying and drowning.

Although this exercise was distressing, Dale reported that the modifications we developed together were a helpful alternative. Other challenges noted by Dale included attending sessions with friends and how closing their eyes in a group setting was difficult at times, but knowing that they had the support of the group over time helped Dale to became more comfortable.

Summary of Qualitative Data

The qualitative reflections and post-program interview data provided an in-depth perspective of Dale’s journey through mindfulness and yoga education with a goal to decrease perceived stress and increase the ability to regulate emotions. Common

themes within the qualitative data included: the recognition of tension, present moment awareness, a sense of calm, breathing exercises, an improvement in the ability to refocus, the identification of physical and emotional symptoms from stress and the realization that many of the visualizations increased stress and anxiety as opposed to alleviating it. During the yoga reflections, I observed symptoms related to Dale's mental health that interfere with their inability to effectively regulate emotions, such as worry that has impeded their ability to engage in some of the visualizations presented during the YWP. For example, mindfulness education often referred to water visualization (the mind is like the ocean), which became a barrier for them to access as a tool. On more than one occasion, I had to work with Dale individually to assist them in developing effective visualizations such as lying on a grassy knoll watching thoughts pass by like clouds as opposed to being at the bottom of the ocean watching thoughts pass by like waves. Despite the challenges surround visualizations, Dale reported an appreciation for participation in the YWP.

Converging the Data – Quantitative and Qualitative

Dale's post-program perceived stress score (PSS) indicated a decrease in perceived stress from moderate to low. This score is reflected throughout the reflections during the program as well as in the post-program interviews and through general discussion. During the post-program interview, Dale reported:

I feel like I've changed a lot since we started yoga doing it has made me feel more grounded and aware of my surroundings and I've also noticed I've been way less stressed.

It should be noted that Dale would come to my office to report experiencing a decreased level of perceived stress on a number of occasions and gave 100% credit to the program. Dale was able to describe specific situations in which they were confident in using the skills acquired through participation in the YWP for example, during week 12, Dale reported: "I haven't really been too stressed or worried about exams until lately. When I'm taking my socials provincial, I know I'll be breathing properly and thinking clearly. I'll be going into the provincial more confident and calm." This response suggests an improved ability to manage stress with the skills to combat the effects of stress with ease.

Although Dale's post-program self-regulation (SRQ) score indicated an improvement in their capacity for self-regulation, the score remained in the range of moderate capacity. During the post-program interview, Dale described a shift in awareness stating the following:

So, since I have been like paying closer attention to like my body and stuff, I've been able to help from getting like having my anxiety attacks go full on. It's mostly just that sense of it coming on and then kind of going into it, but like kind of finding a way to pull myself out.

This response suggests the improved ability to identify and manage intense emotional experiences by accessing strategies to reduce its negative effects.

Dale's post-program emotion regulation (DERS) score indicated an increase in their ability to regulate emotions over the 8-week program. The decrease in score corresponds with information from Dale's post-program interview: "I find that sometimes I feel like with certain emotions I'll be all or nothing. And I find that since the program that I've been able to get over it a bit more." Dale has reported throughout the program having moments of clarity particularly through recognizing what creates anxiety for example the visualizations introduced in the program. It is important to note that, in the past, Dale would internalize anxiety triggered from situations which caused anxiety and during the program, Dale became very vocal to disliking some of the visualizations and I was able to work with them to modify the visualizations so that they were pertinent and effective for Dale. This, along with Dale's recognition that anxiety attacks have decreased since the program, are proof in Dale's ability to regulate emotions have improved as a result of program participation. It is important to note that although Dale's scores and reflections show an improvement in the ability to regulate emotions, this was not observed prior to the program, and their pre-program DERS scores do not reflect what was observed throughout Dale's participation in the program.

Dale's mindfulness score indicated an increase of mindfulness that was observed throughout the program. During the post-program interview, Dale reported: "I notice that halfway through the program, if I was upset, I would focus on my breathing and I would give it like a day and I'd be like okay." Throughout the program, Dale was able to identify many occasions in which they mindfully listened, walked and ate. Dale communicated a

strong desire to practice mindfulness due to the impact the experience has had on their daily life.

The Post Pre- Retrospective Assessment score indicated an increase in emotion regulation, perception of stress and well-being. This improvement was both observed and reflected upon during and after the program. Dale reported an improvement in managing stress and emotions as well as the identified the cause of Dale's anxiety, which they were not able to recognize prior to the YWP. In the post-program interview, when asked what Dale learned during the YWP, they described the experience as follows:

I feel more centered and more grounded and more, like I don't just let things pass me by. I've noticed that I've become a lot more observant. And just a lot more, focused on my breathing like all the time. Like if I like, even if I'm just like bored or have nothing to do, I'm like I want to do some breathing exercises.

In my opinion, Dale gained great insight through participation in the YWP, which will serve them throughout development particularly in the area of Dale's mental health. Having the knowledge and the tools to effectively manage emotions related to anxiety and stress was an area in which Dale required improvement, and, I believe were addressed throughout the program.

Scores reported by Dale for perceived stress pre-post mindfulness and yoga sessions indicated a decrease in stress as a result of session participation. Mindfulness appeared to have a greater impact on levels of stress post-program than yoga. This could be due to Dale's inability to do some of the postures combined with the anxiety provoking visualizations incorporated with the yoga class. On occasion, the class would start and end with a visualization practice, which may have negatively impacted Dale's ability to reduce perceived stress. During week 2 of mindfulness, Dale described the program as an effective method of reducing tension related to stress: "I really notice how loose my shoulders feel and how relaxed and regular my breathing is. I notice my body's not holding any tension and I feel kind of head – hazy, but also really clear."

Dale's scores for the Positive Youth Development Questionnaire (PYD) indicated a slightly below average level of self-confidence. I would have predicted a much lower score for self-confidence due to Dale's struggle with this area historically. Although a

post-program measure was not taken, I believe their self-confidence improved over the course of the YWP. In the post-program interview, Dale's response suggested a sense of empowerment over what Dale had considered out of their control prior to the YWP:

I love how it taught me like to basically like train myself to breathe like in a way that just was better and just more like free flowing I guess. I don't know how to describe it. I just know that like I get really happy when I think about it.

Dale's scores for empathy are slightly above the total mean, which aligns with their reflections. Dale is the type of person to put the needs of others above their own in order to be socially accepted.

Overall Observations and Conclusions

Dale was an enthusiastic participant who displayed tremendous growth throughout the program evident through the ability to identify how stress affects them physically, emotionally and mentally. Dale reported many moments of realization and recognition throughout the program regarding understanding the impact of stress on emotions. Similarly, these personal acknowledgements may help to demonstrate a reasonable argument that Dale's experience in the YWP improved all aspects of well-being. It is important to consider the potentially exaggerated effects of the program, in the hope of pleasing me. There were times when I suspect that Dale's responses were not a reflection of an authentic experience, but one that they desired and this was taken in consideration while creating this account.

4.16. Convergence of Findings: Qualitative and Quantitative Data

A grounded theory approach to thematic analysis was used to provide for an interpretation of the students' experiences (Maykut & Morehouse, 1994). The combination of qualitative and quantitative methods provides a rich perspective on how a program might influence various aspects of a youth's perspective of an intervention. Qualitative feedback can enhance our understanding of quantitative findings. This mixed methods convergent study was designed to explore the effects of a mindfulness and yoga program on emotion regulation and stress. The information gathered through

interviews, reflections, observations and questionnaires was converged to provide a detailed account of the experience from the perspective of youth and their caregivers. Further, this information provided valuable insight into the development of curriculum to support the education process in assisting youth in managing, dealing and coping emotions related to stress. This study is an effort to respond to the ongoing inability to connect with mind and body when experiencing intense emotions related to stress in present-day use and the potential that exist for developing the capacity. In converging the data collected during the YWP, eight qualitative categories, twenty-one emergent themes and 107 sub-themes were paired with the six measures of statistical data to provide a rich description of participant experiences throughout the YWP. In converging the data, I have referred to all methods of data collection conducted throughout this study with the exception of the pre-program interviews. Post-program interviews, post-session reflections, parents' observations, participants' vignettes, and researcher's notes paired with the statistical outcomes of the pre- and post-program quantitative measurements were compared and contrasted in order to inform one another. A visual representation of the convergent design timeline is outlined in Figure 4.16.

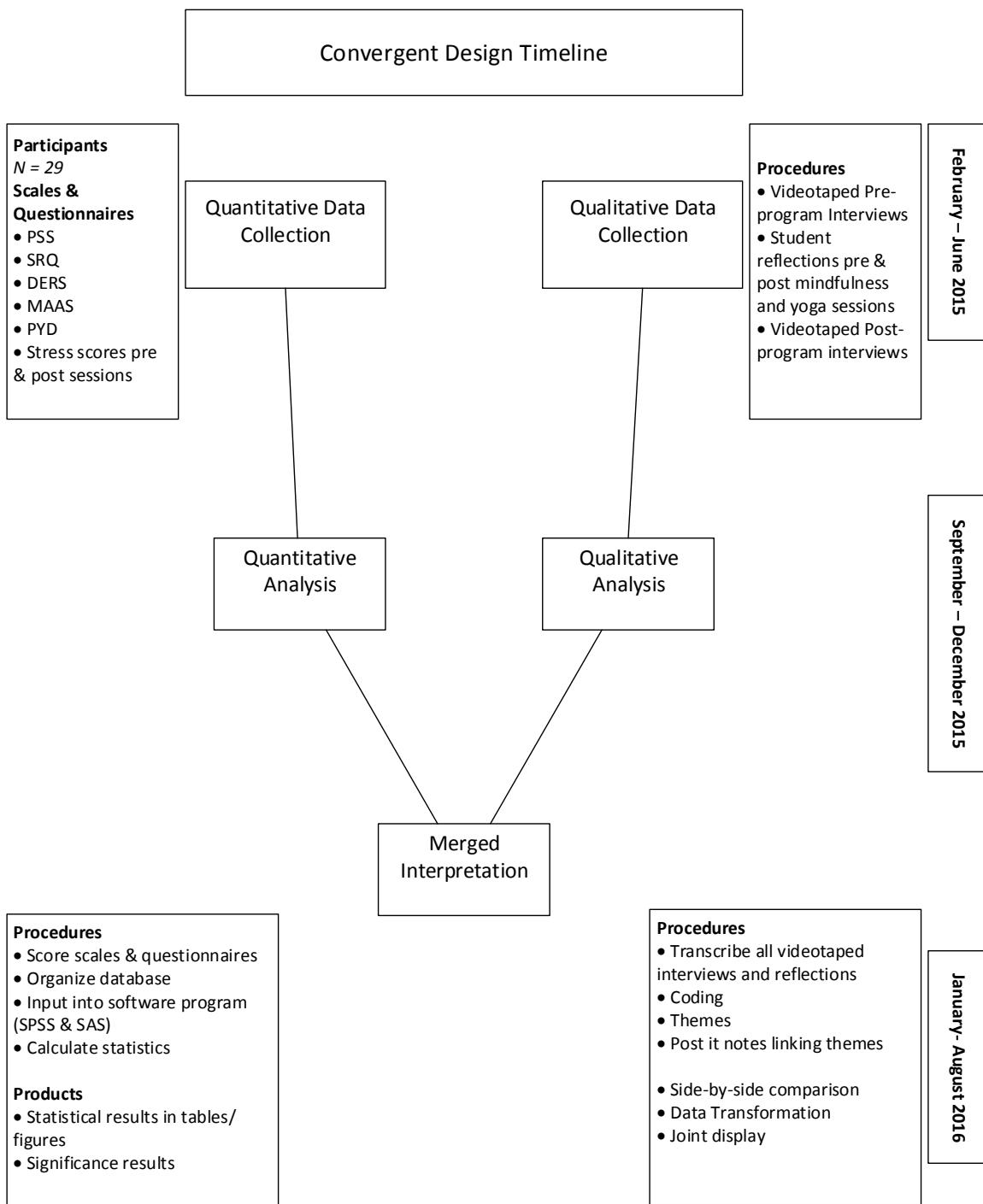


Figure 4.16 A visual representation of the convergent design timeline

Pre-program interview data were solely used for the vignettes and to assist in the development of the program. Throughout this summary, I will be examining the quantitative measurements along with findings from the thematic analysis to assist describing the outcomes of this research. This approach to converging data is designed

to address the research question and the four main goals stated in Chapter 1 including: (a) Drawing awareness and attention to the physical, mental and emotional response to stress, (b) Introducing and encouraging the development of skills/strategies to regulate physical, mental and emotional responses to stress, (c) The acquisition and application of skills to manage intense emotion and stress that can be generalized to daily life, (d) Encouraging critical reflection by youth on how they cope with stress by learning to attend and focus through mindfulness and yoga practices, and by developing awareness of habitual responses that may be unhelpful or unhealthy. Based on these main goals it is suggested that the findings from the present study will indicate: (a) an improvement in self-reported emotion regulation following the YWP, (b) an improvement in self-reported perceived stress following the YWP, (c) an improvement in self-regulation following the YWP, (d) an improvement in mindfulness following the YWP, (e) a shift in awareness of how to foster personal well-being, (f) a better understanding how empathy and self-confidence play a role (if any) in the impact of a school-based mindfulness and yoga program.

The convergence of findings will be addressed in the following manner for example: a comparison of the quantitative measures PSS along with the self-reported perceived stress pre- and post-session mindfulness and yoga coupled with the emergent qualitative themes from the category stress were combined to provide a thorough description of participant experiences with stress during the YWP. This approach was used to address all areas of interest including: emotion regulation (DERS), stress (PSS and session measures), self-regulation (SRQ), mindfulness (MAAS), well-being (Post-Pre- Retrospective Assessment), positive youth development (PYD) and overall impact of the YWP program as described by participants through quantitative and qualitative measures.

4.16.1. Emotion Regulation

Emotion regulation was measured using the Difficulty in Emotion Regulation Scale (DERS). Results from the Wilcoxon signed-rank test indicated a significant improvement in emotion regulation from pre- to post-program.

During the YWP, I introduced the concept that we all have the power to change our experience with emotions by becoming aware of and learning how to manage them

by applying effective skills. Many participants described this concept as, “something they had not considered before.” Understanding and providing youth with skills to regulate emotions was one of the main topics under investigation for this research. The themes for category two, emotion regulation included: awareness, managing and strategies for managing emotion regulation outline participants’ reported experiences during the YWP and parallel the desired outcome of this research. It is evident through participant responses that many of them gained an incredible amount of personal insight in the category emotion regulation increasing awareness and management of emotionally challenging situations. One participant stated:

I used to cry a lot when I was stressed and now I'm motivated to practice the skills we learned in mindfulness and yoga. I feel like I can avoid getting stressed now by taking a step back and thinking and being calm. I know I can just figure things out and that it will all be OK. (Grade 10 Participant).

Parent observations from category two emotion regulation included the following themes: (a) ability to regulate emotions and (b) awareness of emotions. Subthemes included: manage, improved emotional reactivity, awareness of the escalation of an emotional response, the implementation of strategies improving the awareness of emotions and general awareness. Parent observations parallel participant feedback suggesting an improvement in emotional awareness and management through the application of strategies adopted through YWP participation.

It should be noted that although both pre- and post-DERS scores indicated above average difficulty in regulating emotions by participants compared to the DERS average population study scores, the general consensus from parents and participants was that involvement in the program produced positive notable changes in emotion regulation and awareness.

4.16.2. Stress

The most often observed significant differences occurred with perceived stress. Results indicated that more junior students reported change in PSS after the YWP (72.7%) than senior students (27.3%), and although there was a trend towards lower perceived stress after YWP, students who reported experiencing a previous mental

health episode reported more significant change in perceived stress than those who did not experience a previous mental health episode. There was also a significant negative correlation indicating that as mindfulness increased, perceived stress decreased. There was a significant change for students' self-perceived experience of Non-Clinical Mental Health. While a significant change in perceived stress was noted for juniors after yoga sessions, the senior group experienced a significant change in perceived stress after the mindfulness sessions. Finally, there was a significant difference for empathy with junior students showing greater empathy.

Stress was measured via the Perceived Stress Scale (PSS) and self-reported perceived stress before and after each mindfulness and yoga session. A Wilcoxon signed-rank test was performed with the PSS pre- and post-program data, which indicated a significant decrease in perceived stress from pre- to post-program. The written reflections, reported by participants, support the suggested decrease in total participant perceived stress. Initially participants reported having minimal strategies to access when dealing with stress and in fact were often oblivious to the impact stress had on them physically, mentally or emotionally. It was also reported by many participants that they were unable to identify situations that were causing them to experience stress. Statistical results also indicated a significant decrease in stress with the senior participants post-program. Some participants reported an inability to recognize or to apply helpful strategies when experiencing stress. One senior participant reported an improvement in this area as a result of the YWP stating:

I did not like, know what stress was really, I was just like I just like get a little anxious or whatever, like sometimes your stomach will hurt or whatever it is for different people, and I like now know what it is and like how to deal with it in my own way. (Grade 11 Participant)

One of the primary goals of the YWP was to draw awareness and attention to the physical, mental and emotional response to stress in hopes that this awareness would encourage participants to identify why, when and where they experience stress in order to apply strategies to assist in the management of it. The total mean for participant pre-session mindfulness and yoga sessions suggested an above average perceived stress while the post-session total participant mean scores fall below average, indicating a decrease in perceived stress as a consequence of participating in the mindfulness and yoga sessions. As a result of participating in the YWP, participants reported an

increased awareness coupled with the desire to manage stress as well as the application of a particular strategy to alleviate stress. One participant stated:

Since the program I try and figure out like why I'm so stressed out or anxious and then I'll try and resolve it anyway I can, or just kind of like I'll do something like the breathing exercise or like I will like write things down. (Grade 11 Participant)

Stress management requires the awareness of stress, the ability to identify causes of stress and the understanding of the implications of ongoing stress on well-being. The inability to identify triggers of stress impacts whether or not we employ effective techniques to manage it. Throughout the reflective process many participants indicated a positive shift in the ability to manage stress, which was also reflected in the PSS scores and parent observations.

4.16.3. Self-Regulation

A Wilcoxon signed-rank test indicated a significant decrease in self-regulation from pre- to post-program. Post-program scores indicated an improvement in participant's ability to self-regulate. Although the quantitative data indicated that overall participants' pre-program self-regulation (SRQ) scores suggested a low or impaired capacity to self-regulate, the qualitative post-program interview data suggest an improvement in self-regulation. This improvement was not expected given that some of the participants attended sessions sporadically throughout the program leaving gaps in their acquisition of skills. For the participants who were able to attend on a regular basis it is important to note that many of them were able to identify an improvement in their ability to recognize the benefits of using the skills and techniques acquired during the program. One sporadically attending participant reported:

I can notice when I'm stressed because I can't focus. It helps to lower my stress when we did mindfulness and yoga. I felt like it would go immediately down to zero. I still have panic attacks but I feel like I've learned how I can control them. I also noticed that my stress levels have gone down in general. I think the breathing and yoga sessions help with my stress. (Grade 10 Participant)

Category four, 'Individual benefits' provides a thorough account of participant experiences of improved self-regulation. During the latter portion of the program many

participants described a deeper understanding of their experiences with stress along with the identification of effective strategies to assist in managing stress in their reflective responses. One participant reported:

I never used to be able to identify when I was stressed before it was too late. Now I can try to resolve it I actually listen to my body and think about why am stressed and not try to push my feelings away. Now I come to terms with them trying to move past them. Now if I'm feeling stressed I just take time to sit in my room and use mindfulness to calm me down. (Grade 11 Participant)

It should be noted that all of the participants reported varying degrees of improvement in their ability to self-regulate through the implementation of mindfulness skills promoting a calm and focused state when experiencing stress. Improvements in self-regulation during and after the program were also evident in the theme “impact on mental health” in category four. The sub theme *change in the occurrence and intensity of anxiety attacks* suggested an increase in the awareness of the escalation process of anxiety attacks as a result of participating in the YWP. All 7 of the participants who self-disclosed experiencing what they perceived to be anxiety attacks reported an improvement in their ability to manage these episodes more effectively as a result of program participation.

4.16.4. Mindfulness

Mindfulness as referred to throughout this thesis is “present moment awareness” (Kabat-Zinn, 2003). Being aware of what’s going on in your thoughts and surroundings in real time is the goal of being present. A Wilcoxon signed-rank test indicated a significant improvement in mindfulness from pre- to post-program. This improvement in mindfulness was observed in the qualitative data categories: yoga and mindfulness and individual benefits. One participant stated: “I feel I have found strategies to deal with that I’ve been more conscious of being present as a result of this program.” Throughout the program participants observed and experienced what it means to be mindful in various areas of their lives (i.e. eating, walking, doing the dishes). As a result of participation in the YWP one participant reported:

I feel like I gained a lot of, awareness and more respect for things in fact. For example, when the whole eating and like thinking about what you’re eating, and let it affect you and all that, I actually kind of did

that a few times and it was kind of peaceful and it was really cool.
(Grade 11 Participant)

Many participants reported an increase in present moment awareness both through the reflective process as well as during discussions throughout the YWP. One participant described the awareness of becoming “ungrounded” with the newly accessible strategies such as breathing or present moment awareness to “ground” themselves stating:

During this program, I realized that just being more mindful of how busy my life is and like how ungrounded I can get at times and remembering to ground myself and take some breathes and kind of look around and see where I'm at is super helpful. (Grade 12 Participant)

Redirecting thoughts by accessing the ability to return to the present moment and implement techniques such as focusing on the breath when distracted was described by one participant during week 3's written reflection:

I experienced a decrease in my stress and I felt more in control of my emotions. I do find myself thinking about some random things sometimes but I am pretty good at bringing myself back to the present. My strategies include coming back to focusing on the present moment or my breathing. (Grade 11 Participant)

Several participants reported using mindfulness techniques outside of the YWP to manage anxiety, reduce emotional reactivity, prevent impulsivity, remedy distraction and to remain calm during an emotionally challenging or stressful situation. Most of the skills accessed by participants included breath work, visualizations of calm and returning to the present moment when distracted by thoughts of the future or the past. Participants noted breath work was the most often used technique accessed providing several examples both during the program and once the program was completed. Participants shared their knowledge with friends and family in order to encourage the experience of present moment awareness to help those around them when required. Personal practice was typically motivated by intense emotions and high levels of stress regarding social interactions, school related issues or self-disclosed anxiety related symptoms such as anxiety attacks.

4.16.5. Post- Pre- Retrospective Assessment - Perceptions of Well-being

The Post-Pre- Retrospective Assessment was implemented at the end of the program and was designed to encourage participants to reflect upon what they knew about emotion regulation, stress and well-being prior to participating in the YWP and their perception of how much their knowledge or perception changed if at all as a consequence of participation. The post-program scores from the post-pre- retrospective assessment suggested an above average increase in perception of well-being. The two areas that participants reported the greatest improvement in terms of perception of well-being included: (a) knowledge of resources that can help them when they are feeling stressed and unable to cope on their own and (b) recognizing the value of using mindfulness strategies in their life. One participant stated, "I found these sessions very productive and helpful to me it was the first time that some of the techniques we learned happened almost on their own" (Grade 9). The qualitative data support this awareness as described in category one for knowledge of resources and category three for the value of mindfulness. Participants were able to articulate the benefits of participation in the YWP during the post-program interview as outlined in the thematic analysis particularly in category four (individual benefits).

4.16.6. Positive Youth Development

Positive youth development was used to explore the affective roles of empathy and self-confidence as determinants in predicting the impact of the YWP on emotion regulation and stress. The qualitative results indicate that most of the participants reported the loving kindness meditation as an exercise that created a shift in perspective with regards to how participants viewed themselves with others reporting the desire to have more self-compassion and empathy. It was expected that participants with a higher level of self-confidence and empathy would benefit more from the program in terms of emotion regulation and perceived stress, hypothesizing that these qualities may allow for a person to be more in tune with themselves. Also, it was expected that these qualities would enhance the possibility of becoming open to the prospect of improved well-being which would be reflected in the post program scores and interview data.

The quantitative results suggest that self-confidence was similar between the two groups in terms of comparison but also indicate that the junior grade level showed greater empathy than the senior grade level prior to the program. These results could be reflective of stage of development, suggesting the junior group has not yet developed a negative view of the world due to less life experiences and potential lack of exposure to hardship. As children move into their teen years, typically they become self-absorbed because they are going through a process of self-discovery. This self-absorption, coupled with the inundation of technology, may have produced the perfect storm of what appears as an unwillingness to empathize but may actually be a sign of having little to no confidence to interact on an emotional level.

In retrospect, data collected pre- and post-program combined with a larger sample size and more extensive measures could be enhanced and reflect the affective roles of self-confidence and empathy in improving emotion regulation and stress. The post-program measure would also have been valuable to compare pre- and post-self-confidence and empathy and may have provided information as to how the program impacts these traits.

Table 4.21. Convergent Data Points

Convergent Data Points	Quantitative	Qualitative
Emotion-Regulation	A Wilcoxon signed-rank test indicated a significant improvement in emotion regulation from pre- to post-program (a higher score indicates greater difficulty in emotion regulation), $Z = -2.127$, $p = .03$	Many participants reported to have gained insight in emotion regulation through increasing awareness of emotions, the ability to manage emotions and the accessible strategies to manage emotions such as removing oneself, working through a situation or using a distraction.
Stress	A Wilcoxon signed-rank test indicated a significant decrease in perceived stress from pre- to post-program, $Z = -2.283$, $p = .02$	Experiencing the awareness of stress through the identification of stress, understanding the causes of stress as well as the impact of stress. Participants also reported building capacity for stress management through the recognition and application of strategies to manage stress.
Self-Regulation	A Wilcoxon signed-rank test indicated a significant decrease in self-regulation from pre- to post-program, $Z = -1.615$, $p = .11$	During the latter portion of the program many participants described a deeper understanding of their experiences with stress along with the ability to identify effective strategies to assist in managing stress in their reflective responses.
Mindfulness	A Wilcoxon signed-rank test indicated a significant improvement in mindfulness from pre- to post-program (a higher score indicates greater improvement in mindfulness), $Z = -2.267$, $p = .02$	Several participants reported using mindfulness techniques outside of the YWP to manage anxiety, reduce emotional reactivity, prevent impulsivity, and remedy distraction and to remain calm during an emotionally challenging or stressful situation. The mindfulness skills most accessed by participants included breath work, visualizations of calm and returning to the present moment when distracted by thoughts of the future or the past.

4.16.7. Summary

Although both the quantitative and qualitative data depict a shift in awareness in all areas of interest, the qualitative data reflects a more significant impact in the area of emotion regulation, stress, self-regulation, mindfulness and well-being. Results from this convergence of quantitative and qualitative data tend to support the current study's proposal that the implementation of a school-based mindfulness and yoga program does improve emotion regulation, decrease stress, and foster well-being. Findings suggest that participants learned skills that promote improved emotion regulation and stress management indicating greater well-being.

Chapter 5. Discussion

5.1. Purpose and Significance

This exploratory study investigated the impact of a secondary school-based mindfulness and yoga program designed to help improve emotion regulation, decrease stress and foster students' overall well-being. The depth and breadth of data was enhanced through the use of a mixed methods convergent design that involved various methods of data collection (i.e., interviews, written reflections, parent observations, researcher field notes and self-reported measures). The implications of this study may prove relevant not only to educators working with the study's population, but also to educators who wish to implement a secondary school-based mindfulness and yoga program.

Key findings associated with the research questions were found in the patterns of data reported by groups and the patterns observed from individual data (vignettes), as well as parent observations. Significant change was observed both quantitatively and qualitatively in all areas of interest including: emotion regulation, perceived stress, self-regulation, mindfulness, mindfulness and yoga session stress, post-pre-retrospective assessment, empathy and self-confidence. Qualitative results yielded eight categories and twenty-one major themes and 107 sub-themes that emerged related to the acquisition and application of skills to manage stress and regulate emotions. Based on these results, the YWP approach to emotion regulation and stress was an effective method of fostering well-being with the secondary students in this study. Therefore, this eight-week school-based mindfulness and program provides evidence regarding the benefits of implementing a program such as the YWP into the curriculum within the education system. These findings are summarized below followed by a discussion of the implications for the development of mindfulness education to foster well-being in relation to physical education and health curriculum in British Columbia.

5.1.1. The Impact of the YWP

Research Question: To what extent does the implementation of a school-based mindfulness and yoga education program improve emotion regulation, decrease stress and foster well-being?

The YWP was designed to empower participants to learn to regulate emotions when experiencing stress by utilizing skills and strategies acquired through a mindfulness and yoga program. Upon completion of the program, many participants referred to mindfulness as an “automatic response to challenging or difficult situations” associated with improved confidence, self-esteem and overall well-being. Subsequently, these experiences offered them the opportunity to appreciate richer intrapersonal and interpersonal relationships. Similar improvements were reported in the findings from a study conducted by Metz, Frank, Reibel, Cantrell, Sanders & Broderick (2013). The authors found that with increasing mindfulness practice, participants reported an improved sense of calm, balance and control in their emotional responses to stress. Positive findings for the YWP showed that participants reflected upon their individual capacities to develop and to utilize the acquired skills, enabling each participant to be more present in their experiences. Several participants were able to identify which techniques were especially effective, as well as to articulate the techniques that may have been perceived as ineffective or challenging to adopt. In these instances, I was able to adapt or to modify the techniques in order to accommodate the personal needs of the participants. It was through this valuable written and verbal feedback that adaptations and modifications were applied to ensure the YWP would meet the needs of the participants.

As outlined in the vignette section of Chapter 4, Dakota reported experiencing a positive impact on emotion regulation, stress and mindfulness as a result of participation in the YWP. In terms of mindfulness, common themes within the qualitative data for Dakota included: increased feelings of relaxation, a sense of calm, use of breath work, visualizations, and the identification of physical symptoms from stress, the recognition of emotional reactions during difficult situations, recognizing feelings as emotions, the ability to focus and an improved appreciation for self.

From a secondary source of qualitative data, Dakota's parent responses indicated an improvement was observed in how their child managed, dealt, and coped with stress and regulated emotions. Many of the parents reported a positive impact on their child's ability to navigate stress and regulate emotions by applying skills learned during participation in the YWP. An improvement in the awareness of the escalation pattern of emotional responses, a general awareness of emotions and the implementation of strategies to increase emotional awareness were also reported by parents suggesting positive outcomes for stress management and emotion regulation as related to program participation. Specific skills such as slowing responses, thinking before reacting, slowing thoughts and focusing on the breath to remain present and the insight to assist others to reassess the magnitude of a situation by acknowledging what they can and cannot control were examples described by parents post-program. One parent reported the absence of what was historically described as a "breakdown" at the end of the year because of participation in the YWP.

Research suggests that a secure emotional parental relationship permits both positive and negative emotions assisting in the development of emotion regulation (Cassidy, 1994). The decision to include parent observations post-program was influenced by a study conducted by Weijer-Bergsma, Formsma, Bruin, and Bogels (2011) that investigated the effectiveness of a program developed from the Mindfulness in Schools Project and that included a parent education component. The findings from the Weijer-Bergsma et. al (2011) research suggested a significant reduction in parenting stress, meta-cognitive problems and an overall improvement in behaviour regulation. This study illustrates that greater parent involvement can be correlated with adolescent health and well-being and would be beneficial when developing programs for future research.

It is important to note that negative feedback was also disclosed by some of the participants, including feelings of discomfort particularly during loving kindness exercises. Several participants reported that this exercise increased their perceived stress and feelings of anxiety.

As outlined in the vignette section of Chapter 4, Taylor described the loving kindness exercise to be "difficult" causing Taylor to feel "discomfort." Taylor reported:

When being asked to pay attention to my thoughts and feelings when practicing kindness to myself I felt discomfort. I feel the desire to be able to access self-love but not being able to allow myself to feel that way. Practicing kindness to others is what I love to do and I just never thought I needed to have love and kindness for myself.

Taylor also described their tendency to avoid emotionally intense responses for fear of becoming vulnerable or losing control. Taylor reported being fearful that some of the memories Taylor might recall would be “too difficult to handle.” As a result, Taylor chose to avoid thinking about these experiences by mentally shutting down and becoming isolated. Similarly, Taylor reported that sending themselves loving kindness evoked, what they described as, an “intense negative response” resulting in an emotional reaction that elicited a desire to remove themselves from the session. Further, a few of the participants reported that closing their eyes was sometimes difficult due to feeling vulnerable or feeling like “people would be staring at them.” Alternatives to closing their eyes were suggested to the participants, such as ‘softening their gaze’ or turning away from the other participants. This approach was more desirable for the participants who found closing their eyes to be uncomfortable.

Taken together, the mixed methods data collected from participants, parent observations and researcher field notes suggest that many of the participants experienced an improvement in their ability to regulate emotions, manage stress and foster well-being as a result of participating in the Yoga Wellness Program (YWP) while a few participants experienced periods of discomfort resulting in distraction, avoidance and rumination.

Research Question: To what extent does the YWP influence participants' ability to become aware of and attentive to their emotional responses to stress?

In order to understand how mindfulness interventions affect emotion regulation, Gross (2012) described how mindful attention directly supports adapted emotion regulation based on two major principles: (a) attention to the present with an emphasis on body sensation rather than cognitive deliberation; and (b) non-judgment which requires the suspension of judging experience to be liked or disliked, to promote acceptance as opposed to rejection (p. 554). During the pre-program interview, many of the participants reported that they were not able to recognize the relationship between

the mindfulness practice, the management of stress and the regulation of emotions, mostly due to lack of knowledge or preoccupation with the future or past. In a relatively short period of time (eight weeks), participants described personal improvement in their emotional response to stress. Similarly, they reported greater confidence in their ability to manage challenging situations more effectively through present moment awareness and attention as a result of practicing mindfulness and yoga. Subsequently, participant post-program responses reflected improved awareness and increased strategies for managing emotions and improved self-regulation. This awareness included the realization and the recognition of one's experience of intense emotions related to stress. Participants were able to communicate specific strategies such as: recognizing their physical response to stress, allowing an intense emotion to pass without trying to alter the experience, removing oneself from a situation and working through a challenge or using a distraction when learning to regulate emotions. According to Gross (2012), non-judgmental attention to the present will "support the gradual process of reconfiguring attention and cognition extinguishing maladaptive patterns of reactivity and introducing cognitive flexibility in the response to stress (p. 554).

Participants in the current study reported that through participation in the YWP they gained valuable tools to manage emotions, stress and an improved ability to self-regulate. When articulating these experiences, participants used descriptors such as being able to handle, control and deal with emotions by accessing techniques such as visualizations, breathing techniques and relaxation skills. These responses assisted in the development of the program—specific techniques reported as valuable to youth in the process of learning mindfulness principles were included. Throughout the YWP, participants were able to express the usefulness of the methods introduced to them while also providing concrete examples of when they applied them in their daily life. This further demonstrated their understanding of the relationship between mindfulness and well-being. The participants' written and verbal reflections supported their developing understanding and recognition of when they experience stress, how to manage that stress and how to regulate their emotions in ways that impact on their well-being. In other words, the data demonstrate that many of the participants experienced an improvement in their awareness and attention to their emotional response to stress because of their participation in the Yoga Wellness Program (YWP) where they were

provided with skills and strategies that helped them to positively manage their responses.

Research Question: In what ways did the participants apply the strategies and skills introduced through participation in the YWP to regulate emotions and manage stress? How were these skills and strategies transferred to daily life by each student participant?

Prior to participation in the YWP, each of the six participants, outlined in the vignettes, all reported that they “did not have many skills to access” when trying to regulate emotions related to stress. During the pre-program interview, Dale reported the use of self-injurious strategies, such as cutting and sleep deprivation, as methods of managing stress and regulating emotions. Findings from a study conducted by Bootzin and Stevens (2005) on the impact of mindfulness practices for issues of substance abuse and sleep problems show significant reductions in mental health challenges and an improvement in quality and time of sleep. Some YWP participants, such as Dale, reported similar findings; in particular, they noted a reduction in mental health challenges such as anxiety attacks and symptoms related to depression. As a consequence of participating in the YWP, Dale reported having learned “what it’s like to feel more centered, grounded and focused.” Dale described recognizing changes in their breathing and being generally more observant specifically in test taking situations to relieve the effects of stress and boredom. Dale reported feeling more calm with a notable decrease in anxiety attacks over the duration of the program. Dale reported that the combination of yoga and mindfulness assisted Dale to “de-stress and feel calm like I’ve been put back into my own body.” Dale described an ease to breathing, walking and living after practicing yoga and mindfulness together. Finally, Dale reported that the YWP taught Dale how to use the breath to calm the mind and to relax the body. Dale’s responses were similar to others with the majority of participants relaying similar feedback prior to and during participation in the program.

It should be noted that some of the participants were not able to internalize, and thus not access or implement the skills or strategies introduced to them during the YWP beyond the short term. These findings are similar to the research conducted by Huppert and Johnson (2010) suggesting that the impact of a program is related to program duration, at home practice and attendance. During the YWP, attendance was sporadic for some participants due to other commitments, illness or disinterest, all which likely

hindered the acquisition of skills. Implementation of a long-term program could prove more effective in promoting longer-term well-being.

Another factor to consider is my role as the teacher/researcher and I was required to maintain dual responsibilities in relation to some of the participants. Throughout the program, participants would continue to access my counseling service; therefore, I was privy to their difficulty in coping while also knowing their reported feedback from the sessions. For example, while a Grade 10 participant stated, "I feel like I have learned to be more calm in stressful situations and I now take things more slowly as a result of participating in the program," this participant only attended two of the mindfulness sessions and four of the yoga sessions. The same participant was in the counseling office, or the youth worker's portable, with the inability to cope with even the slightest change, challenge or difficulty in both their social and family life on a daily basis. This evidence contradicts this participant's disclosure of remaining calm and taking things slowly as a result of participating in the YWP and is perhaps the result of a desire to please me as the teacher/researcher.

Despite this observation, the qualitative data paired with the quantitative data (emotion regulation and stress) indicated that there was improvement in most of the participants' capacity to regulate emotions while experiencing stress as a result of participation in the YWP. Data collected from the post-program interviews in the categories of emotion regulation and stress indicated that participants were able to identify stress, the causes of stress for them and how that stress impacted them physically, mentally and emotionally. The identification of causal factors paired with the awareness and ability to manage stress, participants were able to cite specific strategies to improve their emotional response to perceived stress as a result of participation in the YWP. Therefore, the data suggest that participants reported experiencing an improvement in emotion regulation and perceived stress as a result of applying the skills and strategies acquired from participation in the YWP.

Research Question: How were youth able to critically reflect on how to foster well-being as a result of participating in the YWP?

From a quantitative data perspective, the Post-Pre- Retrospective Assessment captured a shift in the awareness, importance and value of well-being as a result of

participation in the YWP for both the junior and senior grade levels. Post-Pre data suggested that the participants experienced an improvement in their confidence coupled with optimism in their ability to manage stress and regulate emotions independently as a result of participating in the YWP. Participants also reported that in the event of needing help, they now had dependable and accessible resources both within themselves and within the community.

Findings from the qualitative assessment of a school-based yoga program conducted by Conboy, Noggle, Frey, Kudesia, and Khalsa (2013) indicated psychological benefits such as stress reduction, the increased ability to manage negative emotions and a more optimistic outlook on life. The qualitative data collected during the YWP provides a fuller and more descriptive account of participants' experiences indicating an impact in the area of non-clinical mental health, particularly anxiety and depression. Many participants credited the observable decrease in the occurrence and intensity of anxiety attacks and the improvement in symptoms of depression to their participation in the YWP particularly during yoga sessions. Serwacki and Cook-Cottone (2012) have suggested that ongoing yoga practice may be related to improved mood, decreased anger, decreased depression and fatigue and an improvement in the resilience of stress while reducing problematic physiological and cognitive patterns of response to stress such as rumination intrusive thoughts and emotional arousal.

Another non-traditional approach to shifting awareness of how to foster well-being included providing participants with leadership opportunities during the YWP. This approach was helpful in assisting participants in making a shift in awareness and included: assisting in the set up and closing of sessions, relating personal experiences during discussions prior to meeting (if they were comfortable), sharing information they may have found useful as a tool to support and foster learning for themselves and others including family members and friends outside of the YWP. This approach increased engagement and the generalization of techniques for participants. Many participants described feeling in control of their learning and more importantly that they perceived some influence on the learning of others; these feelings seemed to elicit a sense of importance for participants. Evidence of these effects was particularly noted during the wrap up luncheon when several participants openly reported their appreciation for

involvement in the study and believed that they were now part of an “exclusive club”. Several participants reported having shared the skills and strategies from the YWP to help them improve a friend and family member’s quality of life.

Participants reported having gained both the knowledge and the desire to experience improved well-being as a result of participating in the YWP. All participants indicated improvement in emotion regulation, perceived stress, self-regulation, mindfulness and perceptions of well-being. These findings indicate the YWP’s positive impact on participants’ recognition and understanding of well-being and how they might pursue a happier, healthier and more balanced lifestyle through the implementation of mindfulness concepts. This evidence combined with the results of the Post-Pre-Retrospective Assessment suggests a shift in awareness of how to foster well-being.

Research Question: Which findings from the YWP might help to inform curriculum development in the area of well-being in education? How might they serve the purpose of well-being education?

Similar to the Huppert and Johnson (2010) study with the Mindfulness in Schools Project, the YWP was designed to fit into the school curriculum. A key aim of this study was to gather pertinent information to assist in the development of an effective YWP for typically developing (non-clinical) secondary students in order to provide education in the areas of emotion regulation, stress and well-being. Pre-program interviews were conducted in order to gain perspectives from the youth participants about their coping strategies and skills in order to provide a baseline of data that could be drawn from during the program. Throughout the YWP, all participants provided weekly feedback in response to questions regarding their experience during the mindfulness and yoga sessions. This feedback was incorporated into the ongoing development of weekly sessions that were responsive to participant’s requests, and to negotiate the use of concepts they reported to be of value, or those that were challenging or difficult. These perspectives informed the direction of the program, whether it was to continue with a topic for a longer time because the concept had not yet been understood, whether it was a concept significantly enjoyed by participants, or whether it was the removal of specific sections due to the level of challenge or difficulty (e.g., yoga postures). During the program, many of the participants were able to grasp some concepts before others. There were many opportunities for modification, and as a facilitator, it was useful to give

attention to these opportunities to ensure that participants understood techniques for the greater benefit of learning. On many occasions, it was beneficial to reframe the concept in order for it to be understood by all participants in the session. As an educator, providing personal examples proved helpful for facilitating understanding when teaching unfamiliar concepts. During the YWP, the inclusion of personal examples was used when appropriate and when expected to be helpful. This perspective was meant to bring life to the skill, strategy or technique; the examples were intended to provide context from an experience in terms of drawing awareness to the relationship between mindfulness and yoga education and its impact on emotion regulation and stress. I believe that providing strategies and the opportunity to practice them in real life allows for students to experience concrete evidence that validates the efficacy of these skills when committed to the practice. As suggested by Huppert and Johnson (2010), long term application and repetition is required in order for youth to have the experience necessary to recognize the practices' benefits.

The collected data validate the potential use of the YWP as a model for curriculum development for the purpose of fostering well-being in an educational setting. Qualitative data suggest that the majority of youth that participated in the YWP did not value well-being as they reported living moment by moment with little regard for the future. When asked how educators might assist youth in learning to value well-being, participants suggested that teachers should try to limit the obstacles that impair youth's ability to experience well-being, such as workload, pressure and time constraints. Some participants reported that when adults force them to take time away from social events, such as being with peers, they experienced resentment and therefore were unwilling to engage in anything related to an adult's perspective of well-being. Other participants described "not caring", "not thinking about it", "living in the moment" or "never having been taught" about well-being. Most of the participants' responses reflected a lack of knowledge and education in the area of well-being, while some also reflected little interest at all.

Strengths and Limitations of the Research

The data suggested that the YWP had a positive effect in areas related to stress, self-regulation, emotion regulation, mindfulness, perceptions of well-being and positive youth development. The qualitative data supported the positive effects of the strategies

and techniques provided to the participants. However, the YWP was limited to 29 students from one school. Therefore, caution must be taken when interpreting the results as there are limitations due to the small sample size and lack of a comparison or control group. Several questions remain regarding the mechanisms by which mindfulness and yoga impact emotion regulation and stress and there is a need for replication of the study with larger sample sizes. Strengths and limitations of the current study are outlined below.

Strengths

The three areas of strength within this research include: a mixed methods approach to the data (both the strengths and limitations are described), student involvement throughout the process and the researcher's knowledge in the area of education, mindfulness and yoga. Strengths for this study are explored further below.

Strengths and Limitations of Mixed-Methods Design

Mixed methods research combines elements from both qualitative and quantitative paradigms to produce convergent findings for complex research questions that call for contextual understandings and multi-level perspectives (Johnson & Onwuegbuzie, 2004). Quantitative research uses measurable data for the formulation of facts and the acknowledgement of patterns in research studies using surveys, scales and questionnaires. Qualitative research is primarily used to gain an understanding of the implicit reasons, opinions, and motivations of people concerning a particular phenomenon through the use of unstructured or semi-structured interviews, focus groups and participation/observations. Researchers choose to use qualitative and quantitative material in order to complement each other or to corroborate findings, while offsetting the weaknesses inherent to using each approach independently.

According to Teddlie and Tashakkori (2009), a mixed methods approach is valuable to the researcher when validation is needed or for the purpose of corroborating the results obtained from other methods. Further, a mixed methods approach benefits the researcher when needing to use one method to inform another method. Finally, mixed methods may be the best suited research approach when a study requires the continuous examination of a question, using a variety of methods to clarify unexpected findings as well as potential contradictions.

Creswell, Plano, Gutmann and Hanson (2003) described six mixed methods design strategies including sequential explanatory, sequential exploratory, sequential transformative, concurrent triangulation, concurrent nested and concurrent transformative (p. 179). The current research is concurrent triangulation, characterized by two or more methods of concurrent data collection used to confirm, cross-validate, or corroborate findings within a study (Greene, Caracelli & Graham, 1989). With this strategy, both methods are used to overcome a weakness in using one method by adding the strengths of another.

The current research involved a mixed methods approach that required collecting both types of data at roughly the same time, assessing information using parallel constructs for both types of data, separately analyzing both types of data, and comparing results through procedures, such as a side-by-side comparison in a discussion, merging the qualitative and quantitative data, and displaying both forms of data. A convergent parallel design was used to compare findings from qualitative and quantitative data sources during the interpretation phase. Although these two types of data provided validation for each other in this research and created a solid foundation for drawing conclusions about the approach to the phenomenon of well-being, there were also challenges and tensions. These tensions have historical antecedents stemming from the different research paradigms in which they are situated and several tensions were experienced as the research process unfolded as outlined below.

Tensions in a Mixed Methods Design

The research paradigms associated with quantitative and qualitative research have historically been distinct and non-complementary. Through an examination of positivist (quantitative) and interpretivist (qualitative) approaches, it may be stated that these worldviews, or epistemological positions, create a tension for a researcher trying to work with both methodologies and forms of quantitative and qualitative data. Some of the primary differences between the two paradigms as outlined by Lather (2006) in the table below. This table illustrates the challenge of working with data that is situated in very different research traditions. These challenges are further articulated in Table 5.1.

Table 5.1. A visual representation of the tensions between quantitative and qualitative paradigms

Positivist (Quantitative)	Interpretivist (Qualitative)
Reality is objective and "found"	Reality is subjective and constructed
Truth is one	Truth is many
Knowing the world	Understanding the world
Communication is transmission	Communication is transaction
Discourse is structured and transparent, reflecting reality	Discourse is dialogic and creates reality
The positivist approach views reality as objective and "found"	The interpretivist approach views reality as something subjective and based on meanings and understanding.
Positivist believes that certain ("positive") knowledge is based on natural phenomena and their properties and relations. Thus, information derived from sensory experience, interpreted through reason and logic, forms the exclusive source of all certain knowledge.	Interpretivists believe that just as people can't be separated from their knowledge, researchers can't be separated from their research subject.
Positivism is approach to the study of society that relies specifically on scientific evidence, such as experiments and statistics, to reveal a true nature of how society operates.	Interpretivism (social science), an approach to social science that opposes the positivism of natural science. Qualitative research, a method of inquiry in social science and related disciplines.
Positivist Paradigm: realist ontology - assumes that there are real world objects apart from the human knower. In other words, there is an objective reality.	Interpretivist Paradigm is concerned with understanding the world as it is from subjective experiences of individuals. They use meaning (versus measurement) oriented methodologies, such as interviewing or participant observation, that rely on a subjective relationship between the researcher and subjects.

Tensions as Experienced in this Research

It could be argued that quantitative research does not provide a rich understanding of the context or setting in which people are situated, which is a key strength of qualitative research. On the other hand, qualitative research may be regarded as less trustworthy because the researcher interprets the sense that is made of the data (lack of objectivity) and the findings cannot be generalized. By using a mixed methods design, the strengths of each approach can compensate for the weaknesses of the other (Creswell et al., 2003).

Throughout this research process, I have experienced tension between these two research paradigms. Historically, my research experience has been in the quantitative field, but as a young qualitative researcher I continue to see the strengths of both paradigms. The tension between the two approaches is evident in the literature outlined by Patty Lather (2006). I experienced similar difficulties from the initial stages to the end of the study. Straddling both research paradigms required a fine balance between what I had experienced in the past and what I saw as beneficial in the present. And yet, despite the tensions between these methods, in terms of their values and processes, it was through these emergent tensions that I was able to generate new insights into the phenomenon of well-being. By drawing on both objective facts as well as subjective interpretations, I was able to make the most of the data I collected from the participants, their parents and in my own researcher's field notes.

Subjectivity in Self-Reporting

A common criticism of self-reported measures such as scales, questionnaires or interview data is that they do not provide objective data; rather, they should be classified as subjective given that they are based on respondents' own point of view. Further, the term subjective may also suggest connotations of capriciousness (impulsive) and arbitrariness (random) in responses. It may be that we are drawn to the negative aspects of self-reports, rather than the positive, because we have doubts about positive self-reports that are often linked to social desirability effects. Drapeau (2002) suggests that this can lead to skepticism about positive findings, such as finding an improvement in well-being as a result of participation in a program such as the one investigated in this study.

The Challenges of Mixed Methods Research

One of the challenges of mixed methods is to maintain the integrity of both approaches. According to Creswell, Plano, Gutmann and Hanson (2003) challenges include: (a) complex research design, (b) it is time consuming, (c) this approach requires more resources and planning than mono designed research, (d) it may be difficult to plan and implement one method by drawing on the findings of another, (e) it may be unclear how to resolve discrepancies that arise in the interpretation of the findings, (f) having the knowledge of a new paradigm is not enough to overcome potential biases; it must be

learned through practice and experience; and, finally g) people have strengths that predispose them to particular paradigms.

The practical difficulties in marrying quantitative and qualitative data include the complexity of planning for a mixed methods study, including the careful planning of: the study sample for qualitative and quantitative portions (identical, embedded, or parallel), timing (the sequence of qualitative and quantitative portions) and the plan for integrating data (Creswell et. al, 2003). Integrating qualitative and quantitative data during analysis is often a challenging phase for many researchers. Mixed methods studies are labor intensive and require greater resources and time compared to single method studies.

The Benefits of using Mixed Methods

Mixed methods are especially useful in understanding contradictions between quantitative results and qualitative findings. Mixed methods give a voice to study participants and ensure that study findings are grounded in participants' experiences and reflect participants' points of view while providing methodological flexibility (Greene, Caracelli & Graham, 1989).

Summary

Mixed methods research does not necessarily lead to better or more valid data; it can, and usually does, involve extensive work, particularly if the researcher's goal is to combine them to provide a deeper interpretation of the findings.

A mixed methods approach was used in this research to enable a wider range of data to be collected from multiple perspectives and a more comprehensive interpretation of the findings. This seemed especially important when studying a complex phenomenon such as wellness. It is hoped that the integration of quantitative and qualitative data in this study has will help to strengthen the rigor and enrich the analysis and findings of the implementation of the YWP.

Student Directed

This study included the voices of secondary students (Grade 8 to 12) in both the development, adaptation and assessment of the program. The pre- and post-program

interviews and parent observations elicited a process rather than exclusively focusing on outcome data allowing for the exploration of recalled skills participants utilized and whether or not the lessons translated into “real life” practice outside of the education setting (e.g., home, socially). This also meant that the program could be responsive to students’ needs and revised as new information emerged.

Researcher Knowledge and Experience

My personal knowledge and practice of mindfulness was also a notable strength and is indicated throughout the research to be recommended when implementing a school-based program. I found having this training and personal practice to be very helpful in being able to answer questions that came up during the mindfulness sessions with accuracy and clarity.

Limitations

Inferences from this study are limited, given that changes observed may have been the actualization of skills learned through the program, or were confounded by the following limitations: program design (embedded flexibility) and participant recruitment, group size, the teacher as the researcher, self-report measures and the timing of the research. Limitations for this study are explored further below.

Program Design and Participant Recruitment

It is important to note that the findings from this study are based on a single mindfulness and yoga program implemented in one school by one instructor and may not generalize to other programs or age groups. Due to the voluntary nature of this study participants who assented to and received parental consent to participate may have greater motivation to learn and implement skills than a random sample of participants.

Group Size and No Control Group

Due to the small sample size or low power it was problematic to conduct inferential statistics. It should also be noted that the sample was not randomly assigned and there was no control group. However, it should be noted that small groups are

recommended for mindfulness instruction to decrease distraction and increase each individual's accessibility to the facilitator (Thompson & Gauntlett-Gilbert, 2008). It is suggested that participants may benefit from individual attention when discussing mindfulness lessons. Throughout the YWP, I frequently encouraged participants to contribute their personal experiences to the group discussion which afforded me the opportunity to integrate ideas, provide praise to them more frequently and foster engagement.

The Teacher as the Researcher and Non-Specific Group Effects

It has been suggested that factors such as participant expectations and researcher-participant alliances can have powerful non-specific effects that account for most, if not all, of the observed efficacy of an intervention (Walsh, 2014). In order to examine the influence of my subjective roles as researcher/teacher/counselor, I will describe in the sections that follow my critical reflections relating to the process of engaging in this research from the beginning to the end of the study. I will begin by first acknowledging the tension that existed as I negotiated the roles of teacher/counselor/researcher.

Tensions of the Teacher/Counselor/Researcher Roles

Within this research, I embodied multiple roles of teacher, counselor and researcher. As the teacher, counselor, and researcher, I encountered constant tensions that were both seen and unseen. I consistently experienced tension, initiated by the very obvious geographical distance from SFU to LFAS, where my roles differed in scope and meaning and required me to shift roles. Further tension was experienced in my dual roles of teacher and counselor at LFAS. Having worked at LFAS for ten years, I had the opportunity to interact with each of the participants at some point in their educational career. It should be noted that not all of the interactions were positive or pleasant; in fact, I had some negative experiences with at least fifty percent of the volunteer participants. I noted that the participants were volunteers because this demonstrates that, despite the past negative experience, the students may have seen this opportunity to be of value to them. They each signed up for the program of their own free will. I believe that due to these historical relationships, the boundaries between my roles may have become blurred at times and yet also created unique opportunities for deeper

interaction to inform program development. I have outlined the navigation of these roles from all three perspectives below.

Navigation of Multiple Roles

As a teacher, I was able to identify, adapt and modify my approach to the program information as the program unfolded. In week 2, I indicated the following in my field notes *“This week I did not feel as prepared and it did not seem to be executed as easily. I think I need to rework and tweak the educational piece so that it will flow more easily”*. I also recall times when a participant was unable to understand a concept. On these occasions, I was able to reframe the concept so that it made more sense. For example, the concept of rumination was difficult for some participants to understand while one specific participant reported that they “hated that word” so I replaced it for that individual and called it “stewing”.

As a counselor, I was able to observe behaviour and relate to past knowledge from the student/counselor relationship. I was also able to negotiate situations that were emotionally challenging for students; for example, during the loving kindness meditation during week 7, I wrote in my field notes: “Sky is having a major emotional experience through this session.” It was through my skills as a counselor that I was able to work individually with the student to unpack why they may have had this reaction in response to the concept of loving kindness to self.

As a researcher, I was able to design and develop program ideas, drawing on my knowledge and understanding of concepts of interest. I was able to probe for more information as the program unfolded and present the findings within the context of the research.

Other ways these roles were navigated included: (a) there was every attempt made throughout the study to encourage the students to voice their points of view, concerns, and any changes they wanted to the program, (b) working diligently to remain responsive to participant needs throughout the program which was also apparent in the field notes, (c) continuously revisiting and re-assessing roles adapting and changing approaches to be present in the role required at the time, (d) posing questions continually to refer back to throughout the program to explore at a different time, (e)

reflecting continuously on program delivery and session observations as well as what students reported as feedback (this was recurring in the field notes and informed the development of the program), (f) utilizing the feedback from participants as to what was desirable, easy, challenging or neutral from their perspective.

Although I was always aware of my actions and reactions, I intentionally noted them in my field journal after every session or interaction with students. It should be noted that through an analysis of my field notes my critical reflection, judgments, assumptions and observations tell a story beyond the participants' data that may have in fact affected how participants responded. Although the intention was always to ensure the participants were not persuaded, influenced or directed in any way, the reality is the dual role I played as teacher/researcher may have indeed influenced the participants' responses. Having habits of awareness for the times when I was assuming or making a judgment was especially significant. For example, the following entry was noted in week 2 of the program: *"The dynamics of the group has changed I feel like the two participants who were away are almost suspicious. The participant who were here had their eyes open and appear to look annoyed as seen in the video. These things really affect how I deliver the information. This week it did not seem to flow as easily as last week. I need to work on this!! I feel like it would be ok if some participants dropped out or did not show because this mountain of work feels overwhelming but I will persevere for the kids."* It was through these types of reflections that I was able to acknowledge and adapt my approach, minimizing the interference of one role into another.

I believe that because of these multiple roles, I found it easy to negotiate relationships with students. On one hand, I had a previous history with the participants, some of them which were very complex and on the other hand, I was introducing new concepts to them as a researcher. There were times that these lines did become blurred, and it allowed for an opportunity for deeper and richer interactions which would not have been possible if I did not have the prior knowledge and experience with the participants.

The Beginning of the Study

Prior to designing the program, I focused in on education settings and programs in the literature that reflected my interest as a teacher/counselor. In the past, I have

provided many mindfulness and emotion regulation classroom programs for grades K through 12. I was initially interested in what approach was most effective and reflected on studies that were both successful and unsuccessful when developing the YWP. The literature is heavily saturated with either quantitative or qualitative studies, suggesting a need for research using a mixed methods design. In designing the program, I wanted to include the opportunity for participant dialogue because I believed that this would be the best method of understanding the needs of the students, as well as the most effective approach to program development. The design of the program also allowed for embedded flexibility to address the ever-changing schedules and commitments of the participants. This knowledge comes from my teacher/counselor self that allowed me to inform my researcher self in the development of the program. This information would not have been readily available to a third-party researcher.

From the recruitment stage of the program, I initially published the information in the school bulletin. Other participants approached me and I was able to explain that this was a volunteer program to gain information about how to develop a program that students would feel was of value to them. This is also evident in how the student assent was designed, which ensured that this was an exploration to gather information regarding stress and emotion regulation. I spoke directly to some students who approached me and expressed interest via the posted advertisement in the school and explained the program as well as purposefully seeking out students that I thought would benefit from the approach to emotion regulation as a result of my previous knowledge of their struggle in this area. Many of the participants signed up as a result of encouragement from their peers. It should be noted that only two students signed up (via their parents) as a result of the published recruitment information in the school bulletin and dropped out in the first week of the program. All of the participant recruitment occurred by word of mouth from peers or through seeking out students I thought would be interested in participating. It should also be noted that approximately fifty percent of the participant population has had a negative interaction with the counselling department and still voluntarily signed up for the program. This information would not have been available to a third-party researcher.

The Challenges of Being the Teacher/Counselor/Researcher

There were several challenges in navigating the three roles such as my relationships with students and my need to fulfil the requirements of the research and the potential for desirability bias with participants feeling the need to please me. For example, one student stated: *"I guess it was more worriment and feeling like I was letting down the fact that I'd said I'd be part of this program and then I said I couldn't be here for days, or I missed days or I was sick and I just like I couldn't"* (Grade 10 Participant). These challenges were managed by reassuring the participants before, during and after each session that the experience was about their views on developing an educationally based program and not about me or my feelings, and to feel free to be as honest and forthcoming regarding their experience during the YWP.

The Middle of the Study

As the program unfolded, I continually reflected on decisions after every session, which are noted in the field notes. I asked questions and considered approaches to topics as well as my reactivity to students when they fell asleep, or did not seem connected or did not show up.

As stated earlier, I have had challenging interactions with at least half of the 29 participants, including some of the following situations: having to speak to their parents about a suicide assessment, conflict with peers, severe behaviour, school avoidance, teacher/student conflict issues and phone calls to the Ministry for abuse allegations. I believe that my persuasion may have varied in intensity depending on the participant and the pre-existing knowledge I had regarding their tendencies, conflicts, strengths and deficits. For example, I had an extremely challenging relationship with one student when they were in grade 8. This student reported that I did not follow protocol, alleging that they were suicidal and that I did not report it to their parents. This initiated an investigation and eventually the student recanted the allegation. I was surprised when this student asked to participate in the program and when I reflect on my notes regarding this particular student, there were times when my pre-existing relationship may not have fared favourably. Despite my lack of enthusiasm for this specific participant, I worked effectively to overcome this because I believed that, of all of the participants, they could benefit from these skills the most.

In examining the role of teacher/counselor and how it affected my researcher role the approaches I took varied depending on how the participants viewed the topic or if they appeared to understand it or not. I made modifications based on my observations and reflections to ensure the greatest possibility for comprehension on the part of the participants. With each participant, I developed some type of relationship, whether through assisting the classroom teacher, presenting a special topic, or in teaching the Planning 10 course. Many of the participants also knew me through the counselor to student relationship during a time of crisis or conflict. The personal context of these relationships provided a level of safety for a number of students who voluntarily signed up for the program. This factor may have also contributed to participant responses regarding the effects of the program. Although the relationship with participants was positive it may have also created biases in their responses. On a few occasions, some participants reported that they "did not want to disappoint me" or that they did not want me to "be upset with them".

This limitation should be noted, because I believe that on occasion my disappointed energy was visible to the participants despite my attempts to contain it. This was especially true when participants did not follow through on their commitment to the program. I noticed that despite consistently assuring them that there was no pressure and that this process was their own to experience, I feel that my strong desire to impact the participants, albeit consciously monitored throughout all interactions, may have been sensed.

At times, delineating the three roles was difficult because as the program unfolded the relationships became stronger and this gave participants' moments when they could informally discuss personal concerns or issues they were struggling with outside of the program. I tried to separate the roles when possible by setting up a separate session to provide them with the support they needed. At times, it was not always feasible to wait especially if the student was upset.

The End of the Study

I believe that the experiences I gained in this research and in the interpretation and discussion of the findings are inextricable. I was motivated to study the phenomenon of wellness because of my personal and professional experiences.

Subjectivity was invariably present in this research and occurred throughout the entire project and I attempted to explore this through critical reflections on the analysis and interpretation phases of the research. I achieved this by keeping detailed field notes and critically reflecting after each interaction. I also consulted with my supervisor and colleagues and our many discussions took place as the program unfolded and during the interpretation phase to help me clarify my emerging understandings and interpretation of the data.

The After Effects

Interestingly, some students have continued to pursue more information after the program was completed such as attending mindfulness Monday even after they had graduated. I have had at least 15 of the participant's email me or drop into my office during work hours to discuss new advances in mindfulness in terms of technology and inquire where to take yoga or practice meditation in the community. Five of the students have voluntarily attended yoga classes I teach at a local fitness center and in fact one of them has become a yoga teacher who now also teaches at the same facility as well as another local center both of which I recommended her for.

The teacher as the researcher can be seen as both a benefit and a hindrance. The process can be empowering for the educator, it can strengthen relationships but there is also the possibility of bias within the data collection process. Social acceptability and pleasing the teacher is often seen as a barrier to authentic responses to inform the process. Gilbert (2001) acknowledges that the relationship between the researcher and the study's participants requires a mental and emotional connection. This emotional aspect is necessary for high quality research and therefore discourages researchers from actively avoiding experiencing emotions. According to Gilbert (2001), "it is the awareness and intelligent use of our emotions that benefit the research process" (p. 11). The extended personal relationships that I maintained with the participants may have impacted their desire to participate but also provided privileged and knowledgeable first-hand access to crucial information about students' lives which allowed me to reflect on my approach in this research so I was able to provide effective, reliable and realistic possibilities for an effective program. I feel that this multi-functional role allowed me to approach participants' issues from different viewpoints, enhancing the scope of my

actions as well as the quality and appropriateness of the approach to emotion regulation that I proposed.

Self-Reporting Measures

A further limitation of this study is the self-reporting method of data collection for the pre- and post-program interviews. This method of data collection may be subject to social acceptability bias or researcher acceptability bias due to the nature of the researcher/participant relationship particularly related to descriptions of program effectiveness (Bloor & Wood, 2006). It is important to note that one of the many difficulties with self-reporting measures of mindfulness as a method of data collection, pre- and post intervention, is that the pre-program responses may reflect an over-stated or over-reported perception of mindful behaviors. When the intervention is completed, participants often report a more honest assessment of their mindful behaviour after learning about mindfulness and mindful techniques, which in this study may have resulted in only a moderate shift in scores (Greco, Baer, & Smith, 2011). Other factors that may have affected or influenced pre- or post-program response patterns may include participants' mood or desire to be portrayed in a certain way at the time of data collection.

Timing

The time of the year and each participant's school responsibilities were both limitations of this study. The YWP took place between March and the end of the school year. During this time students were inundated with deadlines, tests and final exam preparation which prevented them from attending sessions. Another factor included the high number of arts performances that occur during this time of the school year. Participants were encouraged to attend sessions to assist in alleviating the stress-related pressure of these events; but, given that the sessions were offered during the participants' spare time (after school and at lunch), students often had to choose between fulfilling their arts commitments or attending YWP sessions. Unfortunately, the coursework and performances took precedence; therefore, attendance declined mid program. This challenge of timing prompted much of the feedback from students expressing interest in the YWP being offered as a course within the timetable, which

would allow for students to attend on a daily basis rather than trying to fit it into an already full schedule.

It should also be noted that the post-program data were collected shortly after the program ended, capturing immediate post-program effects. Long-term perspectives would be beneficial to evaluate the extent to which skills are retained, sustained and further developed over time. Qualitative data collected longitudinally could provide suggestions as to additional ways of supporting the influences of the program and cementing the concepts delivered during the process.

Summary

This study had a number of limitations and it is important to be careful not to overstate the benefits of participation in the YWP. The findings were based on one program with a small number of volunteer participants known to the researcher. Future studies would benefit from a mixed-methods approach from multiple quantitative and qualitative assessments that extend beyond the immediate post-program to evaluate the skill development over time to examine sustainability of benefits.

Challenges/Limitations of Implementing Mindfulness in Schools

As previously noted, there exist several limitations and challenges within this specific research study, but it is also useful to recognize the broader challenges and limitations of implementing mindfulness programs in schools. As noted by Keng et al. (2011), “with regard to applications of mindfulness training that have received empirical support, research now needs to examine practical issues surrounding their implementation, delivery and dissemination” (p.1052). The research in this field is accompanied by a plethora of challenges with regard to implementation. Meiklejohn et al. (2012) discuss the many challenges reported by those who have developed programs of mindfulness-based education within schools. Challenges include; (a) implementing evidence-based programs; (b) adapting adult programs to accommodate children and youth; (c) funding; (d) program implementation considerations and (e) contemplative practices. These challenges require a realistic plan of action, some of which is described in the next section of this thesis.

Evidence-Based Program Selection

Cullen (2011) reported that “programs are being written and taught by professionals from all walks of life: psychologists, scientists, athletes, lawyers, professors and more” (p.186). This emergent phenomenon, according to Cullen (2011), is “both promising and perilous” which may make it difficult to monitor the quality of the programs. Meiklejohn, Phillips, Freedman, Griffin, Biegel, Roach...& Soloway (2012) suggested that “the development of mindfulness is not like other cookie cutter curriculums that can be learned in a day, outlined in a resource guide and then brought into a classroom using a transmissive approach” (p. 296). A common suggestion by professionals within the field of mindfulness is to become familiar with the research regarding successful program implementation in order to adhere to best practice and ensure successful program delivery. Durlak and DuPre (2008) suggest that even a well-researched or high-quality program may not always be successful, and in fact, a poorly executed program can have adverse impacts for a program’s effectiveness, specifically for the students’ well-being. It has been suggested that educators may benefit from consulting the Garrison Institute’s Contemplative Education database (www.garrisoninstitute.org) when choosing mindfulness based educational programs. The Garrison Institute database contains information regarding secular mindfulness programs utilized in the education setting for students, K through 12. In my opinion, the combination of teacher training, personal practice and knowledge of effective age appropriate programs are critical for successful implementation of mindfulness in education.

Adapting Adult Programs

Brown et al. (2011) reported that the majority of research on mindfulness to date has been conducted with adults, although there is a developing body of research amongst the child and adolescent population (e.g., Biegel et al. 2009; Bootzin et al. 2005; Semple et al. 2010; Zylowska et al. 2008). Although Fodor et al. (2008) suggest that mindfulness practice for children may not be that different than for adults, other researchers maintain opposing opinions, suggesting that a program that works for adults does not necessarily prove it to be effective for adolescents. Factors such as brain development as well as age appropriate material would need to be considered when implementing an adult program with a younger population. More research with both

larger sample sizes and longer periods of time with adolescent populations would better inform the effectiveness of program participation on emotion regulation.

In the event that an adult program has been chosen to use with younger populations Fodor et al. (2008) suggest that it is essential for a teacher develop a level of comfort to implement a mindfulness program. In considering the adaptation of an adult program and the teaching of mindfulness concepts to children, a certain level of the flexibility and adaptability is required. For example, during the early stages of program implementation, students may feel uncomfortable, which causes them to distract those around them (e.g., giggling). It is important that the instructor not scold or draw attention to the individual student since this may create a negative experience by centering the student out. In that particular moment, it may be of benefit to acknowledge that this new experience may be challenging for some, and the instructor may incorporate learning strategies, such as suggesting that all students check in with how they are feeling during the practice. Pre-loading a session is important to ensure that students are aware that they may experience discomfort, boredom or other unpleasant emotions during the practice. At this point, it is helpful to establish a set of expectations, such as learning to remain in situations, which may be difficult or challenging without the need to distract self or others. A post practice discussion would also be a valuable tool to normalize the reactions that students may have experienced without judgment.

Funding

In my experience, funding has been the greatest barrier for the implementation of social emotional learning programs within the education system. Maintaining adequate financial resources changes from year to year, causing difficulties in a school's commitment to programs that require ongoing training and supplies. Considering this challenge, it is of substantial benefit that mindfulness is a cost-efficient program that requires only the training of the teacher for delivery of the program. In addition to school-based and district funding, Domitrovich et al. (2008) suggest developing a model of research-community partnerships that can provide opportunities to link programs with multiple local funding sources. Community partnerships that have been successful in local B.C. school districts in the past include: The F.O.R.C.E Society for Kids, Healthy Schools B.C, The Ministry for Children and Family (MCFD) and Kelty Mental Health. These partnerships, along with specialized grants designated for improving well-being in

students, have provided materials, training and ongoing support. At the school and district level Parent Advisory Committees (PAC) and District Parent Advisory Committees (DPAC) have been instrumental in supporting social emotional learning programs and should be considered as viable options for financial support.

Program Implementation Considerations

In my experience, the implementation of any program in the school setting comes with several challenges including: space considerations, timing, distractions, interruptions and delays. Finding a suitable space that supports a calm atmosphere and engages participant attention is crucial in providing effective mindfulness and yoga programming. Securing a dedicated room prior to beginning a program, equipped with materials such as yoga mats, chairs, cushions and light blankets, would assist in the delivery of a more consistent and enjoyable experience for participants.

Holidays, extracurricular activities, fieldtrips and late arrivals all impact students' ability to participate in programs delivered outside of the timetable. Although many barriers and distractions may not be preventable, one possible consideration is the addition of a mindfulness program to an already existing class, as opposed to outside of the timetable. Napoli, Krech and Holley (2005) suggest a creative way to adapting to the fluctuating timetable, noting that "the physical education curriculum appears to be an ideal place for implementing mindfulness due to the amount of required curriculum to cover during the academic year" (p. 116). The new physical education and health curriculum involves the implementation of lessons that include skills to improve mental well-being throughout the lifespan creating a logical place for a social emotional learning initiative such as the YWP.

Contemplative Practice

Currently in Vancouver, B.C. a parent has launched a petition against teaching mindfulness in school because it is rooted in Buddhism. In general, contemplative practices in education may be accompanied by general skepticism particularly if the link between practice and academic performance is not strongly documented in the research. The historical religious context or affiliation may be a deterrent for a participant, who may be unable to embrace mindfulness. Mindfulness has established

roots in eastern meditative and Christian contemplative traditions, but the secular approach to mindfulness practice is not based on the teaching of any religious group or culture (Dimidjian & Linehan 2009). Dimidjian and Linehan (2003) noted that “it is possible that potential clients will not be receptive to mindfulness training finding it an esoteric or foreign practice, perhaps too closely identified with meditation” (p.170). Beauchemin et al. (2008) reported that mindfulness interventions were feasible when conducted in a classroom where participation was voluntary, allowing for any participants to opt out should they be concerned about the program content or delivery. Davidson (2012) suggested that “any use of contemplative practices in schools must necessarily be thoroughly secular, developmentally and culturally appropriate, and predicted on evidence-based practices” (p. 150). It is important for administrators, teachers, and instructors to be aware that not all mindfulness approaches are suitable for all people and that some individuals may not be interested in learning these concepts. As educators, we must avoid a pressurized system of inclusion and allow for individuals to make their own decisions based on the information we can provide. Allowing for provisions of an alternate activity or placement during a lesson or activity is suggested in order to accommodate students who are unwilling or unable to participate in the program. Similarly, it may be that individuals are cautious of hidden religious agendas, another factor to consider when presenting this approach of well-being in the school environment.

In order to approach this concern, it is suggested that “key issues must be addressed, including first and foremost, how we ensure that we do no harm in this area of education” (Davidson, 2012, p. 150). This suggests that in the practice of any of these concepts, addressing emotional distress should be of primary concern. Parent education workshops, newsletters, bulletins and homework are encouraged to foster family discussion and connect families to the mindfulness program (Broderick, 2013). Providing parent workshops that address a secular approach to mindfulness will assist in the understanding of the program curriculum and allow for a forum of questions that may arise. Another approach might be to examine mindfulness from the neuroscience or thread it with a social emotional learning perspective. While the scientific exploration of the impact of mindfulness practices on brain development has become a growing area within the field, the social emotional learning (SEL) approach to recognizing and managing both stress and emotional reactivity have been effective in improving social

and emotional skills, academic performance, attitudes and behaviour in school (Durlack, Weissberg, Dymicki, Taylor, & Schellinger, 2011). It is important to note that the SEL approach to well-being appears to achieve many of the same outcomes as mindfulness but is less controversial with more extensive research in the field. Empowerment through education and knowledge of the program fundamentals may ease the suspicions of stakeholders, therefore providing students and parents with transparency in whatever approach is decided up may help to promote understanding and acceptance of the method of choice to implement within the school setting.

Future Directions

As research in mindfulness related studies grows, the majority of inquiry into the effects of mindfulness based yoga programs and emotion regulation has been conducted with specialized populations such as incarcerated youth, marginalized or at risk youth and youth with mental health concerns. It would benefit this particular field of study to conduct further research with youth from diverse backgrounds in order to cultivate a more informative representation of how the YWP affects a variety of populations in a variety of settings including typically (non-clinical) developing adolescents. The absence of evidence is not evidence of absence; therefore, if the link between mindfulness and emotion regulation in typically (non-clinical) developing youth is not yet fully researched, it is necessary to continue the research for greater understanding of the phenomenon. As a consequence of this study, I am especially interested in the long-term effects of mindfulness and yoga based interventions on emotion management, stress, impulsivity and overall well-being. As a school counsellor, I hope to pursue further studies including the continuation of Mindful Mondays to introduce school staff and students from Grade 8 to 12 to the concepts and practice of mindfulness meditation. I began this program in mid-October 2016, spending 20 minutes, each Monday morning, facilitating mindfulness meditation. Additionally, I am currently revising a seven week, 7-minutes of mindfulness program for teachers spanning Grades 1 through 7 which was implemented in January 2017. The goal of this program was to provide teachers with age appropriate school-based mindfulness exercises that are brief and easy to incorporate into their health curriculum throughout the year. Similarly, I have implemented mindfulness practices into the Planning 10 course, aiming to teach students how to identify physical, mental and emotional effects of stress and provide them with the tools to manage emotional reactivity. Lastly, in

February 2017, I taught P.E. 8 following the new curriculum set out by the B.C. Ministry of Education, with a particular focus on well-being by incorporating components implemented during the YWP that were tailored to meet the developmental needs of 12 and 13-year-old students and outlined below.

A New Approach to Physical and Health Education in B.C

Recently, there have been significant revisions made to the physical education curriculum in B.C. In September 2016, the B.C. government introduced a newly developed approach to physical education that requires teachers to incorporate teaching in the area of health and well-being as complementary to other curricular learning outcomes. This new curriculum was developed by the Ministry of Education in collaboration with B.C. teachers to facilitate an approach to physical education that promotes student knowledge, skills and understanding of the importance of lifelong well-being. These curricular changes have caused notable discomfort and conflict for the majority of physical education teachers, who are experiencing difficulty during this transitional period. Throughout my career, I have observed that transitioning teachers towards change often involves helping to facilitate a new way of thinking that requires a comprehensive plan including detailed training sessions, hands on materials (manuals), side by side teaching and mentoring to be effective. Atkins et al. (2010) recommend that in order to begin developing new thinking in the area of health and well-being, mental health experts, such as school counsellors, help by becoming educational enhancers that assist teachers who will become the front-line agents of change. In an ideal context, this would be possible, but, in reality, many school counselor positions have been withdrawn due to lack of funds. This often places teachers in uncomfortable and even unethical positions when they are alone in attempting to address the complex emotional needs of students. In my opinion, education is in a constant flux of change to meet the current needs of students and teachers are in desperate need of guidance and assistance as to how to approach and meet the individual needs of all students whilst addressing academic requirements set forth by the Ministry of Education.

In September 2016, Grade 8 P.E. was added to my teaching assignment. As a result of the change in curriculum, P.E. teachers were asked to participate in training to support this new approach early in the fall. A formal group was established to provide information sessions, workshops and weekly updated information about this curriculum

change. One of the training sessions teachers were asked to attend included training for a school-based intervention program called The Fourth R. Crooks, Wolfe, Hughes, Jaffe, & Chiodo (2008) worked collaboratively with the Thames Valley District School Board to develop this skill-based curriculum that involves role-play activities to help develop effective and healthy responses to situations of conflict and violence. The Fourth R stands for “Relationships” designed to promote healthy adolescent relationships and reducing risk behaviours. The Fourth R integrates all of the core competencies outlined by the B.C. curriculum for physical and health education throughout each of the four units. This program would complement the YWP particularly in the area of well-being and self-regulation as described in the learning standards found in The Fourth R training manual.

Final Thoughts

As a practicing school counselor and educator, I am interested in helping to improve the quality of life of my students as well as expanding my own professional knowledge base. From a personal perspective, I have been a lifelong combatant of anxiety brought about by stress; therefore, I am acutely aware of its signs and symptoms. Over the last two decades, I have become especially interested in how the effects of stress can impact on the emotion regulation of the young people with whom I have been entrusted as an educator and school counselor. Several years ago, I gained a heightened sense of the lack of support adolescents receive in the education system. I became especially interested in how mindfulness and yoga might provide a solution for many adolescents who need help in coping with stress and in managing emotion regulation. As Broderick et al. (2012) point out, mindfulness “cultivates the faculties of mind which has a direct relevance to burgeoning self-awareness, self-regulation, and emotional balance that supports fully engaged learning and well-being and that it is of great importance that educators and professionals help adolescents find the inner reserves of mindful awareness that are available to them” (p. 121). I wanted to examine if the benefits of mindfulness that have been described in the literature might also make a positive impact on the lives of the young people I work with.

Gross (1999) suggests that in today’s world, “physical and social environments have changed out of all recognition from those that shaped our emotions, and technological advances have dramatically magnified the consequences that our

emotional responses may have for ourselves and others" (p. 558). Gross (1999) describes an evolutionary process — what might once have been a minor argument or disagreement for some is now being handled with extreme measures (e.g., a gun related homicide). As social and cultural environments have seen drastic changes over the past decade, the mechanisms that elicit the emotion response have remained mostly the same. As environmental conditions change, an individual's emotion response is not always adaptive or socially beneficial (von Scheve, 2012). For me, this is a grave concern: that many young people in society today struggle with regulating their emotions. I recognize that working with the emotional states of students has become a daily occurrence within the education setting. Ironically it is also an area that most teachers have not received any formal training. Each year, new approaches to well-being are proffered along with school board administrations' expectation that the accompanying philosophies be accepted without question. This practice diminishes the value of community involvement and in my opinion, erodes the confidence gained by coworkers when they have witnessed the success of a colleague. The final result is a reluctant teaching community, fated to transactional rather than transformative teaching.

At the beginning of this thesis, I introduced two examples of students who either under or over regulate their emotion and this is something I am witnessing daily in my work as a school counsellor. Many of today's youth have minimal coping strategies to deal with life's conflicts on any level. In my opinion, adolescence is a battle between the drive for young people to become autonomous from parents while at the same time their dependency on social relationships increases. The challenges and impacts on well-being that result from this tension are a key feature of the transition from adolescence into adulthood for many young people. Increasingly, mindfulness and yoga education is being viewed as a promising stress-management and emotion regulation tool in fostering well-being for secondary students. As an educational intervention, this approach is beginning to demonstrate positive effects on well-being, especially among youth coping with expected developmentally-related emotional and mental health. Ritchhart and Perkins (2000) suggest that the real educational potential of mindfulness lies not in test scores but in addressing some of the other intractable problems of education such as the flexible transfer of skills and knowledge to new contexts, the development of deep understanding, student motivation and engagement, the ability to think critically and creatively, and the development of the more self-directed learners.

Much of the current research suggests that physical and health education appears to be the most suitable area within the curriculum to implement a program such as the YWP. The implementation of curriculum in this area has been done in the past but due to cut backs, untrained teachers, poor student participation and unavailable space, these approaches to well-being have been cut from the list of classes available to students. In the recent past within the B.C. curriculum, 'Planning 10' was suggested as an option to integrate a program promoting well-being; however, this will be removed from the curriculum in September 2018. YWP participants suggested that it would be ideal if the class were to stand alone rather than piggy back onto an existing section of the curriculum. And yet, the new B.C. physical and health education curriculum was designed to promote students' exploration of overall health and well-being from a deeper more holistic approach making it a natural fit for the YWP. It will be interesting to see how this potential tension between curriculum expectations and student expectations might impact on the implementation of YWP in secondary schools in the future.

It is important to note that many different approaches to mindfulness training have emerged over the past decade including online mindfulness programs (Luk, 2016). Mindfulness apps, Skype sessions and guided lesson plans through podcasts are some of what has become available to the general public. The challenge that virtual approaches to mindfulness face is how to connect meaningfully with others and build a foundation of ongoing support when one is experiencing distress. The translation of mindfulness concepts is not complex; however, when practiced in the virtual world they may not be as effective. Also, caution should be taken when a young person has severe anxiety or depression to ensure that a trained professional is on hand to connect with, discuss and encourage the practice of long term skill development.

This study explored the best-available research regarding the impact of school-based mindfulness and yoga practices with youth. The resulting evidence of the study presented in this thesis was generally supportive of using a YWP approach to foster well-being with students in a secondary school. YWP was found to be both safe and potentially effective in helping students to cope with anxiety, emotion regulation and stress. Additional potential benefits for youth included increased awareness, improved mood and quality of life. These positive impacts are of great interest and relevance due to the challenging nature of the current state of stress among today's youth, which has

prompted young people to voice the need for action. These experiences are very complex and influence health in a variety of ways. As parents, educators and counselors it is our job to assist them on their journey so that they reach their destination relatively unscathed. I believe that school-based mindfulness and yoga programs are capable of bringing great benefit to youth by providing them with strategies to cope with stress and regulate their emotions. It is my hope that these skills will help them navigate life's voyage on tranquil and stormy seas alike, confident in the knowledge that no matter the destination, they can pilot the journey.

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Appendix A. Parent Information Letter

Exploring the Effects of Yoga and Mindfulness on Perceived Stress: A Study of Self-Regulation to Promote Positive Youth Development

PARENT OBSERVATIONS POST PROGRAM [2014s0591]

Dear Parent

Simon Fraser University Doctoral Student Janine Orlando, under the supervision of Dr. Susan O'Neill conducted a study on the effects of education, yoga and mindfulness on stress and self-regulation with students at Langley Fine Arts. The program was developed to assist participants in the identification and acquisition of effective ways of engaging in self-awareness opportunities that will help them to inquire and reflect on their own well-being. The goal of the program was for the participants to become more aware of what causes stress for them and how to manage (self-regulate) their emotional response to life's challenges. Educational research suggests that there is a direct correlation between academic success and the ability to regulate ones emotions.

You are receiving this letter because your child has participated with your consent in a 12 week study on mindfulness and its effect on self-regulation (emotion regulation) and stress. As part of the data collection on this program your views are very important. In order for me to use your feedback I require your permission in writing

If you have any questions about this research, or would like a copy of the results or further information now or at a later date, please contact Dr. Susan O'Neil.

If you have any concerns about your rights as a research participant and/or your experiences while participating in this study, you may contact Dr. Jeffrey Toward, Director, Office of Research Ethics.

Sincerely

Janine Orlando

I GIVE JANINE ORLANDO PERMISSION TO USE MY FEEDBACK FOR THE SFU STUDY CONDUCTED AT LFAS ABOUT YOUTH, MINDFULNESS, SELF-REGULATION & STRESS.

Signed: _____

You may email your response giving me permission to use any information you provide. This information is confidential and your name will not be used. It will be matched with your child's confidential pseudonym.

Appendix B. Student Assent

Exploring the Effects of Yoga and Mindfulness on Perceived Stress: A Study of Self-Regulation to Promote Positive Youth Development

[2014s0591]
STUDENT ASSENT LETTER

Note: After receiving signed informed consent from a parent/guardian and before carrying out the activity, the following should be read to participants and each should sign the section at the bottom of the assent letter before participating in the program and study.

My name is Janine Orlando and I am a researcher from the Faculty of Education at Simon Fraser University. I want to tell you about a research study I am doing. A research study is a way to learn more about something. I would like to find out more about your understanding of and your questions about stress and self-regulation. I am inviting you to join the study because research shows that many youth struggle with the ability to manage stress which affects their ability to self-regulate. If you agree to join this study, I will invite you to take part in a program outside of class time to explore how education, yoga and mindfulness impact stress and self-regulation.

The program will explore the effects of stress and how it relates to your ability to self-regulate in all areas of your life. The program will consist of two sessions of yoga and mindfulness per week for a 12 week period, beginning in March 2015 and ending in June 2015. The program will take place at the school during the lunch hour on Tuesdays for 30 minutes and between 3:15 and 4:15, Thursdays.

I am very interested in how youth experience and regulate their responses to stress. I want to know how you deal with stress in your life as well as how you regulate your response to stress. I am examining how an education, yoga and mindfulness program affects stress and self-regulation in youth. I am particularly interested in how youth cope with stress and intense emotions. The goal is to provide participants in the study with education and skills to identify stress and learn to self-regulate your responses to stress. No one at your school will see your information and your name will not be used in the research.

I would like to video tape and record dialogues and informal conversations we have about the program. I would like to collect any written reflections you record during the program. I would like to interview you before and after the program for approximately

15 – 30 minutes about what to expect initially and post program what you experienced being in the program and video record the interview. Before and after the program you

will be asked to complete a biographical information sheet as well as scales and surveys about stress, and self-regulation. You will also be required to complete a fitness assessment before and after the program to measure if the program had any benefit to your physical health. During the wellness program you will be required to rate your stress level on that day from 1 to 5 before the session and write your reflection of the experience after.

The information collected for this study will be used for research purposes only, and your name will not be used. At any point in the study, if you reveal that there has been an incident that involves abuse, neglect or personal harm please be advised that the researcher must, by law, report this information to the Ministry of Children and Family Development, who may choose to intervene and report the incident to the appropriate authorities. Short segments of your video and/or photographs may be used in the future in any presentation or publication of the research. They will not be used for commercial use. You will be identifiable to those viewing the images but your name will remain confidential and a different name will be used when referring to you in the videotape or photographic image.

All information collected for the study will be kept confidential. Both paper and recorded digital video and audio files will be kept for a five-year period, after which time they will be destroyed. Please note that you do not waive any of your legal rights against the sponsors, investigators, or anyone else by participating in this study.

There are no risks to being part of this research study. This study will help us learn more about how youth deal with stress before and after participating in the Yoga Wellness Program. I aim to gather information regarding what you learn from the program in terms of how you perceive, cope and manage stress. I also hope to discover how you feel the program affected you through sharing your experiences.

Participation in this program is optional and you can leave the program at any time without any penalty. It will make no difference to your grades or marks at school if you decide not to complete the program or the interview at the end of the program. All data will also be discarded from the study should you decide to withdraw. Do you have any questions?

Please sign below if you agree to participate.

Student's Name (please print): _____

Signature: _____ Date: _____

1. Do you wish to be video recorded? Y _____ N _____

2. If you wish to be video recorded, do you wish that your image/voice be distorted? Y____ N____

3. Do you permit the use of the video images in future research studies? Y____ N____

4. Do you permit the use of your video image in public dissemination (thesis, papers, conference presentations etc.) directly related to this research project (NOTE: Due to the nature of digital video images, once the video image is disseminated to the public; the researcher does not have any control over how the video images are distributed and/or used? Y____ N____

Appendix C. Student Questionnaire

PRE PROGRAM INTERVIEW

Yoga Wellness Program

[2014s0591]

Name: _____ ANONYMITY CODE:

Age: _____ Grade: _____ Male _____ Female _____

Major: _____

- 1) How would you define stress?
- 2) How does stress affect you physically?
- 3) How does stress affect how you emotionally?
- 4) How does stress affect how you mentally?
- 5) How does stress affect how you interact with others?
- 6) How does stress affect how you manage your emotions?
- 7) When you experience stress do you know you are stressed? If yes how can you tell?
- 8) What do you know about self-regulation?

BIOLOGICAL DOMAIN

- 9) When you experience intense emotions how do you cope with them?
- 10) How often do you get sick?
- 11) Do you sleep well? If not explain.

EMOTIONAL DOMAIN

- 12) Can you rebound after a highly intense emotional experience?
- 13) Are you easily distracted by what's going on around you?
- 14) Do you consider yourself to be a healthy person in terms of diet?
- 15) What are things you enjoy or are passionate about?
- 16) Do you experience a variety of emotions?

- 17) Do find it hard or easy to recover from intense emotional experiences and move past them?
- 18) Do you interact well with others and allow for others opinions to be heard and considered?
- 19) What are some of your plans for the future?
- 20) What are some of your greatest achievements?

COGNITIVE DOMAIN

- 21) Are you able to switch from one thing to another and remain focused?
- 22) When planning do you consider the impact things have on others or do you do what will meet your needs?
- 23) Are you able to follow a series of steps to get to an outcome or do you find yourself losing focus?
- 24) Have you ever set a goal and accomplished it?
- 25) How do you manage your time?
- 26) What are some resources you use to accomplish goals and stay organized?

SOCIAL DOMAIN

- 27) Do you know when you are feeling sad/angry/excited?
- 28) How can you tell if someone else is sad/angry/excited?
- 29) What would you do if your friend or family member was sad or angry?
- 30) When you have had a disagreement with someone how do you resolve it?

THE PROSOCIAL DOMAIN

- 31) If someone you cared about was very upset what would you do?
- 32) How important is it to be honest with people and are there any circumstances in which you would feel not being honest would be acceptable?

- 33) How important is doing the right thing?
- 34) Have you ever done yoga before? If yes what type and how often.
- 35) Do you want to learn more about how stress affects your daily living?
- 36) What do you expect to get from this program?
- 37) What are some areas in your life that you identify as being stressful?
- 38) What are you currently doing to help manage your stress?

Appendix D. Difficulty in Emotion Regulation Scale (DERS)

Serenity Programme™ - serene.me.uk - Difficulties in Emotion Regulation Scale (DERS)

1 Almost never (0-10%)	2 Sometimes (11-35%)	3 About half the time (36-65%)	4 Most of the time (66-90%)	5 Almost always (91-100%)
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Difficulties in Emotion Regulation Scale (DERS)

Identifier

Date

Please indicate how often the following 36 statements apply to you by writing the appropriate number from the scale above (1 – 5) in the box alongside each item.

- 1 I am clear about my feelings (R)
- 2 I pay attention to how I feel (R)
- 3 I experience my emotions as overwhelming and out of control
- 4 I have no idea how I am feeling
- 5 I have difficulty making sense out of my feelings
- 6 I am attentive to my feelings (R)
- 7 I know exactly how I am feeling (R)
- 8 I care about what I am feeling (R)
- 9 I am confused about how I feel
- 10 When I'm upset, I acknowledge my emotions (R)
- 11 When I'm upset, I become angry with myself for feeling that way
- 12 When I'm upset, I become embarrassed for feeling that way

1 Almost never (0-10%)	2 Sometimes (11-35%)	3 About half the time (36-65%)	4 Most of the time (66-90%)	5 Almost always (91-100%)
------------------------------	----------------------------	--------------------------------------	-----------------------------------	---------------------------------

- 13 When I'm upset, I have difficulty getting work done
- 14 When I'm upset, I become out of control
- 15 When I'm upset, I believe that I will remain that way for a long time
- 16 When I'm upset, I believe that I'll end up feeling very depressed
- 17 When I'm upset, I believe that my feelings are valid and important (R)
- 18 When I'm upset, I have difficulty focusing on other things
- 19 When I'm upset, I feel out of control
- 20 When I'm upset, I can still get things done (R)
- 21 When I'm upset, I feel ashamed with myself for feeling that way
- 22 When I'm upset, I know that I can find a way to eventually feel better (R)
- 23 When I'm upset, I feel like I am weak
- 24 When I'm upset, I feel like I can remain in control of my behaviours (R)
- 25 When I'm upset, I feel guilty for feeling that way
- 26 When I'm upset, I have difficulty concentrating
- 27 When I'm upset, I have difficulty controlling my behaviours

1 Almost never (0-10%)	2 Sometimes (11-35%)	3 About half the time (36-65%)	4 Most of the time (66-90%)	5 Almost always (91-100%)
------------------------------	----------------------------	--------------------------------------	-----------------------------------	---------------------------------

- 28 When I'm upset, I believe that there is nothing I can do to make myself feel better
- 29 When I'm upset, I become irritated with myself for feeling that way
- 30 When I'm upset, I start to feel very bad about myself
- 31 When I'm upset, I believe that wallowing in it is all I can do
- 32 When I'm upset, I lose control over my behaviours
- 33 When I'm upset, I have difficulty thinking about anything else
- 34 When I'm upset, I take time to figure out what I'm really feeling (R)
- 35 When I'm upset, it takes me a long time to feel better
- 36 When I'm upset, my emotions feel overwhelming

Document Version: 1.1

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Privacy - please note - this form does not transmit any information about you or your assessment scores If you wish to keep your results, you must print this document These results are intended as a guide to your health and are presented for educational purposes only They are not intended to be a clinical diagnosis If you are concerned in any way about your health, please consult with a qualified health professional.

Gratz, K.L. & Roemer, E. 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, pp. 41-54.

Appendix E. Perceived Stress Scale 10 (PSS)

INSTRUCTIONS:

The questions in this scale ask you about your feelings and thoughts during THE LAST MONTH. In each case, please indicate your response by placing an "X" over the circle representing HOW OFTEN you felt or thought a certain way.

	Never 0	Almost Never 1	Sometimes 2	Fairly Often 3	Very Often 4
1. In the last month, how often have you been upset because of something that happened unexpectedly?	<input type="radio"/>				
2. In the last month, how often have you felt that you were unable to control the important things in your life?	<input type="radio"/>				
3. In the last month, how often have you felt nervous and "stressed"?	<input type="radio"/>				
4. In the last month, how often have you felt confident about your ability to handle your personal problems?	<input type="radio"/>				
5. In the last month, how often have you felt that things were going your way?	<input type="radio"/>				
6. In the last month, how often have you found that you could not cope with all the things that you had to do?	<input type="radio"/>				
7. In the last month, how often have you been able to control irritations in your life?	<input type="radio"/>				
8. In the last month, how often have you felt that you were on top of things?	<input type="radio"/>				
9. In the last month, how often have you been angered because of things that were outside your control?	<input type="radio"/>				
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	<input type="radio"/>				

Appendix F. Self-Regulation Questionnaire (SRQ)

SRQ

Please answer the following questions by circling the response that best describes how you are. If you STRONGLY DISAGREE with a statement, circle \ominus . If you DISAGREE circle $\not\ominus$. If you are UNCERTAIN or UNSURE circle \angle . If you AGREE circle ∇ , and if you STRONGLY AGREE circle \circledast . There are no right or wrong answers. Work quickly and don't think too long about your answers.

	Strongly Disagree	Disagree	Uncertain or Unsure	Agree	Strongly Agree
1. I usually keep track of my progress toward my goals.	1	2	3	4	5
2. My behavior is not that different from other people's.	1	2	3	4	5
3. Others tell me that I keep on with things too long.	1	2	3	4	5
4. I doubt I could change even if I wanted to.	1	2	3	4	5
5. I have trouble making up my mind about things.	1	2	3	4	5
6. I get easily distracted from my plans.	1	2	3	4	5
7. I reward myself for progress toward my goals.	1	2	3	4	5
8. I don't notice the effects of my actions until it's too late.	1	2	3	4	5
9. My behavior is similar to that of my friends.	1	2	3	4	5
10. It's hard for me to see anything helpful about changing my ways.	1	2	3	4	5
11. I am able to accomplish goals I set for myself.	1	2	3	4	5
12. I put off making decisions.	1	2	3	4	5
13. I have so many plans that it's hard for me to focus on any one of them.	1	2	3	4	5
14. I change the way I do things when I see a problem with how things are going.	1	2	3	4	5
15. It's hard for me to notice when I've had enough@ (alcohol, food, sweets).	1	2	3	4	5
16. I think a lot about what other people think of me.	1	2	3	4	5
17. I am willing to consider other ways of doing things.	1	2	3	4	5
18. If I wanted to change, I am confident that I could do it.	1	2	3	4	5
19. When it comes to deciding about a change, I feel overwhelmed by the choices.	1	2	3	4	5
20. I have trouble following through with things once I've made up my mind to do something.	1	2	3	4	5

Strongly Disagree Uncertain Agree Strongly
Disagree or Unsure Agree

	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
21. I don't seem to learn from my mistakes.	1	2	3	4	5
22. I'm usually careful not to overdo it when working, eating, drinking.	1	2	3	4	5
23. I tend to compare myself with other people.	1	2	3	4	5
24. I enjoy a routine, and like things to stay the same.	1	2	3	4	5
25. I have sought out advice or information about changing.	1	2	3	4	5
26. I can come up with lots of ways to change, but it's hard for me to decide which one to use.	1	2	3	4	5
27. I can stick to a plan that's working well.	1	2	3	4	5
28. I usually only have to make a mistake one time in order to learn from it.	1	2	3	4	5
29. I don't learn well from punishment.	1	2	3	4	5
30. I have personal standards, and try to live up to them.	1	2	3	4	5
31. I am set in my ways.	1	2	3	4	5
32. As soon as I see a problem or challenge, I start looking for possible solutions.	1	2	3	4	5
33. I have a hard time setting goals for myself.	1	2	3	4	5
34. I have a lot of willpower.	1	2	3	4	5
35. When I'm trying to change something, I pay a lot of attention to how I'm doing.	1	2	3	4	5
36. I usually judge what I'm doing by the consequences of my actions.	1	2	3	4	5
37. I don't care if I'm different from most people.	1	2	3	4	5
38. As soon as I see things aren't going right I want to do something about it.	1	2	3	4	5
39. There is usually more than one way to accomplish something.	1	2	3	4	5
40. I have trouble making plans to help me reach my goals.	1	2	3	4	5
41. I am able to resist temptation.	1	2	3	4	5
42. I set goals for myself and keep track of my progress.	1	2	3	4	5
43. Most of the time I don't pay attention to what I'm doing.	1	2	3	4	5
44. I try to be like people around me.	1	2	3	4	5

Strongly Disagree Uncertain Agree Strongly
Disagree or Unsure Agree

	Strongly Disagree	Disagree	Uncertain or Unsure	Agree	Strongly Agree
45. I tend to keep doing the same thing, even when it doesn't work.	1	2	3	4	5
46. I can usually find several different possibilities when I want to change something.	1	2	3	4	5
47. Once I have a goal, I can usually plan how to reach it.	1	2	3	4	5
48. I have rules that I stick by no matter what.	1	2	3	4	5
49. If I make a resolution to change something, I pay a lot of attention to how I'm doing.	1	2	3	4	5
50. Often I don't notice what I'm doing until someone calls it to my attention.	1	2	3	4	5
51. I think a lot about how I'm doing.	1	2	3	4	5
52. Usually I see the need to change before others do.	1	2	3	4	5
53. I'm good at finding different ways to get what I want.	1	2	3	4	5
54. I usually think before I act.	1	2	3	4	5
55. Little problems or distractions throw me off course.	1	2	3	4	5
56. I feel bad when I don't meet my goals.	1	2	3	4	5
57. I learn from my mistakes.	1	2	3	4	5
58. I know how I want to be.	1	2	3	4	5
59. It bothers me when things aren't the way I want them.	1	2	3	4	5
60. I call in others for help when I need it.	1	2	3	4	5
61. Before making a decision, I consider what is likely to happen if I do one thing or another.	1	2	3	4	5
62. I give up quickly.	1	2	3	4	5
63. I usually decide to change and hope for the best.	1	2	3	4	5

Strongly Disagree Uncertain Agree Strongly
Disagree or Unsure Agree

Appendix G. Mindfulness Attention and Awareness Scale (MAAS)

Mindful Attention Awareness Scale

Description:

The MAAS is a 15-item scale designed to assess a core characteristic of dispositional mindfulness, namely, open or receptive awareness of and attention to what is taking place in the present. The scale shows strong psychometric properties and has been validated with college, community, and cancer patient samples. Correlational, quasi-experimental, and laboratory studies have shown that the MAAS taps a unique quality of consciousness that is related to, and predictive of, a variety of self-regulation and well-being constructs. The measure takes 10 minutes or less to complete.

Day-to-Day Experiences

Instructions: Below is a collection of statements about your everyday experience. Using the 1-6 scale below, please indicate how frequently or infrequently you currently have each experience. Please answer according to what really reflects your experience rather than what you think your experience should be. Please treat each item separately from every other item.

1 Almost Always	2 Very Frequently	3 Somewhat Frequently	4 Somewhat Infrequently	5 Very Infrequently	6 Almost Never
I could be experiencing some emotion and not be conscious of it until some time later.				1 2 3 4 5 6	
I break or spill things because of carelessness, not paying attention, or thinking of something else...				1 2 3 4 5 6	
I find it difficult to stay focused on what's happening in the present.				1 2 3 4 5 6	
I tend to walk quickly to get where I'm going without paying attention to what I experience along the way...				1 2 3 4 5 6	
I tend not to notice feelings of physical tension or discomfort until they really grab my attention...				1 2 3 4 5 6	
I forget a person's name almost as soon as I've been told it for the first time...				1 2 3 4 5 6	

It seems I am "running on automatic," without much awareness of what I'm doing..	1	2	3	4	5	6
I rush through activities without being really attentive to them..	1	2	3	4	5	6
I get so focused on the goal I want to achieve that I lose touch with what I'm doing right now to get there..	1	2	3	4	5	6
I do jobs or tasks automatically, without being aware of what I'm doing..	1	2	3	4	5	6
I find myself listening to someone with one ear, doing something else at the same time.	1	2	3	4	5	6
I drive places on "automatic pilot" and then wonder why I went there.	1	2	3	4	5	6
I find myself preoccupied with the future or the past..	1	2	3	4	5	6
I find myself doing things without paying attention.. ..	1	2	3	4	5	6
I snack without being aware that I'm eating.. .	1	2	3	4	5	6

Scoring information:

To score the scale, simply compute a mean of the 15 items. Higher scores reflect higher levels of dispositional mindfulness.

Reference:

Brown, K.W. & Ryan, R.M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84, 822-848.

Appendix H. Post-Pre- Retrospective Assessment

**Yoga Wellness Program
Post-Pre Student Questionnaire
[2014s0591]**

Name: _____

In answering these questions, we would like you to compare yourself now with before the Yoga Wellness Program began.

Knowing what you know now, how would you rate yourself before the program, and how would you rate yourself now?

Please use a two-step process:

- (a) decide whether the statement is "not true for me" or "true for me"
 - (b) circle the rating that most applies
- (0) **not at all** true for me
(1) **not very** true for me
(2) **sort of** true for me
(3) **mostly** true for me
(4) **very** true for me

Thinking about the Yoga Wellness Program, and knowing what you know now,
how would you rate yourself before the program and
how would you rate yourself now?

	Before YWP				Now					
	Not true for me	True for me			Not true for me	True for me				
	0	1	2	3	4	0	1	2	3	4

1.	A clear understanding of how I can manage stress.	□ □ □ □	□ □ □ □	
2.	A clear vision of how to cope with intense emotions in a healthy way.	□ □ □ □	□ □ □ □	
3.	Knowledge of resources that can help me when I am feeling stressed and unable to cope on my own.	□ □ □ □	□ □ □ □	
4.	Effective skills and strategies for keeping myself calm when experiencing stress.	□ □ □ □	□ □ □ □	
5.	Optimism about being able to manage my physical and mental health.	□ □ □ □	□ □ □ □	
6.	Confidence in my ability to manage difficulty in my life.	□ □ □ □	□ □ □ □	

Thinking about the Yoga Wellness Program, and knowing what you know now,

how would you rate yourself before the project and how would you rate yourself now?

Before YWP					Now				
Not true for me		True for me			Not true for me		True for me		
0	1	2	3	4	0	1	2	3	4

7.	The ability to access resources that can help me when I am experiencing difficulty managing my emotions.	<input type="checkbox"/>							
8.	When I feel calm focused and aware I know I am calm, focused and aware.	<input type="checkbox"/>							
9.	When I am stressed I recognize what is causing the stress.	<input type="checkbox"/>							
10.	I recognize stressors in the various areas of my life.	<input type="checkbox"/>							
11.	I have a desire to deal with those stressors.	<input type="checkbox"/>							
12.	I can independently access strategies of how to deal with those stressors.	<input type="checkbox"/>							
13.	I have the ability to recover efficiently and effectively from the stressors?	<input type="checkbox"/>							
14.	I know my body's physical response to stress.	<input type="checkbox"/>							
15.	I can manage my physical reaction to stress.	<input type="checkbox"/>							
16.	I recognize when my thoughts are creating unpleasant feelings.	<input type="checkbox"/>							
17.	I am aware of my thoughts when they begin to take a journey and can actively redirect them to the present.	<input type="checkbox"/>							
18.	I see the benefit of being present in the moment.	<input type="checkbox"/>							
19.	I see the value of using mindfulness strategies in my life.	<input type="checkbox"/>							
20.	I can relate my reactions/actions during stress to my thoughts and feelings.	<input type="checkbox"/>							

Appendix I. Positive Youth Development Questionnaire (Short Version)

STUDENT QUESTIONNAIRE – SHORT VERSION - Measure of PYD (4-H Study of PYD)
Version 1.2 (June 2, 2008)



STUDENT QUESTIONNAIRE

How important is each of the following to you in your life?
Fill in one circle for each line or statement.

	Not Important	Extremely Important
1. Getting to know people who are of a different race than I am.	<input type="radio"/>	<input type="radio"/>
2. Helping other people.	<input type="radio"/>	<input type="radio"/>
3. Helping to make the world a better place to live in.	<input type="radio"/>	<input type="radio"/>
4. Giving time and money to make life better for other people.	<input type="radio"/>	<input type="radio"/>
5. Helping to reduce hunger and poverty in the world.	<input type="radio"/>	<input type="radio"/>
6. Helping to make sure all people are treated fairly.	<input type="radio"/>	<input type="radio"/>
7. Speaking up for equality (everyone should have the same rights and opportunities).	<input type="radio"/>	<input type="radio"/>
8. Doing what I believe is right, even if my friends make fun of me.	<input type="radio"/>	<input type="radio"/>
9. Standing up for what I believe, even when it's unpopular to do.	<input type="radio"/>	<input type="radio"/>
10. Telling the truth, even when it's not easy.	<input type="radio"/>	<input type="radio"/>
11. Accepting responsibility for my actions when I make a mistake or get in trouble.	<input type="radio"/>	<input type="radio"/>
12. Doing my best, even when I have a job I don't like.	<input type="radio"/>	<input type="radio"/>

Think about the people who know you well. How do you think they would rate you on each of these?

	Not at All Like Me		Very Much Like Me
13. Respecting the values and beliefs of people who are of a different race or culture than I am.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Knowing a lot about people of other races.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Enjoying being with people who are of a different race than I am.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. What grades do you earn in school? (Check one answer:)

- Mostly below Ds
- Mostly Ds
- About half Cs and half Ds
- Mostly Cs
- About half Bs and half C
- Mostly Bs
- About half Bs and half As
- Mostly As

How well does each of these statements describe you?

	Not Well		Very Well
17. I don't feel sorry for other people when they are having problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. When I see someone being taken advantage of, I want to help them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. It bothers me when bad things happen to good people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. It bothers me when bad things happen to any person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. When I see someone being treated unfairly, I don't feel sorry for them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. I feel sorry for other people who don't have what I have.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. When I see someone being picked on, I feel sorry for them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. It makes me sad to see a person who doesn't have friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. When I see another person who is hurt or	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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upset, I feel sorry for them.

How much do you agree or disagree with the following?

	Strongly Disagree	Strongly Agree	
26. I get along with my parents.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. My parents give me help and support when I need it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. My parents often tell me they love me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. I have lots of good conversations with my parents.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. In my family, I feel useful and important.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31. I'm given lots of chances to make my town or city a better place in which to live.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. In my neighborhood, there are lots of people who care about me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. Adults in my town or city make me feel important.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. Adults in my town or city listen to what I have to say.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. In my town or city, I feel like I matter to people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36. My teachers really care about me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37. I get a lot of encouragement at my school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38. Students in my school care about me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39. In my school, there are clear cut rules for what students can and cannot do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40. Teachers at school push me to be the best I can be.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
41. On the whole, I like myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42 At times, I think that I am no good at all.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
43. All in all, I am glad I am me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
44. I feel I do not have much to be proud of.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
45. Sometimes, I feel like my life has no purpose.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
46. When I am an adult, I'm sure I will have a good life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How true is each of these statements for you?

	Never True			Always True
47. I trust my friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
48. I feel my friends are good friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
49. My friends care about me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
50. My friends are there when I need them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Never			Usually
51. How often do you feel bored at school?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
52. Would you talk to your parents if you have an important concern about drugs, alcohol, sex, or some other serious issue?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The following pairs of sentences are talking about two kinds of kids. We'd like you to decide whether you are more like the kids on the left side, or you are more like the kids on the right side. Then we would like you to decide whether that is only sort of true for you or really true for you and mark your answer.

FILL IN ONLY ONE CIRCLE FOR EACH ITEM OR PAIR OF SENTENCES.

Sample:

Really True for Me	Sort of True for Me				Sort of True for Me	Really True for Me
1. <input type="radio"/>	• Some kids would rather play outdoors in their spare time.	BUT	Other kids would rather watch T.V.		<input type="radio"/>	<input type="radio"/>

Really True for Me	Sort of True for Me				Sort of True for Me	Really True for Me
53. <input type="radio"/>	<input type="radio"/>	Some kids feel that they are very good at their school work.	BUT	Other kids worry about whether they can do the school work assigned to	<input type="radio"/>	<input type="radio"/>

STUDENT QUESTIONNAIRE – SHORT VERSION - Measure of PYD (4-H Study of PYD)
 Version 1.2 (June 2, 2008)

					them.		
54.	<input type="radio"/>	<input type="radio"/>	Some kids find it <i>hard</i> to make friends.	BUT	For other kids it's pretty <i>easy</i> .	<input type="radio"/>	<input type="radio"/>
55.	<input type="radio"/>	<input type="radio"/>	Some kids do very <i>well</i> at all kinds of sports.	BUT	Others <i>don't</i> feel that they are very good when it comes to sports.	<input type="radio"/>	<input type="radio"/>
56.	<input type="radio"/>	<input type="radio"/>	Some kids often do <i>not</i> like the way they <i>behave</i> .	BUT	Other kids usually <i>like</i> the way they <i>behave</i> .	<input type="radio"/>	<input type="radio"/>
57.	<input type="radio"/>	<input type="radio"/>	Some kids often get <i>mad</i> at themselves.	BUT	Other kids are pretty <i>pleased</i> with themselves.	<input type="radio"/>	<input type="radio"/>
58.	<input type="radio"/>	<input type="radio"/>	Some kids feel like they are <i>just as</i> <i>smart</i> as other kids their age.	BUT	Other kids aren't so sure and <i>wonder</i> if they are as smart.	<input type="radio"/>	<input type="radio"/>
59.	<input type="radio"/>	<input type="radio"/>	Some kids have a <i>lot</i> of friends.	BUT	Other kids <i>don't</i> have very many friends.	<input type="radio"/>	<input type="radio"/>
60.	<input type="radio"/>	<input type="radio"/>	Some kids wish they could be a lot better at sports.	BUT	Other kids feel they are good enough at sports.	<input type="radio"/>	<input type="radio"/>

STUDENT QUESTIONNAIRE – SHORT VERSION - Measure of PYD (4-H Study of PYD)
 Version 1.2 (June 2, 2008)

	Really True for Me	Sort of True for Me				Sort of True for Me	Really True for Me
61.	<input type="radio"/>	<input type="radio"/>	Some kids usually do the <i>right</i> thing.	BUT	Other kids often <i>don't</i> do the <i>right</i> thing.	<input type="radio"/>	<input type="radio"/>
62.	<input type="radio"/>	<input type="radio"/>	Some kids <i>don't</i> like the way they are leading their life.	BUT	Other kids <i>do</i> like the way they are leading their life.	<input type="radio"/>	<input type="radio"/>
63.	<input type="radio"/>	<input type="radio"/>	Some kids are pretty <i>slow</i> in finishing their school work.	BUT	Other kids can do their school work <i>quickly</i> .	<input type="radio"/>	<input type="radio"/>
64.	<input type="radio"/>	<input type="radio"/>	Some kids are kind of <i>hard</i> to like.	BUT	Other kids are really <i>easy</i> to like.	<input type="radio"/>	<input type="radio"/>
65.	<input type="radio"/>	<input type="radio"/>	Some kids think they could do <i>well</i> at just about any new outdoor activity they haven't tried before.	BUT	Other kids are afraid they might <i>not</i> do well at outdoor things they haven't ever tried.	<input type="radio"/>	<input type="radio"/>
66.	<input type="radio"/>	<input type="radio"/>	Some kids usually get in <i>trouble</i> because of things they do.	BUT	Other kids usually <i>don't</i> do things that get them in trouble.	<input type="radio"/>	<input type="radio"/>
67.	<input type="radio"/>	<input type="radio"/>	Some kids <i>like</i> the kind of <i>person</i> they are.	BUT	Other kids often wish they were someone else.	<input type="radio"/>	<input type="radio"/>
68.	<input type="radio"/>	<input type="radio"/>	Some kids do <i>very well</i> at their class work.	BUT	Other kids <i>don't</i> do very well at their class work.	<input type="radio"/>	<input type="radio"/>
69.	<input type="radio"/>	<input type="radio"/>	Some kids wish that more kids liked them.	BUT	Others feel that most kids <i>do</i> like them.	<input type="radio"/>	<input type="radio"/>
70.	<input type="radio"/>	<input type="radio"/>	In games and sports, some kids usually <i>watch</i> instead of <i>play</i> .	BUT	Other kids usually <i>play</i> rather than just <i>watch</i> .	<input type="radio"/>	<input type="radio"/>
71.	<input type="radio"/>	<input type="radio"/>	Some kids do things they know they <i>shouldn't</i> do.	BUT	Other kids <i>hardly ever</i> do things they know they shouldn't do.	<input type="radio"/>	<input type="radio"/>
72.	<input type="radio"/>	<input type="radio"/>	Some kids are very <i>happy</i> being the way they are.	BUT	Other kids wish they were <i>different</i> .	<input type="radio"/>	<input type="radio"/>
73.	<input type="radio"/>	<input type="radio"/>	Some kids have <i>trouble</i> figuring out the answers in school.	BUT	Other kids can almost <i>always</i> figure out the answers.	<input type="radio"/>	<input type="radio"/>
74.	<input type="radio"/>	<input type="radio"/>	Some kids are	BUT	Other kids are <i>not</i>	<input type="radio"/>	<input type="radio"/>

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 Version 1.2 (June 2, 2008)

			<i>popular</i> with others their age.		very popular.		
75.	<input type="radio"/>	<input type="radio"/>	Some kids <i>don't</i> do well at new outdoor games.	BUT	Other kids are good at new games right away.	<input type="radio"/>	<input type="radio"/>
76.	<input type="radio"/>	<input type="radio"/>	Some kids are usually very <i>kind</i> to others	BUT	Other kids wish they would be <i>kinder</i> to others	<input type="radio"/>	<input type="radio"/>
77.	<input type="radio"/>	<input type="radio"/>	Some kids <i>aren't</i> very happy with the way they do a lot of things.	BUT	Other kids think the way they do things is <i>fine</i> .	<input type="radio"/>	<input type="radio"/>

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Tufts

Appendix J. Mindfulness Sessions

Each mindfulness class is taught in a small group in the counseling office to prepare for the yoga class offered after school which incorporates the concepts and relates them to the physical movement of the yoga postures to recognize how our body holds tension and therefore learning to release the tension through the breath.

- WEEK 1 – THEME - **B - Body** - breath awareness, mindful eating, body scan
- WEEK 2 - THEME - **B-Body** - breath awareness, mindful listening, body scan
- WEEK 3 - THEME - **R - Reflections (thoughts)** - breath awareness, mindfulness of thoughts
- WEEK 4 - THEME - **R- Reflections - rumination focus** - breath awareness, posture in life, understanding rumination, body scan
- WEEK 5 - THEME - **E - Emotions & Empowerment**-breath awareness, visualization of surfing the waves of our emotions - things pass and link to the connection to the thoughts, feelings and reactions
- WEEK 6 - THEME - **A - Attention** - breath awareness, pay attention to the body, define stress, paying attention to thoughts and feelings to reduce stress, RELAXATION
- WEEK 7 - THEME - **T - Tenderness** - breath awareness, learning to be kind to oneself through self-compassion, gratitude practice, loving kindness meditation
- WEEK 8 - THEME - **H - Habits** - breath awareness with 4 square or box breathing - changing your habits of mind through reminders, body scan

This is the official last week with the option to continue for an extra 4 week

This school-based mindfulness and yoga program was predicated on the idea that if participants are aware of when they are experiencing stress (present moment attention and awareness to stress) and we teach them the skills to regulate their response to stress (breathing techniques, visualization and metaphor use), there will be an increase in positive responses to stress (e.g. take a break, sit in the intensity and let it pass) and a decrease in negative coping strategies (e.g. self-injurious behaviour). Modifications and adaptations were made for teaching and implementing mindfulness and yoga skills as required to meet the participants' needs. For example, arrangements were made to accommodate the availability of a student with a health condition (concussion syndrome) that limited their time at school. **NOTE: the session details are taken from L2B (2014)and adapted to suit the needs of the participants and time constraints**

Appendix K. Reflective Questions - Mindfulness

Session 1 - Describe what you are experiencing at this moment, what stands out for you from the session or what questions are arising for you right now. Consider 3 activities in your response (breath awareness, mindful eating, body scan). You can address all 3, just one or respond as you see fit.

Session 2 - Describe what you are experiencing at this moment, what stands out for you from the session or what questions are arising for you right now. Directly reflect on any thoughts or feelings that came up for you during the session.

Session 3 - Describe the strategies we have discussed in this program to stop your wandering thoughts. What was your experience in today's session? Record things that you found interesting or relevant to you.

Session 4 - Describe how rumination affects your quality of life? What was your experience in today's session? Record things that you found interesting or relevant to you.

Session 5 - What was the experience of surfing the waves of emotion like for you? What did you notice in your body, thoughts and feelings? What might it be like to surf the waves of more difficult emotions?

Session 6 - 1) How do you know you are experiencing stress physically, emotionally mentally? 2) What will you use from this session that will help you to manage it that you have not considered in the past?

Session 7 - Today we will be practicing mindfulness writing. I will guide you through this practice which will involve some writing about gratitude.

Session 8 - What are some ways you can remind yourself to be mindful in your daily life?

Appendix L. Yoga Sessions

WEEK 1 – Introduction to Yoga and guidelines for practice are outlined ex: modifications and the value of silence before during and after class. Breath Awareness exercise - sitting, Hatha practice, Final Breathing- lying down, Guided Relaxation and a reading of Rumi's Guest House

WEEK 2 - Breath Awareness exercise, Yin Yoga class, Final Breathing, Relaxation and Visualization “*The mind is like the ocean*” and a beach visualization.

WEEK 3 – Breath Awareness exercise standing, recap of the 2 weeks of mindfulness education ex: remind the breath is the anchor for a wandering mind, Moksha Yoga practice, Final Breathing -(Abdominal Breathing Technique) one hand on the belly and the other hand on the chest, Guided Progressive Relaxation lying down.

WEEK 4- Breath Awareness exercise recognizing the thoughts coming and going in the opening exercise, Hatha practice, Final Breathing long and slow breaths, Visualization of a place that brings you comfort.

WEEK 5 - Breath Awareness exercise sitting meditation, Yin Yoga, Final Breathing long and slow inhales and exhales, connecting thoughts to emotions and sensations exercise *just notice with awareness the shifting movement of thoughts, feelings and physical sensations in your body*

WEEK 6 - Breath Awareness exercise, Guided Relaxation Meditation for Stress Reduction, Hatha Practice, Mindfulness Relaxation exercise with a focus on the physical body and identifying where you hold tension.

WEEK 7 - Breath Awareness exercise standing, sitting meditation practicing loving kindness, Yin and Hatha combination class, Final Breathing and Loving Kindness Meditation.

WEEK 8 - Breath Awareness exercise with sitting meditation focus on the anchor (breath), heart tapping, Yin Yoga, Tantrumasana, Guided Passive Progressive Relaxation.

NOTE: The location of the Yoga class was changed 3 times through the program due to space availability, noise and atmosphere. I also tried to adapt the program in terms of days and times available to accommodate what the students needed due to other obligations. LFAS has ongoing opportunities for all of the students such as field trips, out of school timetable performances or extra classes. Many of the weeks had Pro D or a holiday Friday or Monday which also required adaptation to the schedule. The inconsistent times and locations worked in this situation although it is not ideal for the general population of people.

Appendix M. Reflective Questions – Yoga

Session 1 - Write about how you feel when you do things mindfully (with attention or fully engaged) or mindlessly (without attention or disengaged). What did you experience during the class that made you curious about your physical body and where you hold tension?

Session 2 - What did you experience during the class that made you curious? OR just write about what is currently in your mind about your experience.

Session 3 - What was your experience in today's session? Describe the strategies you used to stop your wandering thoughts during the class (if any).

Session 4 - What did you experience physically and emotionally during the visualization practice?

Session 5 - What did you notice in your body? In your thoughts? What feelings were you aware of?

Session 6 - What did you notice about any changes in physical sensations or movements, thoughts and feelings from the beginning to the end of yoga class?

Session 7 - Describe what you experienced when you were asked to pay attention to your thoughts and feelings about yourself and notice when you are practicing kindness and when you are practicing meanness.

Session 8 - What did you find challenging today and what did you find has become easier over the past 8 weeks? Have you noticed a consistency in what challenges you? (E.x a wandering mind, difficulty relaxing). Please explain why you think this has been a challenge and what you think may help you overcome this challenge.

Appendix N. Optional Sessions

- **WEEK 9 - THEME - *E - Empowerment*** - breath awareness - the mind body connection, and a review of all 8 weeks THE VIRTUAL TOOL BOX and community quilt of what stands out for each individual. Breath Awareness exercise (Nadi Shodhana) or Alternate Nostril Breathing, Candle light yoga, Yin and Hatha combined, Final Breathing (Abdominal Breathing Technique) one hand on the chest the other on the stomach for ten breaths, Guided Relaxation.
- **WEEK 10 - THEME - **Empowerment and BREATHE**** - an overall review of all of the elements of the program in one session - COMBINATION OF YOGA AND MINDFULNESS IN ONE SESSION. Breath Awareness exercise, Yin/Hatha class, threading in the concepts we have learned as reminders ex: *we don't need to believe everything we think*, Ankle Rocking Relaxation and a reading of *The mind is like the ocean* – reminder to visualize the place that gives them comfort as practiced in week 4.
- **WEEK 11 – THEME - **Mindful eating, breath awareness and body sensation**** review Mindful Eating, Breath Awareness exercise sitting with Abdominal Breathing Technique, Feeling Sensations while lying down guided – No physical practice.
- **WEEK 12 - THEME - **Surviving Exams**** - Yoga to relieve stress and a visualization for passing exams. Breath Awareness exercise, 6 postures to relieve stress, Guided Imagery: Taking an Exam.

Appendix O. Reflective Questions – Optional Sessions

Session 9 - What do you notice about your experience in yoga that has changed since your first class? What connections have you made between your experience with stress and tension in your physical body?

Session 10 - Describe your experience today with the new format of yoga and mindfulness combined into one session?

Session 11 - What did you experience during the meditation around feeling sensations in your body? Were there some sensations you experienced more intensely than others? Explain.

Session 12 - Describe your experience today. What part of this exercise do you think will be helpful during your exams?

Appendix P. Post-program Interview Questions

The following questions were used as a guide for the semi-structured exit interviews post-program.

- 1) What have you learned or gained from participation in the YWP?
- 2) What challenges did you encounter during the YWP?,
- 3) What did you like about the YWP?
- 4) What did you dislike about the YWP?
- 5) What would you change or add to the YWP?
- 6) Would others see a difference in how you manage stress? Please explain
- 7) How has your stress or your ability to manage your stress changed, if at all?
- 8) Would people in your life see a difference in you since participating in the YWP? If yes what would they say?
- 9) Do see any change in how you manage emotions since the YWP? If so please explain.
- 10) What do you think your experience would have been like if your friends did or did not participate?
- 11) Why do you think I put yoga and mindfulness together?
- 12) What are your views on the following statement? Youth do not value their well-being. Do you agree or disagree? Please explain.
- 13) What can educators do to help students foster their own well-being?
- 14) Would you recommend this program to others? Why or why not
- 15) Is there anything else that you think that I need to know about your participation in the YWP?

Appendix Q. Amended Student Assent

**Exploring the Effects of Yoga and Mindfulness on Perceived Stress:
A Study of Self-Regulation to Promote Positive Youth Development
[2014s0591]**

STUDENT ASSENT LETTER

Thank you for your participation in the LFAS program that explored the effects of stress and how it relates to your ability to self-regulate. I am very interested in how youth experience and regulate their emotional responses to stress.

I am writing to you to ask permission to send a letter (via email) to your parents/guardian asking them for feedback around of any changes they may have observed during the 12 week program in the area of stress management and emotion regulation as well as any feedback they believe would be of interest to my research.

The information collected for this study will be used for research purposes only, and your name as well as your parent/guardian's name will not be used. All information collected for the study will be kept confidential. Both paper and recorded digital video and audio files will be kept for a five-year period, after which time they will be destroyed. Please note that you do not waive any of your legal rights against the sponsors, investigators, or anyone else by participating in this study.

Please sign below if you agree to allow me to contact your parents for observational feedback.

Student's Name (please print): _____

Signature: _____

Date: _____

Appendix R. Amended Parent Letter

Exploring the Effects of Yoga and Mindfulness on Perceived Stress: A Study of Self-Regulation to Promote Positive Youth Development

PARENT OBSERVATIONS POST PROGRAM [2014s0591]

Dear Parent

Simon Fraser University Doctoral Student Janine Orlando, under the supervision of Dr. Susan O'Neill conducted a study on the effects of education, yoga and mindfulness on stress and self-regulation with students at Langley Fine Arts. The program was developed to assist participants in the identification and acquisition of effective ways of engaging in self-awareness opportunities that will help them to inquire and reflect on their own well-being. The goal of the program was for the participants to become more aware of what causes stress for them and how to manage (self-regulate) their emotional response to life's challenges. Educational research suggests that there is a direct correlation between academic success and the ability to regulate ones emotions.

You are receiving this letter because your child has participated with your consent in a 12 week study on mindfulness and its effect on self-regulation (emotion regulation) and stress. As part of the data collection on this program your views are very important. In order for me to use your feedback I require your permission in writing

If you have any questions about this research, or would like a copy of the results or further information now or at a later date, please contact Dr. Susan O'Neil.

If you have any concerns about your rights as a research participant and/or your experiences while participating in this study, you may contact Dr. Jeffrey Toward, Director, Office of Research Ethics.

Sincerely

Janine Orlando

I GIVE JANINE ORLANDO PERMISSION TO USE MY FEEDBACK FOR
THE SFU STUDY CONDUCTED AT LFAS ABOUT YOUTH,
MINDFULNESS, SELF- REGULATION & STRESS.

Signed: _____

You may email your response giving me permission to use any information you provide. This information is confidential and your name will not be used. It will be matched with your child's confidential pseudonym.