

**“Investigation (Dhamma-vicaya) Practice of Mindfulness Program” as a Balanced
Intervention to Manage Anxiety of the Adolescent**

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**“Investigation (Dhamma-vicaya) Practice of Mindfulness Program” as a
Balanced Intervention to Manage Anxiety of the Adolescent**

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I hereby declare that this dissertation has not been submitted
as an exercise for a degree at any other institution,
and that it is entirely my own work.

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ABSTRACT

“Investigation (Dhamma-vicaya) Practice of Mindfulness Program” as a Balanced
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Abstract

Adolescence is a high-risk period for adolescents during which they experience mood fluctuations and anxiety. Relevant studies point to a need for effective treatments for this age group. Mindfulness-based intervention provides an opportunity to live in the present but lacks guidance on what the participant can do after mindfully calming down.

The aim of the current pilot research was to assess the effectiveness of the Investigation Practice of Mindfulness Program (IPMP) for a group of adolescents in Canada. This intervention was integrated by developmental psychology of adolescents, clinical strategies from CBT for anxiety, and mindfulness teaching techniques geared towards adolescents.

A total of 27 participants were subdivided into two groups. One group's ages ranged from 11 to 13 years old and was identified as the Early Group, while the other group ranged from ages 14 to 17 years old and was identified as the Middle Group. There were 21 participants who attended enough times and completed the required forms from the two groups combined. We reviewed self-report assessment of anxiety in a pre- and post-survey called the Beck Anxiety Inventory showed that (76.19%) participants in the combined groups experienced decreased anxiety. A positive result was found in the other

self-reporting on the Child and Adolescent Mindfulness Measure based on pre- and post-surveys that 90.47% of the participants showed improvement in mindfulness. Moreover, the final Class Evaluation Form was to evaluate the overall effectiveness of a 6-week IPMP course, especially within exercise practice according to their acceptability, generalizability and overall effectiveness in both groups. Additionally, the findings showed that the IPMP program significantly improved the participants' ability to relax and concentrate as well as the ability to identify feelings and emotions, thus improving interpersonal relationships, addressing internalized and externalized problems, and boosting of psychological well-being.

This pilot study is the first trial that introduces the investigation practice into mindfulness program for adolescents to manage anxiety in daily life. Findings will advance current interventions that support adolescents' anxiety reduction and spiritual growth. This dissertation research contributes to knowledge in the fields of psychology, mindfulness research, pastoral and spiritual care, social science, and youth education.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	ii
ABSTRACT.....	v
LIST OF TABLES	xi
LIST OF FIGURES	xii
CHAPTER I: INTRODUCTION.....	1
Background of the Study	1
Purpose Statement	6
Significance of the Study.....	8
CHAPTER II: LITERATURE REVIEW.....	11
Introduction.....	11
Understanding Adolescent Development.....	14
Definition of Adolescence	16
Historical and Theoretical Development	17
Periods of Adolescence’s Development.....	20
Early and Middle Stages of Transitional Experience of Adolescence	24
Precocious and Delayed Puberty	41
Summary.....	47
Strategies to Deal with Anxiety	48
Definition of Anxiety	48
Approach from CBT	53
Summary	66
Teaching Techniques of Mindfulness for Adolescents	67

Mindfulness and Investigation.....	67
Key Elements in Teaching Mindfulness to Adolescents.....	75
Summary.....	84
Conclusion	85
CHAPTER III. METHODOLOGY	88
Recruitment Strategies and Procedures	89
Criteria for Inclusion.....	90
Criteria for Exclusion.....	91
Parents’ Meeting	92
Outline of the Model Program (Appendix I)	93
1. Check-in and Report Back.....	94
2. Transition Phase.....	94
3. Psychoeducation	95
4. Activity Practice.....	95
5. Closing Moment	96
Data Analysis	97
Measures of Anxiety	98
Measures of Mindfulness.....	99
Evaluation with Curriculum	99
Provisions of Confidentiality	100
Conclusion	101
CHAPTER IV. RESULTS	103
Statistical Analysis:.....	103

1. Demographics	103
2. Self-Report Assessment of Anxiety from Pre- and Post- Survey	108
3. Self-Report Assessment of Mindfulness from Pre- And Post-Scores.....	112
4. Self-report on Class Evaluation Form	117
Conclusion	121
CHAPTER V. DISCUSSION	123
Interview Information.....	123
1. Understanding the Investigation of Mindfulness.....	125
2. Benefits from Learning / Experience.....	130
Problem-Solving Strategies	135
Strengths of the Program	137
Limitations and Recommendations for Further Research	139
Implications of this Research.....	140
Conclusion	141
CHAPTER VI. CONCLUSION	143
BIBILOGRAPHY	152
APPENDIX A: Participant --- Assent Form	160
APPENDIX B: Parent/Legal Guardian --- Informed Consent Form	161
APPENDIX C: Demographics Questionnaire	166
APPENDIX D: Beck Anxiety Inventory (BAI).....	167
APPENDIX E: Child and Adolescent Mindfulness Measure (CAMM)	168
APPENDIX G: Scheduling Exit Interview Chart.....	172
APPENDIX H: Exit Interview Questions.....	173

APPENDIX I: Curriculum	174
Session one: Mindfulness/ Here and Now	174
Session Two: Investigation/ Sending Awareness	176
Session Three: Identifying Anxiety	178
Session Four: Releasing Anxiety Emotion	180
Session Five: Befriending Surroundings/ Integrating Practice.....	182
Session Six: Self-Compassion/ Balancing Inside and Outside.....	184
APPENDIX J: Exercise	186

LIST OF TABLES

Table 1: Age Divisions for Puberty	23
Table 2: The Characteristics of Early and Middle Adolescence.....	40
Table 3: Advantages and Disadvantages of Early Girls and Boys, Middle Girls and Boys	44
Table 4: Demographic Characteristics of Early Group	106
Table 5: Demographic Characteristics of Middle Group.....	107
Table 6: Demographic Characteristics of Middle Group.....	109
Table 7: Pre- and Post- Score of Anxiety from the Middle Group	111
Table 8: Pre- and Post- Score of Mindfulness from the Early	114
Table 9: Pre- and Post- Score of Mindfulness from the Middle Group.....	116
Table 10: Responses of Participants on Understanding Investigation of Mindfulness from Sending Awareness	126
Table 11: Responses of Participant Understanding Investigation of Mindfulness from the Concept of Cause and Effect	128
Table 12: Benefits with Relaxation and Concentration from Practicing	131
Table 13: Benefits with Identifying Feelings and Emotions from Practice.....	132
Table 14: Benefits with Improved Ability with Expression from Practice.....	133
Table 15: Benefits with Assisting Interpersonal Relationships from Practice.....	134
Table 16: Benefits with Improved Sleep Quality from Practice.....	134

LIST OF FIGURES

Figure 1: Contrast Pre-and Post-Score of Anxiety from Early Group.....	110
Figure 2: Pre-and Post-Score of Anxiety from Middle Group	112
Figure 3: Contrast Pre-and Post-Score of Mindfulness from Early Group	115
Figure 4: Pre-and Post-Score of Mindfulness from Middle Group	117
Figure 5: Evaluation of Understanding Investigation and Sending Awareness.....	119
Figure 6: Evaluation the Meaning of Cause and Effect.....	120
Figure 7: The Evaluation of Exercises	121

CHAPTER I: INTRODUCTION

Background of the Study

Education is defined as “the process of bringing up children in particular manners, habits, or ways of life...the development of mental or physical powers,”¹ which emphasizes balancing internal and external development. However, recent statistics from the Substance Abuse and Mental Health Services Administration (SAMHSA), Centers for Disease Control and Prevention (CDC) and the U.S. Department of Justice, illustrated that: “1 in 6 U.S. youths aged 6-17 experience a mental health disorder each year.”² Modern conditions cause students to lack the capacity to manage their mental health during their individual growth, due to study pressures, over-scheduling, and some other unknowable reasons.³ The younger generation faces more challenges, competition, and temptation in our contemporary society. Fortunately, research in neuroscience and attention provides evidence that “becoming more mindful helps children and adolescents better regulate how life circumstances impact their mental health.”⁴ Thus, although the young generation face more challenges, they can achieve internal and external balance through mindfulness training. This research project thus is relevant and significant.

Mindfulness is widely accepted theoretically and empirically in the treatment of

¹ Lesley Brown, "Education, " in *The New Shorter Oxford English Dictionary on Historical Principles* (New York: Oxford University Press, 1993), 785.

² “Mental Health by the Numbers,” *National Alliance on Mental Illness*, accessed January 1, 2022, <https://www.nami.org/mhstats>.

³ Brandon H. Hidaka, “Depression as a Disease of Modernity: Explanations for Increasing Prevalence,” *Journal of Affective Disorders* 140, no. 3 (2012): 205–14, <https://doi.org/10.1016/j.jad.2011.12.036>.

⁴ Marilyn Price-Mitchell, “Mindful Warriors: Meditation for Teenagers,” *Roots of Action*, October 2012, <http://www.rootsofaction.com/meditation-children-teens-mindful-warriors>.

various mental disorders in the West. Numerous mindfulness research including on Mindfulness-Based Stress Reduction (MBSR) and Mindfulness-Based Cognitive Therapy (MBCT) are utilized to address stress, depression, and trauma in adults and have shown their efficacy.⁵⁶ Both of these therapies not only effect long-lasting physical and psychological symptom reduction but also deep, positive changes in attitude, behavior, and perception of self, others and the world. However, MBSR and MBCT are limited in application to adolescents, as experts have pointed out: application towards teens is lacking due to various factors such as the downward application of mindfulness-based approaches from adults to teens, causing a gap in developmentally sensitive treatments and posing questions of efficacy when the “same process mechanism is applied across the lifespan.”⁷ Although Mindfulness-based Cognitive Therapy has developed a twelve-session therapy for children between the ages of nine to twelve (MBCT-C), many professors have recognized the necessity of developing the training process according to different characteristics of each age group because different thoughts, emotions, motivations, and behaviors are age appropriate at different developmental stages. Scholars Apsche and Jennings pointed out in their 2013 article the need to “modify mindfulness training with youth to accommodate their differing developmental needs and

⁵ Gina M. Biegel et al., “Mindfulness-Based Stress Reduction for the Treatment of Adolescent Psychiatric Outpatients: A Randomized Clinical Trial,” *Journal of Consulting and Clinical Psychology* 77, no. 5 (2009): 855–66.

⁶ Samuel J. Jennings and Jerry L. Jennings, “Peer-Directed, Brief Mindfulness Training with Adolescents: A Pilot Study,” *International Journal of Behavioral Consultation and Therapy* 8, no. 2 (2013): 23-25.

⁷ Zindel V. Segal et al., *Mindfulness-Based Cognitive Therapy for Depression*, 2nd ed, (New York: Guilford Press, 2013), 44.

interests.”⁸

Kabat-Zinn developed MBSR in 1979 at the University of Massachusetts Medical Center, and mindfulness is most often defined using his description: “paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally.”⁹ Zindel, Segal, and Mark Williams based on MBCT adapted some techniques and worksheets from cognitive therapy¹⁰ and placed little emphasis on changing or altering thought content.¹¹ They further described the essence of this moment-to-moment state: “to ‘be’ fully in the present moment, without judging or evaluating it, without reflecting backwards on past memories, without looking forward to anticipate the future, as in anxious worry, and without attempting to ‘problem-solve’ or otherwise avoid any unpleasant aspects of the immediate situation.”¹²

In brief, the practice process involves being alert and accepting body sensations, emotions, and cognition that arise in the individual’s awareness, observing without past or future or other evaluation or judgment. Later, a therapy approach called the Mindfulness-integrated Cognitive Behavior Therapy (MiCBT) was created by Bruno Cayoun. His research involved the dysfunction of attentional systems and the human capacity for attentional and inhibitory control in children with ADHD, complex co-morbidity, trauma, and measurements of mindfulness mechanisms in clinical

⁸ Randye J Semple, and Jennifer Lee, *Mindfulness-based Cognitive Therapy for Anxious Children: A Manual for Treating Childhood Anxiety* (Oakland, CA: New Harbinger Publications, 2011), 31.

⁹ Jon Kabat-Zinn, *Wherever You Go, There You Are: Mindfulness Meditation in Everyday Life*, (New York: Hyperion, 1994), 4.

¹⁰ Semple and Lee, *Mindfulness-based Cognitive Therapy*, 23.

¹¹ Segal et al., *Mindfulness-Based Cognitive Therapy for Depression*, 49-51.

¹² John D. Teasdale, Segal Zindel, and Williams J. Mark G, “How Does Cognitive Therapy Prevent Depressive Relapse and Why Should Attentional Control (Mindfulness) Training Help?” *Behaviour Research and Therapy* 33, no. 1 (January 1, 1995): 25–39. [https://doi.org/10.1016/0005-7967\(94\)E0011-7](https://doi.org/10.1016/0005-7967(94)E0011-7).

populations.¹³

MiCBT is a four-stage therapy model that integrates mindfulness with core elements of cognitive and behavioral methods for the purpose of teaching clients to internalize attention in order to regulate emotion and attention and to externalize these skill to contexts in which their impairment is triggered or maintained.¹⁴ A further definition of mindfulness is that it is “experienced as a heightened sensory awareness of the present moment, free from judgment, reactivity, and identification to the experience.”¹⁵ Those interventions from MBSR, MBCT, and MiCBT with mindfulness principles have led to the proposal of various operationalizations and rationales for the implementation of mindfulness-based therapy systems in accordance with the theory of specific psychopathologies, guidelines for clinical interventions, and a description of the quality standards of the therapeutic approach.¹⁶ Moreover, these interventions have been directly adapted for children,¹⁷ showing that one can develop an intentional awareness of the present experience on a moment-to-moment basis in children’s practice of mindfulness.¹⁸

While mindfulness training is focused on paying attention to being nonjudgmental towards personal experiences in the present moment, sometimes, regardless of how much you try, certain emotions or repetitive thoughts may persist. When this happens, one

¹³ Bruno A. Cayoun, *Mindfulness-Integrated CBT: Principles and Practice* (John Wiley & Sons, 2011), i.

¹⁴ Cayoun, *Mindfulness-Integrated CBT*, 11.

¹⁵ Cayoun, 11.

¹⁶ Cayoun, 2.

¹⁷ Semple and Lee, *Mindfulness-based Cognitive Therapy*, 23.

¹⁸ Randy J. Semple and Jennifer Lee, “Mindfulness-Based Cognitive Therapy for Children.” *In Mindfulness-Based Treatment Approaches*. (Academic Press, 2014), 161-188.

could pursue a deeper process behind the mindful experience through Investigation, *dhamma-vicaya*, which places emphasis on gently looking at the motivating factor behind the experience,¹⁹ investigating the arising of physical, verbal and mental²⁰ phenomena right here²¹ (Cankī Sutta (95) of the Majjhima Nikāya), and discovering the truth by oneself²² (Mahāparinibbāna Sutta (16) the Dīgha Nikāya). It is a key factor to be developed in the cultivation of insight in Buddha's teaching.

Dhamma-vicaya is outlined in the second of the Seven Factors of Awakening in the Buddha's meditation teaching in the Mahāsatipaṭṭhāna Sutta of the Dīgha Nikāya⁵ and is usually translated as "Investigation of Dhamma" or "Investigation of Phenomena properly,"²³ which is to analyze phenomena as they occur in terms of cause and effect²⁴ or to examine the cause and/or the cause of its cause.²⁵ The practice principle of Investigation has been specifically outlined by the Canadian-born Theravada monk Ajahn Thiradhammo as: "Our awareness has developed only enough to see part of that much deeper process, so this Investigation requires some ability to probe into things. It's like sending awareness into some particular specialized area of our experience, investigating

¹⁹ Weiss, Allen, "Mindfulness Is Not a Cure for Everything," *Tricycle: The Buddhist Review*, Accessed June 6, 2018. <https://tricycle.org/trikedaily/investigation-mindfulness/>.

²⁰ Satipaṭṭhāna Sutta. *The Foundations of Mindfulness*, trans. Nyanasatta Thera. (Kandy; Buddhist Publication Society, 1993), 145-55.

²¹ Suvaco, Phra Ajaan Suwat, and Thanissaro Bhikkhu, "A Home for the Mind," *Access to Insight*, 2002, <https://ibcclibrary.thanhsiang.org/files/accesstoinight/html/lib/thai/suwat/homeformind.html>.

²² Maurice O'Connell Walshe, *The Long Discourses of the Buddha: A Translation of the Dīgha Nikāya*. (Boston: Wisdom Publications, 2012), 231.

²³ Jeet Baudh, "Satta Bojjhanga Sutta," *Bodhi Path* 20, no. 1 (2021): 23–28.

²⁴ Thānissaro Bhikkhu, *Right Mindfulness: Memory & Ardency on the Buddhist Path* (Valley Center, CA: Metta Forest Monastery, 2012), 102.

²⁵ Dharma Priya Bhikkhu, "The Notion of Investigation (Vicaya) in Buddhism," *Asia Pacific Journal of Religions and Cultures* 1, no. 1 (2017): 27–38.

it more thoroughly.”²⁶ This principle provides the concrete steps for participants to practice and examine the underlying emotion, thus facilitating them to conduct Investigation thinking patterns to prevent anxiety.

Purpose Statement

The purpose of this pilot study is to introduce Investigation into mindfulness practice while integrating interventions from a CBT strategy. The goal is to provide a practical, easy-to-use guide using theories based on studying the mindfulness and Investigation, applying various empirically supported mindfulness techniques for different anxiety conditions for adolescents between 11 to 17 years old. The present study will contribute to current trends in mindfulness research for youths.

The present study has four aims: the first aim is to examine what anxiety does to adolescent experience based on biological, social-emotional, psychosocial, and cognitive development, to understand their developmental characteristics. The second aim is to identify anxiety from psychological and Buddhist perspectives. The third aim is to find out existing approaches for anxiety reduction in adolescents based on cognitive and behavioral aspects of CBT therapy. The fourth aim is to gather existing techniques of mindfulness teachings for adolescents. Based on the above understanding and research, Investigation practice is integrated into mindfulness in curricula and programs with the goal of reducing anxiety in teens.

An additional purpose of this research project was to examine the experience of

²⁶ Weiss, “Mindfulness Is Not a Cure for Everything.”

adolescents who completed the six-week Investigation Practice of Mindfulness Program (IPMP). More, specifically, it aimed to explore how Investigation practice works for adolescents' ability to implement the program—whether there is a point or a shift when they apply the Investigation practice as a useful and worthy strategy rather than just a skill they learned through the program.

In order to gather the answers to this question, the present study explores the participants' expressed perceptions and perceived benefits after the program. Three research questions were proposed:

1. To assess the feasibility of research intervention for adolescents regarding their participation and adherence to the pilot intervention.
2. To evaluate whether the Investigation practice intervention for adolescents would reduce symptoms of anxiety and increase the level of mindfulness.
3. To examine whether the curriculum process helped them with understanding and experiencing the Investigation practice and what the results were with regard to perceived benefits and effects.

Therefore, the purpose of this research intervention was to provide Investigation practice in a mindfulness program while developing curriculum for intervention in adolescent anxiety, based on understanding the development of adolescent physical and psychological characteristics, existing strategies of mitigating anxiety from CBT, and mindfulness teaching techniques for adolescents. The hypothesis for this pilot study was that adolescents participating in the Investigation Practice of Mindfulness Program (IPMP) would report decreases in anxiety in their exit questionnaire and interview in

comparison to their initial questionnaire.

Significance of the Study

Anxiety is considered as “the crucial problem of emotional and behavioral disorders,” and the “fundamental phenomenon of neurosis,”²⁷ with many synonyms such as “‘fear,’ ‘foreboding,’ ‘worry,’ ‘disquiet,’ ‘tension,’ ‘unease,’ ‘restlessness,’ ‘watchfulness,’ ‘distress,’ ‘concern,’ ‘nervousness’ and the all-encompassing ‘suffering.’”²⁸ Such negative emotions can influence the physical functioning²⁹ of the body’s cardiovascular, immune, nervous, and metabolic systems.³⁰ Yet only one in four young people receive professional help for this problem.³¹ Even though young people face more difficulties than adults, “young students are harder to express their intangible problems and incur them to suffer in silence, which would be a clue to cause the psychological wounds under the invisible condition to go through their life.”³²

Pertinent research has pointed out that learning to be present with emotional intensity is an important application for adolescents because they are facing body changes, gender identity issues, or other challenges in society⁷ and are far more insecure than any other age group.⁶ Psychologist G. Stanley Hall described this stage as “storm

²⁷ Rollo May, *The Meaning of Anxiety*, (Ronald Press, 1950), 15.

²⁸ Bob Stahl, Florence Meleo-Meyer, and Lynn Koerbel, *A mindfulness-based Stress Reduction Workbook for Anxiety*, (New Harbinger Publications, 2014), 13.

²⁹ Robert C Solomon, *What is an Emotion?: Classic and Contemporary Readings*, 2nd ed. (New York: Oxford University Press, 2003), 77.

³⁰ Mats Lekander, “Ecological Immunology: The Role of the Immune System in Psychology and Neuroscience,” *European Psychologist*, 7(2), 98–115, 2002, <https://doi.org/10.1027/1016-9040.7.2.98>

³¹ Cunningham et al., “The Cool Teens CD-ROM for Anxiety Disorders in Adolescents.” *European Child & Adolescent Psychiatry* 18, no. 2 (2009): 125–129.

³² David Fontana, and Ingrid Slack, *Teaching Meditation to Children: A Practical Guide to the Use and Benefits of Meditation Techniques*, (Shaftesbury, Dorset: Element, 1998), 12.

and stress.”⁸ They are developing an understanding of the emotions of self and others,¹⁰ and it is a stage of growing cognitive capacities.⁹ This makes it much more possible for them to create a good habit of being aware of their body sensations, emotions, and thoughts, which would provide clues for them to understand their inner balance and cultivate good abilities of self-understanding, self-regulation, and self-management.

The rationale behind the inclusion of Investigation is for teens to grasp the reality of life issues, come to terms with their understanding of cause and effect, and take control of their emotions using meditative Investigation techniques. This allows teens to pinpoint the source of causation and how it arises in the mind to cloud their clear knowing/cognition, leading to negative thoughts or emotions. Once they can recognize and rectify the problems, they will have enough capacity to prevent themselves from engaging in serious behaviors such as alcohol, drug, or sexual abuse or even committing various crimes. Furthermore, a much happier and healthier mentality towards life in general will be appreciated and personal emotions/anxiety will subside or be better navigated during troublesome situations or hardships.

An additional contribution to this field will be adding Investigation practice to a mindfulness program within the theoretical and historical context of Buddhism, thus integrating this approach into the contemporary mindfulness practice system in the US as a psychoeducation strategy with an additional perspective and applying them in practical way. This approach would also be appropriate for the educational standard of balancing the body (physically) and mind (psychologically) for individual development as described at the beginning of this study. The approach and analysis of the dissertation is interdisciplinary, in many ways bridging gaps between psychology, education, and

religion.

CHAPTER II: LITERATURE REVIEW

Introduction

Adolescence is a high-risk period for mood fluctuations and intense reactions in many situations.³³ The National Institutes of Health showed nearly 1 in 3 of all adolescents experience an anxiety disorder, and this has gone up 20% recently.³⁴ The literature has strongly pointed out that these conditions tend to lead to other risk-taking activities such as suicide, violence, use of tobacco, illicit drugs, and risky behaviors related to sexuality³⁵ or to committing other crimes, causing psychological wounds that are invisible and could last a lifetime.³⁶ ³⁷ Although there are numerous approaches from etiology and medical fields with regard to research studying the physical and psychological effects anxiety has on the body and mind, few research interventions have been conducted with this particular population based on psycho-education and application in a practical way.

Intervention is a type of research where a new treatment, therapy, or tool is tested on research subjects or cohorts for a finite period to see if it works. Dr. Jon Kabat-Zinn first introduced mindfulness to the West in a medical setting at the University of Massachusetts Medical Center in 1979. Mindfulness was used as an additional

³³ Oppo, Annalisa et al., “Mindfulness Skills and Psychological Inflexibility: Two Useful Tools for a Clinical Assessment for Adolescents with Internalizing Behaviors,” *Journal of Child and Family Studies* 28, no.12 (Dec 2019): 3569-3580, <https://www.proquest.com/docview/2288316355?accountid=25358>.

³⁴ “Any Anxiety Disorder,” National Institute of Mental Health (NIMH), accessed January 2, 2022, <https://www.nimh.nih.gov/health/statistics/any-anxiety-disorder>.

³⁵ Fred E. Stickle, ed, *Adolescent Psychology* (Boston: McGraw-Hill/Dushkin, 2006),165.

³⁶ Fontana and Slack, *Teaching Meditation to Children*, 12.

³⁷ Oppo, “Mindfulness Skills and Psychological Inflexibility.”

intervention tool to reduce stress and pain specifically for hospital outpatients.³⁸ Since then, numerous mindfulness-based interventions have been conducted, moving progressively through three large institutional cultures: health care, mental health, and education.

Nowadays, mindfulness as a part of treatment is called the “third wave” of CBT and has a large amount of support from clinical trials.³⁹ It integrates traditional mindfulness training with cognitive and behavioral principles for the purpose of addressing psychological distress. This treatment is called Mindfulness-integrated Cognitive Behavior Therapy, and the acronym for this approach is MiCBT. The definition of MiCBT: “is a systemic therapy approach that integrates mindfulness meditation with core elements of cognitive and behavioral methods for the purpose of teaching clients to internalize attention in order to regulate emotion and attention and externalize these skills to the contexts in which their impairment is triggered or maintained.”⁴⁰ The cognitive and behavioral approach with mindfulness intervention helps participants with internalized and externalized attention.

Moreover, there are three derivative therapies from Cognitive Behavioral Therapy (CBT), called Dialectical Behavior Therapy (DBT), Mode Deactivation Therapy (MDT), and Acceptance and Commitment Therapy (ACT). These use mindfulness techniques with adolescents who have been suffering from disorders such as Conduct Disorder, post-

³⁸ Cheryl L. Shigaki, Bret Glass, and Laura H. Schopp, “Mindfulness-Based Stress Reduction in Medical Settings,” *Journal of Clinical Psychology in Medical Settings* 13, no. 3 (September 1, 2006): 209–16, <https://doi.org/10.1007/s10880-006-9033-8>.

³⁹ Seth J. Gillihan, *Cognitive Behavioral Therapy Made Simple: 10 Strategies for Managing Anxiety, Depression, Anger*, (Emeryville: Callisto Media Incorporated, 2018), 5.

⁴⁰ Cayoun, *Mindfulness-Integrated CBT*, 11.

traumatic stress symptomology and other mood disorders; these types of therapy decreased the suffering of the adolescents successfully.⁴¹ Few interventions have been conducted specifically for youth mental health. The present research builds on existing knowledge about adolescent development characteristics and tests the efficacy of anxiety management from CBT strategies when integrating mindfulness with Investigation practice as additional interventions geared specifically for adolescents.

In order to develop a suitable curriculum to alleviate anxiety, Investigation practices are integrated into a mindfulness program. This literature review is divided into three sections. The first section briefly outlines the development of the theory of adolescence from various standpoints in history. At the same time, it explores the causes of anxiety based on four dimensions of adolescent development, namely biological, cognitive, emotional, and social conditions in the early and middle adolescent stages. In brief, to find out what causes teenagers to have anxiety during this period, especial attention was paid to early and later maturing girls and boys.

The second section outlines existing anxiety-reducing strategies from various perspectives. First, the researcher explains the concept of anxiety from a psychological perspective and draws comparisons with the Buddhist perspective as well. Next, the researcher focuses upon describing existing approaches relating to youth anxiety using psychological intervention and outlines the core treatment components according to various aspects from Cognitive Behaviors Therapy (CBT). The basic principle of CBT

⁴¹ Bass, Christopher, Jolene van Nevel, and Joan Swart, "A Comparison between Dialectical Behavior Therapy, Mode Deactivation Therapy, Cognitive Behavioral Therapy, and Acceptance and Commitment Therapy in the Treatment of Adolescents," *International Journal of Behavioral Consultation and Therapy* 9, no. 2 (2014): 4–8, <http://dx.doi.org/10.1037/h0100991>.

centers on changing thought patterns (cognition) to change actions (behavior), emphasizing that the way people think and act helps emotional and behavioral problems.⁴² Providing specific strategies from Coping Cat and C.A.T. Project teaches youth to recognize signs of anxious arousal as a cue to manage anxiety.

The third section introduces the concept of Investigation as an additional tool utilized after attaining mindful calm, through recognizing cues to investigate conditions and thinking patterns, thus preventing anxiety. There were two components aiding seamless integration of the concept of Investigation into a mindfulness program. First, the definitions and contextualization of mindfulness and Investigation in Early Buddhism help us to apply this concept more flexibly and naturally. The second component is an overview of existing mindfulness teaching techniques for adolescents that clarifies the different strategies for adolescents in the early and middle stages.

The purpose of these three sections is to explore the question of “why” people are anxious, “what” existing research has been done, and “how” we can improve the strategies and teaching approaches for this project. The function of these three phases is to facilitate interrelationship and interaction, indispensable processes to produce a system. The overall aim is to propose a new treatment protocol that skillfully incorporates an Investigation practice into a mindfulness program for alleviating adolescents’ anxiety.

Understanding Adolescent Development

The reason for selecting this age group is because these youths are not so naïve or

⁴² Rob Willson, *Cognitive Behavioural Therapy for Dummies*, (Chichester, West Sussex, England: John Wiley, 2006), 9.

unaware of their thoughts and have considerable intellectual capacity for mental analysis.⁴³ In addition to relying on their parents or teacher for guidance, they can self-regulate and monitor their own learning process and set up small steps of objectives to reach their goals. At the same time, G. Stanley Hall (1846-1924), an important and influential figure in American psychology for child and adolescent studies⁴⁴ believed adolescents “are more responsive than any other age-group to positive growth and adult direction.”⁴⁵ However, psychologists pointed out that: “during adolescence proper, inner conflicts have reached a point of inescapability”⁴⁶ and “all individuals experience difficulties in adjusting during their adolescent years.”⁴⁷ Experts have pointed out that different thoughts, emotions, motivations, and behaviors are age-appropriate at different developmental stages.⁴⁸ Hence, the first aim of this study is to understand the characteristics of adolescent psychological development and explore different kinds of anxieties during the early and middle adolescent periods.

First of all, the following section will clarify some relevant concepts about adolescent development, from definitions to historical perspectives, and how psychologists at different times classify different stages of adolescence from their various standpoints. Moreover, the characteristics of adolescent psychological development from biological, cognitive, emotional, and social dimensions will be summarized in order to

⁴³ John W. Santrock, *Life-Span Development*, (New York: McGraw-Hill, 2011), 370.

⁴⁴ W. Andrew, *Developmental Psychology: Childhood and Adolescence*, (New York: Macmillan Pub. Co., 1991), 11.

⁴⁵ David E. Balk, *Adolescent Development: Early through Late Adolescence*, (Pacific Grove, CA: Brooks/Cole Pub. Co., 1994), 10.

⁴⁶ Peter Blos, *On Adolescence: A Psychoanalytic Interpretation*, (New York: Free Press of Glencoe, 1962), 88.

⁴⁷ Balk, *Adolescent Development*, 28.

⁴⁸ Semple and Lee, *Mindfulness-based Cognitive Therapy*, 31.

find out the main causes of anxieties during early and middle periods. In addition, the characteristics and anxiety of early-developing and late-developing adolescence will be presented as well.

Definition of Adolescence

According to the Oxford English Dictionary, adolescence is defined as a period following the onset of puberty during which a young person develops from a child into an adult.⁴⁹ The founder of adolescence science and the father of adolescence psychology, G. Stanley Hall, provides a more profound definition of adolescence as a “complex, multi-system transitional process involving progression from the immaturity and social dependency of childhood into adult life with the goal and expectation of fulfilled development potential, personal agency, and social accountability.”⁵⁰ This definition extends individual development into multiple aspects. From Morris J. L. Stambler’s perspective, “the biological event of puberty clearly marks the beginning of adolescence, the end of adolescence and entry into adulthood has many more cultural determinants.”⁵¹ Other opinions also agree that puberty marks the onset of adolescence, but when adolescence ends, it is a more complex situation.⁵²

In addition, Professor Laura E. Berk described adolescence as “a cascade of instinctual passions, a phase of growth so turbulent that it resembles the period in which

⁴⁹ Frank R. Abate, and Elizabeth Jewell, *The New Oxford American Dictionary*, (New York: Oxford University Press, 2001), 22.

⁵⁰ Greenfield M Patricia et al, “Cultural pathways through universal development,” *Annual review of psychology* 54, no. 1 (2003): 461-490.

⁵¹ Morris J.L. Stambler, “100 Years of Adolescence and Its Prehistory from Cave to Computer,” *Routledge* 70, no. 1, (2017): 22-39.

⁵² Stambler, “100 Years of Adolescence,” 23.

human beings evolved from savages into civilized beings.”⁵³ Her explanation is based on biological and hormonal changes of adolescence. Another definition, based on sociologist Margaret Mead’s experience, showed that “greater attention must be paid to social and cultural influences for adolescent development to be understood”⁵⁴ because it is obvious that some cultures manifest very different images of adolescent life compared to western perspectives, in a social-cultural perspective.⁵⁵ Different groups have their own lifestyles; images and characteristics of adolescence are influenced by culture.

From those various descriptions, the definition of adolescence is dependent on the field of study. Thus, adolescence is not a unitary term existing in isolation. Rather, it has an interrelation with an internal multi-system and the external social-system environment. Let’s trace back the history of the development of the concept of adolescence.

Historical and Theoretical Development

Even though anthropology does not yield original recordings or publications of the descriptions of the lives, activities, and experiences of children,⁵⁶ people have been paying attention to the adolescent phase since ancient times. Professor Sung Kyung-Yoo explained that during the 4th century B.C, the famous Greek philosophers Plato and Aristotle mentioned that there is a period of time in the development in human life for

⁵³ Laura E. Berk, *Infants, Children, and Adolescents*, 5th ed. (New Zealand, 2005), 516.

⁵⁴ Berk, *Infants, Children, and Adolescents*, 571.

⁵⁵ Sung-Kyung Yoo, “Adolescent Psychology: Achievement,” Ewha Womans University, accessed August 8, 2018, video, 29:39, <https://open.163.com/newview/movie/free?pid=MA5T0OVM&mid=MA5T2QODK>.

⁵⁶ Robert A. LeVine, “Ethnographic Studies of Childhood: A Historical Overview,” *American Anthropologist* 109, no. 2 (June 2007): 247–60, <http://dx.doi.org/10.1525/aa.2007.109.2.247>.

these developmental tasks.⁵⁷ Whether or not they used the specific terminology of “adolescence,” people throughout history have regarded adolescence as a phase in the development of human beings.

During the middle ages, there were two disunified views on whether adolescence is separate from adulthood. The first perspective considered children under the age of seven to be infants and those older than seven to be adults.⁵⁸ Aries (1962) reported that “as soon as children outgrew their swaddling clothes, they were dressed like adult men and women. They played adult games, drank with adults, and worked beside them in fields and shops.”⁵⁹ They are considered as a kind of labor force to help parents with farming. During that time, people assume that children and adolescents are equivalent to adults⁶⁰ and that children could be married, crowned as monarchs, or hanged as criminals.⁶¹ Children were treated as miniature adults largely because of economic demands, and social organizations of earlier eras required that adolescents work as adults to support themselves or their families.⁶² The other perspective from historical artifacts and writings from as early as medieval times in Europe details that childhood was regarded as a separate phase of life. The medieval painters often depicted children as childlike and the written texts contained terms that distinguished children under age 7 or 8 from other people and recognized even young teenagers as not fully mature.⁶³ By the

⁵⁷ Sung, *Achievement, Psychology of Adolescents*.

⁵⁸ Martine Batchelor, “Meditation and Mindfulness,” *Contemporary Buddhism* 12, no. 1 (2011): 157. <https://www-tandfonline-com.uwest.idm.oclc.org/doi/full/10.1080/14639947.2011.564832>.

⁵⁹ F. Philip Rice, *Child and adolescent development*, (Prentice Hall, 1997), 124.

⁶⁰ Sung Kyung-Yoo, *Achievement, Psychology of Adolescents*, 04 mm film.

⁶¹ Rice, *Child and Adolescent Development*, 124.

⁶² Rice, 124.

⁶³ Berk, *Infants, Children, and Adolescents*, 12.

fourteenth century, manuals offering advice on many aspects of childcare including health, feeding, clothing, games, and participation in family life become common.⁶⁴ Hence, childhood and adolescence still was not always viewed as distinct periods of life separate from adulthood during medieval times.

During the Enlightenment period, adolescence was considered as a kind of preparation for adulthood, but an adolescent was still considered to be an adult.⁶⁵ During the 17th and 18th centuries, economic progress and technological changes contributed to the development of the middle class and created a demand for workers who had some degree of skill and education. Consequently, special provisions had to be made to send children to school or tutor them at home.⁶⁶

After the industrial revolution, with the development of the economy, society required adolescents to meet educational needs before entering society.⁶⁷ People regarded adolescents to be a kind of group that had to be trained and educated as the next generation. After 1900, in the United States and Western Europe, mass secondary school enrollment extended schooling beyond childhood and into adolescence.⁶⁸ At the same time, much scientific research was done on this particular subject. The most representative psychologist pioneering the theory of adolescence, G. Stanley Hall (1846–1924), grounded in Darwin’s theory of evolution and maturation⁶⁹ described

⁶⁴ Berk, 12.

⁶⁵ Sung Kyung-Yoo, *Achievement, Psychology of Adolescents*,.

⁶⁶ Berk, *Infants, Children, and Adolescents*, 12.

⁶⁷ Berk, 571.

⁶⁸ LeVine, “Ethnographic Studies of Childhood”, 248.

⁶⁹ Rice, *Child and Adolescent Development*, 129.

“adolescence as a cascade of instinctual passions, a phase of growth so turbulent that it resembles the period in which human beings evolved from savages into civilized beings.”⁷⁰ Hall proposed the idea that adolescence is a time of unusual turmoil and conflict, and this provided a framework within which scholars could explain adolescent change.⁷¹ Hall greatly advanced the science of child and adolescent development by lending his considerable prestige to this area of study in its early years.⁷² Social-economic stability, education system improvements, and general acceptance of the theories in education led to the ongoing progress of the education system. Gradually, compulsory education meant that the adolescent years ordinarily extends the shift from childhood to the prerogatives and responsibilities of adulthood over a 10 to 15-year period, one-fifth of the lifespan of the average person.⁷³ As we know, modern education even extended the schooling period to the college level, which is normally completed past 20 years of age.

Periods of Adolescence’s Development

Since adolescence has been defined as a separate group from adults, the study of adolescent psychology has become increasingly sophisticated. In 1482, the *Oxford English Dictionary*’s definition of adolescence referred to a period between childhood and adulthood that extended between ages 14 and 25 years in males, and 12 and 21 years

⁷⁰ Rice, 129.

⁷¹ Balk, *Adolescent Development*, 9.

⁷² Collins and Kuczaj, *Developmental Psychology*, 10.

⁷³ Collins and Kuczaj, 538.

in females.⁷⁴ In 1904, Hall based the perspective of the development of the growing child as parallel to the evolution of the human species and outlined it in four major stages, i.e., infancy (birth to age 4), childhood (ages 5 to 7), youth (ages 8 to 12), and puberty (ages 13 to 24).⁷⁵ Later on, research become more detailed and specific, dividing adolescence into three different stages based on various criteria.

Peter Blos, in his book *On Adolescence*, initially divided this period into five phases consisting of: preadolescence, early adolescence, adolescence proper, late adolescence and post-adolescence.⁷⁶ Preadolescence is considered as young as early adolescence and may be called late childhood, and post-adolescence is called emerging adulthood in later research. However, there is no uniform division standard for the three stages of early to late adolescence because it is difficult to define the precise ages indicating the beginning and end of puberty. As Professor John W. Santrock mentioned in his *Life-span Development*, “we know whether a young boy or girl is going through puberty, but pinpointing puberty’s beginning and end is difficult.”⁷⁷ Many other researchers and organizations have pointed out different stages using different criteria for categorization. Some of the typical and critical ideas in chronological order will be introduced as follows:

Firstly, Professor F. Philip Rice in the book *Child and Adolescent Development*⁷⁸ divided the stage into two groups based on his criteria:

⁷⁴ Alexa. C Curtis, “Defining Adolescence” *Journal of Adolescent and Family Health* 7, no. 2 (2015), 11.

⁷⁵ Rice, *Child and Adolescent Development*, 129.

⁷⁶ Balk, *Adolescent Development*, 17.

⁷⁷ Rice, *Child and Adolescent Development*, 129.

⁷⁸ Rice, 6.

1. Early adolescence, 12 to 14 years
2. Late adolescence, 15 to 19 years

Secondly, Professor Laura E. Berk⁷⁹ in her book *Infants, Children, and Adolescents* divided adolescence into three groups based on her criteria:

1. Early adolescence, from 11 or 12 to 14 years, a period of rapid pubertal change.
2. Middle adolescence, from 14 to 16 years, when pubertal changes are nearly complete.
3. Late adolescence, from 16 to 18 years, when the young person fully matures in appearance of an adult and faces more complete assumption of adult roles.

Thirdly, Professor John W. Santrock in his book *Life-span Development* also categorized three groups of adolescence but assigned different ages to them, as follows:⁸⁰

1. Early adolescence, starting at approximately 10 to 12 years of age.
2. Middle adolescence, between 13 to 17 years of age.
3. Late adolescence, ending at 18 to 21 years of age.

Fourthly, Professor Alexa C. Curtis has different classifications in the article “Defining Adolescence.”⁸¹

1. Early adolescence, from 11 to 13 years.
2. Middle adolescence, from 14 to 17 years.
3. Late adolescence, from 18 to 25 years.

⁷⁹ Berk, *Infants, Children, and Adolescents*, 517.

⁸⁰ Santrock, *Life-Span Development*, 17.

⁸¹ Curtis, “Defining Adolescence”, 26.

In addition, some other relevant organizations also proposed their criteria of categorization, such as the Society for Adolescent Medicine (SAM), which published a position paper on adolescent health research defining adolescence as the ages of 10 to 25. Further, the American Academy of Pediatrics (AAP) “Bright Futures” recommendations for pediatric preventive services identifies adolescence as the ages of 11 to 21 years. Finally, the criterion established by the Center for Disease Control and Prevention’s Youth Risk Behavior Surveillance System (CDC) is constructed by using educational levels such as grades 9 to 12, rather than a particular age group.⁸²

Table 1: Age Divisions for Puberty

Theorist /Organization	Definition of Adolescence (years)
Historical Definition (1482)	Males: 14-25 Females: 12-21
G. Stanley Hall (1904)	13-24
Peter Blos	Five phases, without precise ages
F. Philip Rice	12-19
Laura E. Berk	11-18
John W. Santrock	10-21
SAM	10-25
AAP	11-21
CDC	9 th -12 th grade

⁸² Curtis, “Defining Adolescence”, 11.

It is difficult to determine specific boundaries for the three stages of adolescence because each individual timetable for puberty is influenced primarily by heredity, although environmental factors such as diet and exercise also exert some influences.⁸³ Thus, it is not possible to make one uniform division criterion for different individuals. Still, we can know from these rich sources that the research on teenagers has improved to become more detailed and specific.

Since most experts base their adolescence categorization on age because it considers the depth and breadth of this brief developmental phase,⁸⁴ we are going to choose a neutral standpoint to set up the boundaries for the purposes of this dissertation.

1. Early adolescence, from 11 to 13 years --- Alexa C. Curtis
2. Middle adolescence, from 14 to 17 years --- Alexa C. Curtis
3. Late adolescence, from 18 to 21 years --- John W. Santrock

It is necessary to clarify the reason for not extending the late adolescence phase up to 25 years of age is because it is considered as emerging adulthood in modern studies. Additionally, the following discussion will only include early and middle stages of the transitional experience of adolescence, which relate to this research project.

Early and Middle Stages of Transitional Experience of Adolescence

As we know, the study of adolescent development has never been a simple subject. It has always involved interdisciplinary collaborations, which include various

⁸³ Wikipedia contributors, "Adolescence," *Wikipedia, The Free Encyclopedia*, accessed Sep, 2018 <https://en.wikipedia.org/wiki/Adolescence>

⁸⁴ Laurie L. Meschke, Christina Renee Peter, and Suzanne Bartholomae, "Developmentally appropriate practice to promote healthy adolescent development: Integrating research and practice," *In Child & Youth Care Forum*, vol. 41, no. 1, pp. 89-108. Springer US, 2012, 91.

perspectives from psychology, biology, history, sociology, education, and anthropology,⁸⁵ related to many changing elements.⁸⁶ However, we cannot discuss all of them here and will focus on the understanding of adolescent physiology and psychological development from the biological, cognitive, emotional, and social dimensions. Many psychology professors have pointed out four basic dimensions that could be seen as a complex processes of human growth involving physical, cognitive, emotional and social development.^{87 88} Simultaneously, several etiological models of childhood and adolescent anxiety were proposed to highlight cognitive, environmental, biological, and emotional influences as factors in the development and maintenance of anxiety.⁸⁹ This dissertation will focus on adolescents' biological, cognitive, emotional and social conditions in the early and middle stages to find causes for their anxiety.

The beginning of adolescence is marked by puberty, which is mainly dominated by biological development.⁹⁰ Among those floods of biosocial changes are signs of sexual maturation, increases in height and weight,⁹¹ hormonal changes, and brain development.⁹² These height, weight, hormonal, sexual and cognitive changes are basic

⁸⁵ Wikipedia contributors, "Adolescence," *Wikipedia, The Free Encyclopedia*, accessed Sep, 2018 <https://en.wikipedia.org/wiki/Adolescence>

⁸⁶ Stambler, "100 Years of Adolescence", 34.

⁸⁷ Rice, *Child and Adolescent Development*, 8.

⁸⁸ Joshua Lev Eagle, "Engaging the 'Wise Mind' of a Teen: Incorporating Mindfulness Practice into a Group Therapy Protocol for Anxious Adolescents." (PhD diss, *Massachusetts School of Professional Psychology*, 2008), 8, <https://search.proquest.com/docview/304817822/abstract/22BDD2D71F78436DPQ/3>.

⁸⁹ Brittany L. Mathews "Relations of Parent-Child Relationships and Biological Factors with Anxiety in Early Adolescence: Examining the Mediating Role of Emotional Factors." *Ph.D., Kent State University*, 2015, 1, <https://search.proquest.com/psychology/docview/1733329373/abstract/9E0E7183B7924369PQ/1>.

⁹⁰ Berk, *Infants, Children, and Adolescents*, 516.

⁹¹ Santrock, *Life-Span Development*, 354.

⁹² Robert S Feldman, *Development Across the Life Span*, 8th ed. (Pearson India Education Services, 2018), 395-403.

biological foundations that form the first stage and influences the beginning of adolescence, triggering other cognitive and behavioral changes.

Studies of cognitive development investigate how adolescence think. Piaget devised four stages of cognitive development by categorizing how children think and considered adolescence as belonging to the last stage, which he called the Formal Operational Stage, appearing between the ages of 11 and 15 and continuing through adulthood.⁹³ In this stage, the individual moves beyond concrete experiences and thinks in abstract and more logical terms.⁹⁴ Some of the largest changes in thinking during this formal operational period involve the capacity for abstraction, which permits adolescents to reason with symbols that do not refer to objects in the real world,⁹⁵ and logical and scientific reasoning,⁹⁶ which allows them to think about deep questions concerning meaning, truth, justice and morality.⁹⁷ In addition, this is the time adolescents start thinking about their body with the basic understanding of who they are. Body image is an important sense that is based on self-concept.

Emotional Development: Erikson recognized the major social and emotional developmental task of adolescence (12-18 years of life) as the development of identity.⁹⁸ The word emotion literally means “the act of being moved out or stirred up.”⁹⁹ However, compared to childhood and adult phases, adolescence has long been described “as a time

⁹³ Santrock, *Life-Span Development*, 25.

⁹⁴ Santrock, 25.

⁹⁵ Berk, *Infants, Children, and Adolescents*, 21.

⁹⁶ Siegler, Robert S, *Children's Thinking*, (Upper Saddle River, N.J.: Prentice Hall, 1998), 43.

⁹⁷ Siegler, *Children's Thinking*, 43.

⁹⁸ Eagle, “Engaging the ‘Wise Mind’ ”, 9.

⁹⁹ Rice, *Child and Adolescent Development*, 444.

of emotional turmoil, which is a group who can be on top of the world one moment and down in the dumps the next.”¹⁰⁰ G. Stanley Hall depicted this stage as “storm and stress,” which came from the German “Sturm und Drang,”¹⁰¹ a time for all young people to go through some degree of emotional and behavioral upheaval before establishing a more stable equilibrium in adulthood.¹⁰² The problem is that they do not know how to adequately express their feelings.¹⁰³ Thus, if adolescents learned to observe their emotions and feelings, they could start to understand their behavior and psychology.

Social development is the capacity to understand social relationships,¹⁰⁴ which is affected by the nature and level of the child’s cognitive skills.¹⁰⁵ Ross Vasta explained that how children interact with others depends on, for example, how clearly they conceptualize interpersonal relationships, how accurately they interpret other children’s behavior, and how well they can apply information gained in previous situations to their current circumstances.¹⁰⁶ For adolescents, the concern is how they recognize conditions and information to establish relationships in the family, with their parents and siblings, and in groups with both same-sex and opposite-sex friends, building moral and value beliefs. Among these, peer relations are the way that children’s contact with one another influences their socialization.¹⁰⁷ Social relationships also build their identity and self-

¹⁰⁰ John W. Santrock, *Children*, 10th ed. (Boston: McGraw-Hill, 2008), 542.

¹⁰¹ Stambler, “100 Years of Adolescence”, 27.

¹⁰² Jeffrey Jensen Arnett, “G. Stanley Hall’s Adolescence: Brilliance and Nonsense,” *History of Psychology* 9, no. 3 (2006): 186, <http://dx.doi.org.uwest.idm.oclc.org/10.1037/1093-4510.9.3.186>.

¹⁰³ Michelle Bosquet and Byron Egeland, “The Development and Maintenance of Anxiety Symptoms from Infancy through Adolescence in a Longitudinal Sample,” *Development and Psychopathology* 18, no. 2 (April 2006): 517.

¹⁰⁴ Rice, *Child and Adolescent Development*, 351.

¹⁰⁵ Ross Vasta, Marshall M. Haith, and Scott A. Miller, *Child Psychology: The Modern Science*, 2nd ed. (New York: J. Wiley & Sons, 1995), 36.

¹⁰⁶ Vasta, Haith, and Miller, 37.

¹⁰⁷ Collins and Kuczaj, *Developmental Psychology*, 440.

confidence.

Individual growth involves physical, biological, emotional, and social elements that influence each other, manifesting differently in each person and growing into personal characteristics. Thus, the result may be “a natural outgrowth of the biological upheaval of puberty...heightened emotionality, conflict.”¹⁰⁸ We try to find the risk factors of adolescent anxiety in early and middle stages of adolescence based on a biological, cognitive, emotional, and social understanding to clarify the reason behind adolescent anxiety as well.

Early Adolescence: (roughly 11-13)

Early adolescence is identified as the initial period of change¹⁰⁹ with physical maturation involving hormonal and bodily changes¹¹⁰ into a sexually mature person,¹¹¹ extending roughly from age 11 to age 13. Actually, in some ways the early years of adolescence have a lot in common with the early years of toddlerhood in terms of the struggle to learn a vast array of new skills.¹¹²

Peter Blos describes this as the second quest for separation-individuation from his or her family of origin. By this age, along with physical upheaval, values, standards, and moral laws have acquired an appreciable independence from parental authority; adolescents have become ego-syntonic and operate partly within the ego.¹¹³ This is a

¹⁰⁸ Berk, *Infants, Children, and Adolescents*, 516.

¹⁰⁹ Balk, *Adolescent Development*, 5.

¹¹⁰ Santrock, *Life-Span Development*, 353.

¹¹¹ Lois Wladis Hoffman, *Developmental Psychology Today*, (New York: Random House, 1988), 340.

¹¹² Helen L. Bee, *The Developing Child*, 6th ed. (New York, NY: HarperCollins College Publishers, 1992), 579.

¹¹³ Blos, *On Adolescence, a Psychoanalytic Interpretation.*, 76.

transition period between childhood and adolescence.

a. Biological Development

As we mentioned, the most important marker of the beginning of adolescence is facing puberty,¹¹⁴ which is when hormones play an organizational role¹¹⁵ to prime children to change dramatically in height, weight, and sexual maturation.¹¹⁶ It is worthwhile to note that boys and girls grow at different rates, as do their different body parts. Girls' peak growth rate for height is just under 12 years; for boys, it is 13.4 years. The peak rate of growth for weight is 12.5 years for girls and 13.9 years for boys. Thus, boys lag behind girls by 1 to 2 years. Girls achieve their adult height by around 16 years while boys are still growing at 18, 19, or even 20 years.^{117 118}

Moreover, sexual maturation, for most girls, begins at about age 9 to 11 as fatty tissues accumulate around the nipples, forming small "breast buds" that take about 3 to 4 years to mature into full breasts at around the age of 14.¹¹⁹ For boys, sexual maturation begins at about 11 to 12 (9.5 to 13.5) with an enlargement of the testes that is often accompanied by the appearance of unpigmented pubic hair. Another hallmark of male sexual maturity is the lowering of the voice as the larynx grows and the vocal cords lengthen.¹²⁰

¹¹⁴ Santrock, *Life-Span Development*, 353.

¹¹⁵ Patricia C. Broderick and Pamela. Blewitt, *The Life Span: Human Development for Helping Professionals*, 2nd ed. (Upper Saddle River, N.J.: Pearson Merrill Prentice Hall, 2006), 279.

¹¹⁶ David R. Shaffer and Kipp Katherine, *Developmental Psychology: Childhood and Adolescence*, 8th ed. (Pacific Grove: Wadsworth Cengage Learning, 2010), 217.

¹¹⁷ Carol K. Sigelman and Elizabeth A. Rider, *Life-Span Human Development*, 5th ed. (Australia; Thomson/Wadsworth, 2006), 131.

¹¹⁸ Arnett, "G. Stanley Hall's Adolescence," 189.

¹¹⁹ Shaffer and Katherine, *Developmental Psychology*, 217.

¹²⁰ Shaffer and Katherine, 218.

Hall and today's psychologists describe similar information about the adolescent brain development, that nearly all brain cells have already appeared at birth, that the brain reaches its full weight by ages 12 to 14, that what really matters for intelligence is not the number of brain cells but the "fibers" connecting brain cells, and that these fibers show accelerated growth at puberty.¹²¹ Professor Robert. S. Feldman notes, "brain development and thought are paving the way for cognitive growth."¹²²

b. Cognitive Development

Professor John W. Santrock considers adolescence thus: "during the transition from childhood to adolescence are increases in abstract, idealistic and logical thinking."¹²³ However, adolescent ability to focus on the relationship that is relevant in the particular situation and to screen out irrelevant ones remains limited.¹²⁴ As they make this transition, adolescents begin to think in more egocentric ways, often sensing that they are onstage, unique, and invulnerable."¹²⁵ The psychology of exploration also arises naturally: initial struggles with a sense of identity, a desire for independence, a return to childish behavior when stressed, moodiness, rule and limit testing, greater interest in privacy, and a tendency for a present-moment orientation, with limited thoughts about the future.¹²⁶

Blos considered that a strongly bisexual tendency is present shortly before the

¹²¹ Arnett, "G. Stanley Hall's Adolescence," 190.

¹²² Feldman, *Development Across the Life Span*, 403.

¹²³ Santrock, *Children*, 468.

¹²⁴ Siegler, *Children's Thinking*, 47.

¹²⁵ Santrock, *Children*, 468.

¹²⁶ Stambler, "100 Years of Adolescence," 23.

conflicts of adolescence¹²⁷ and that this bisexual self-representation with a more or less vague perception of the body finds an expression in all sorts of activities, interests, preoccupations, and daydreams.¹²⁸ This condition continues to exist until the early adolescent shifts his or her bisexual self-identity towards the opposite gender in the form of heterosexual love.¹²⁹ Individuals in this stage are gradually moving away from narcissism and bisexuality towards heterosexuality, which moves them toward clearer self-definition and self-acceptance. Compared to boys, girls are less repressed and are quite willing to stress their masculinity, while the boy is ashamed of his femininity and denies it during this period of their life.¹³⁰ Girls are much more consciously occupied by the idea: “Am I a boy or a girl?”¹³¹ His report also shows that girls face more challenges to their self-esteem and problems in early adolescence than boys do.¹³²

Moreover, girls at this stage experience a strange vagueness in their sense of time and space and imagine memories of events that their family tells them never happened or never happened in a particular way.¹³³ In addition, the first awareness of same-gender attraction for gay and lesbian youths often occurs during early adolescence.¹³⁴

Understanding of morality becomes more bound by social norms and expectations and moves toward an appreciation for relational ethics; an understanding of social equity shifts from strict adherence to equal treatment to a more individualized appreciation of

¹²⁷ Blois, *On Adolescence, a Psychoanalytic Interpretation*, 83.

¹²⁸ Blois, 86.

¹²⁹ Blois, 86.

¹³⁰ Blois, 83.

¹³¹ Blois, 83

¹³² Broderick and Blewitt, *The Life Span*, 283.

¹³³ Blois, *On Adolescence, a Psychoanalytic Interpretation.*, 83.

¹³⁴ Curtis, “Defining Adolescence,” 15.

human need.¹³⁵ Their “faith ranges start to move from the ‘literal mythic’ to the ‘synthetic-conventional,’ relying heavily on compliance with the beliefs of influential others.”¹³⁶

c. Emotional Development

David E. Barrett reported from his experimental and clinical evidence that age 11-13 years is the period of peak conformity to peers, when the sense of identity is closely tied with the identity of a best friend or “chum.” What’s more, children in this age group have such a strong need for a sense of belonging that they tend to betray their better judgment in order to avoid marginalization by the group;¹³⁷ a sense of belonging is necessary during early adolescence.¹³⁸ Thus, anxiety in this stage will manifest in such behaviors as refusing to sleep at another person’s house, refusing to attend school, and seeking to avoid situations where leaving the home is required.¹³⁹ In addition, a number of investigations show that those adolescents who are facing changes such as transitioning to junior high school, moving to a new town or into a new house, or even perhaps a parental separation or divorce show the greatest loss in self-esteem, the largest rise in problematic behavior, and the biggest drop in grade-point average during the beginning of puberty.¹⁴⁰

Sullivan portrayed loneliness as an intimidating experience “ordinarily

¹³⁵ Curtis, “Defining Adolescence,” 16.

¹³⁶ Curtis, “Defining Adolescence,” 16.

¹³⁷ David E Barrett, “The Three Stages of Adolescence.” *The High School Journal* 79, no. 4 (1996): 334.

¹³⁸ Barrett, 334.

¹³⁹ Barrett, 335.

¹⁴⁰ Bee, *The Developing Child*, 579.

encountered only in preadolescence...”¹⁴¹ This is particularly common at ages 11-12;¹⁴² undoubtedly, children in this age group needs to belong, to feel a part of things, at the level of the family, peer group, school, and community. Otherwise, they will not feel good and will experience more difficulty moving into the next stage of uniqueness.¹⁴³

d. Socioemotional Development

The social context also changes very obviously during the transition period from living under parents’ protection to interacting with peers, and this age group is strongly influenced by the standards of good or bad actions in the peer group.¹⁴⁴ So, it is natural for adolescents in this phase to belittle or ignore adult authority¹⁴⁵ and desire to spend more time with peers.¹⁴⁶ They prefer to have a smaller number of friendships that are more intense and intimate than those of young children¹⁴⁷ for both genders.¹⁴⁸ They thus face a whole new set of demands and required social skills, which will cause increases in the rate of depression and a drop in self-esteem if they do not connect well to this range of new demands and changes.¹⁴⁹

Moreover, the form of friendship is different from the preadolescent companion-in-adventure among boys or the secret-sharing whispering partner among girls at this age.¹⁵⁰ The boy now forms friendships that demand an idealization of the friend and is

¹⁴¹ Balk, *Adolescent Development*, 304.

¹⁴² Barrett, “The Three Stages of Adolescence,” 335.

¹⁴³ Barrett, 335.

¹⁴⁴ Barrett, 335.

¹⁴⁵ Meschke, Peter, and Bartholomae, *Developmentally Appropriate Practice*, 96.

¹⁴⁶ Santrock, *Children*, 469.

¹⁴⁷ Santrock, 548.

¹⁴⁸ Bloss, *On Adolescence, a Psychoanalytic Interpretation*, 77.

¹⁴⁹ Bee, *The Developing Child*, 579.

¹⁵⁰ Bloss, *On Adolescence, a Psychoanalytic Interpretation*, 77.

obsessed with a proxy who has some admired characteristics or loved qualities that the subject himself would like to possess.¹⁵¹ A transition to secondary schooling and the development and maintenance of same-gender and heterosexual friendships occur during this period.¹⁵² ¹⁵³ Early group experiences can help early adolescents construct a map of the social world and provides them with a knowledge base about human differences.¹⁵⁴

Summary

Early adolescence is a period in which individuals undergo both external and internal upheaval, which could recur throughout life. Biological development processes with external changes in height, weight and brain matter occur along with cognitive development from concrete¹⁵⁵ to abstract and logical thinking, but within limitations, which causes individuals to be curious about their own physical development and struggle with a sense of identity. Early adolescents try to separate from their parents' protection, while simultaneously experiencing the demand for new social skills and pursuing a sense of belonging, especially among their peers. Experts suggested that early adolescence may be particularly noteworthy, as this period is marked by an increase in internalizing and externalizing problems and may play a crucial role in laying the foundation for future development.¹⁵⁶

¹⁵¹ Blos, 77.

¹⁵² Bosquet and Egeland, "The Development and Maintenance," 519.

¹⁵³ Curtis, "Defining Adolescence," 15.

¹⁵⁴ Broderick and Blewitt, *The Life Span*, 269.

¹⁵⁵ Meschke, Peter, and Bartholomae, *Developmentally Appropriate Practice*, 95.

¹⁵⁶ Cliff McKinney and Kimberly Renk, "A Multivariate Model of Parent-Adolescent Relationship Variables in Early Adolescence," *Child Psychiatry and Human Development*; *New York* 42, no. 4 (August 2011): 445. <http://dx.doi.org/10.1007/s10578-011-0228-3>.

Middle Adolescence: (Roughly 14–17)

By middle adolescence, it is a time to move into high school in the modern education system. The body and brain proceed in development toward full adult stature and complete sexual maturation. The group of peers with which middle adolescents play have the tendency to form cliques with a mixed sex-crowd. Some may experience their first feelings of “falling in love” within a short time. Thus, group activities provide a safe opportunity for middle adolescents to develop relationship skills and interact with the opposite sex without the pressure of romantic involvement.¹⁵⁷ Generally, from the developmental perspective, the age of 14 years is considered a significant psychosocial benchmark.¹⁵⁸

a. Biological development

Continual adjustment to changing body size takes place;¹⁵⁹ although some late developments in boys or girls may still be involved in a growth spurt, in general, most people in this stage have overcome this awkwardness.¹⁶⁰ While there is an increasing acceptance of the pubertal physique, concern over making the body more attractive escalates,¹⁶¹ which is referred to as: “middle adolescence, is one of imminent finality and decisive turns.”¹⁶²

The circadian rhythm associated with brain development gradually decreases the

¹⁵⁷ Meschke, Peter, and Bartholomae, *Developmentally Appropriate Practice*, 97.

¹⁵⁸ Curtis, “Defining Adolescence,” 18.

¹⁵⁹ Stambler, “100 Years of Adolescence,” 23.

¹⁶⁰ Meschke, Peter, and Bartholomae, *Developmentally Appropriate Practice*, 97.

¹⁶¹ Curtis, “Defining Adolescence,” 18.

¹⁶² Bos, *On Adolescence, a Psychoanalytic Interpretation.*, 87.

youth's ability to fall asleep in the early evening hours despite fatigue, which will affect social interactions. On average, adolescents need just over 9 hours of sleep per night. Yet the average 16-year-old youth has but 7.5 hours of sleep, and typically, night-schooled seniors have 30 minutes less sleep. Sleep deprivation has been associated with increased risks of challenged mood regulation and depression, substance use, obesity related to challenged metabolism, and decreased academic success.¹⁶³

b. Cognitive Development

Middle adolescents typically have mature reasoning ability and are able to fully demonstrate abstract, multidimensional, intentional, and hypothetical thinking.¹⁶⁴ To compare with early adolescents, middle adolescents no longer feel good about performance solely because he or she “did the same” as a best friend; rather, they prefer to seek to out-do friends in areas of common activity, which reflects a need to be noticed and known.¹⁶⁵ It is normal for them to show their typical characteristics of competence and uniqueness because they are driven to find a special competence – abilities, aptitudes and interests that make a person who he or she is.¹⁶⁶

Another characteristic of this stage's adolescence proper is narcissism, which is existent in both sexes and results in a variety of ego states.¹⁶⁷ Psychologically, there may also be an increase in self-involvement, alternation between grandiosity and low self-esteem.¹⁶⁸ Erik Erikson considered that this group identifies themselves as “falling in

¹⁶³ Meschke, Peter, and Bartholomae *Developmentally Appropriate Practice*, 100.

¹⁶⁴ Meschke and Bartholomae, 98.

¹⁶⁵ Barrett, “The Three Stages of Adolescence,” 336–337.

¹⁶⁶ Barrett, 336.

¹⁶⁷ Blos, *On Adolescence, a Psychoanalytic Interpretation.*, 89.

¹⁶⁸ Stambler, “100 Years of Adolescence,” 23.

love” for the first time to clear the field for self-definition and self-acceptance, which is related to the individual’s uniqueness. Thus, it is the time for them to think much more about the future and setting goals, and interest in moral reasoning and thinking about the meaning of life continues.¹⁶⁹

c. Emotional Development

Due to hormonal and brain development, the middle adolescent’s emotional life is deeper and more intense, with greater scope compared to the earlier phases.¹⁷⁰

There is a tendency toward emotional decision making¹⁷¹ and a gradual affirmation of the sex-appropriate drive moving into ascendancy, bringing increasingly conflictual anxiety to bear on the ego.¹⁷² Some research shows that the middle adolescents are also more likely to experience clinical levels of depression and suicide attempts compared to early adolescents and children.¹⁷³

d. Socioemotional Development

This group will increase their distance from their parents.¹⁷⁴ At the same time, peer involvement peaks during this stage, as heterosexual peer groups develop into cliques and crowds and dyadic intimate relationships increase in prevalence and intensity.¹⁷⁵ Usually, clique members are usually of the same sex and about the same age,

¹⁶⁹ Stambler, 9.

¹⁷⁰ Blos, *On Adolescence, a Psychoanalytic Interpretation.*, 88.

¹⁷¹ Meschke, Peter, and Bartholomae *Developmentally Appropriate Practice*, 98.

¹⁷² Blos, *On Adolescence, a Psychoanalytic Interpretation.*, 87.

¹⁷³ Meschke, Peter, and Bartholomae *Developmentally Appropriate Practice*, 99.

¹⁷⁴ Stambler, “100 Years of Adolescence.”

¹⁷⁵ Curtis, *Defining Adolescence*, 18.

with a range from 2 to about 12 individuals and averaging about 5 to 6 individuals.¹⁷⁶ In contrast, crowds are larger, comprising of individuals who share particular characteristics but who may not interact with one another.¹⁷⁷ However, cliques and crowds serve as social categories for students rather than as actual friendship groups,¹⁷⁸ and the influence of groups is primarily indirect rather than overtly coercive.¹⁷⁹ Compared to the earlier adolescence group, peers are now more emotionally supportive.¹⁸⁰

Dating and romantic relationships promote an exploration phase, with two types of romantic involvement: a) casual dating emerging between individuals who are mutually attracted, but always lasting only a short time of a few months or weeks, b) dating in groups becoming common, reflecting embeddedness in the peer context.¹⁸¹ Thus, this stage has more of a tendency to abandon narcissistic and bisexual positions and to possibly find a heterosexual object.¹⁸² Interactions with the opposite sex or romantic interests may preoccupy middle adolescents,¹⁸³ which shows that they have learned to cooperate with each other in a more mature fashion.

Summary

Developments in external and internal aspects continue during middle adolescence. This age group's adolescents are not only seeking to belong in a group but also endeavor to be noticed and be known among the community. Gradually moving

¹⁷⁶ Santrock, *Life-Span Development*, 393.

¹⁷⁷ Feldman, *Development Across the Life Span*, 447.

¹⁷⁸ Broderick and Blewitt, *The Life Span*, 269.

¹⁷⁹ Broderick and Blewitt, 269.

¹⁸⁰ Meschke, Peter, and Bartholomae *Developmentally Appropriate Practice*, 99.

¹⁸¹ Santrock, *Life-Span Development*, 394.

¹⁸² Blos, *On Adolescence, a Psychoanalytic Interpretation.*, 87.

¹⁸³ Meschke, Peter, and Bartholomae *Developmentally Appropriate Practice*, 99.

away from narcissism and bisexuality towards heterosexuality will help them move toward a clearer self-definition and self-acceptance. Their social style changes from peer groups into cliques and crowds, or they may have their first falling-in-love experience, which requires more mature cooperative behavior. In addition, hormonal and neural developmental changes responsible for shifting sex-appropriate drives to ascendancy also cause conflicts resulting in the anxiety. It should also be noted that middle adolescents still experience emotional instability. Middle adolescence “comes to a close with the delineation of an idiosyncratic conflict a drive constellation which during late adolescence is transformed into a unified and integrated system.”¹⁸⁴

¹⁸⁴ Blois, *On Adolescence, a Psychoanalytic Interpretation.*, 127.

Table 2: The Characteristics of Early and Middle Adolescence

Stages	Characteristics
Early Adolescence	<ul style="list-style-type: none"> • Conflict with parents • Struggles with a sense of identity • Vague perception of the body • Avoids being marginalization by the group • Refusing to sleep in another person's house • Refusing to attend school • Seeking to avoid situations where leaving the home is required
Middle Adolescence	<ul style="list-style-type: none"> • Increased distance from parents • Sleep deprivation • Narcissism results in a variety of ego states • Increase in self-involvement • Reflects a need to be noticed and known • Reflects individual's uniqueness • Thinks much more about the future and setting goals • Interest in moral reasoning • Thinking about the meaning of life • Toward emotional decision making • Shifting sex-appropriate drive • Develops relationship with cliques and crowds and dyadic intimate relationships • Cooperates with each other in a more mature fashion

Precocious and Delayed Puberty

There is no doubt that common biological, cognitive, emotional, and social categories may not reflect the wide range of individual differences because of complex growth process that involve the individual's heredity, gender, parenting style, school, and social environmental conditions. To learn about the early and late maturing process of adolescents will help us to understand the ones who differ from the norm in the timing of their development.

Early-maturing Girls

Early maturing girls are more physically mature in size and heavier than most other children; such girls may make become a target for teasing or innuendo from peers and rejection by less mature girls.¹⁸⁵ Most times, early-maturing girls tend to be less popular than her prepubertal classmates, and she is more likely to report symptoms of depression and anxiety, especially if she had psychological problems as a child.¹⁸⁶ As a result, early-maturing girls often seek older companions, particularly boys, who often steer them away from academic pursuits and into less desirable activities, such as smoking, drinking, drug use, sex,¹⁸⁷ or engaging in minor troublemaking at an early age.¹⁸⁸ Some studies found that early-maturing girls continue to perform more poorly in school and were more likely to drop-out than their late-maturing or on-time classmates.¹⁸⁹ Moreover, girls may find themselves emotionally unequipped to deal either with sexual

¹⁸⁵ Broderick and Blewitt, *The Life Span*, 283.

¹⁸⁶ Sigelman and Rider, *Life-Span Human Development*, 134.

¹⁸⁷ Shaffer and Kipp Katherine, *Developmental Psychology*, 228.

¹⁸⁸ Sigelman and Rider, *Life-Span Human Development*, 134.

¹⁸⁹ Shaffer and Kipp Katherine, *Developmental Psychology*, 228.

enticement or with sophisticated social activities,¹⁹⁰ and pressures from parental restriction in addition to being less popular than her prepubertal classmates are factors that cumulate to reported symptoms of depression and anxiety, especially if she had psychological problems as a child.¹⁹¹ Many studies report an association between early maturation and lower self-esteem among girls.¹⁹² Nevertheless, usually when early-maturing girls have reached 17 years of age, they score higher on tests of total personal and family adjustments, have more positive self-concepts, and enjoy better personal relations than do late-maturing ones.¹⁹³ Early maturation does not seem to be as pronounced for girls as for boys and appears to be more of a disadvantage than an advantage for girls.

Late-maturing Girls

Slow-maturing girls are looked at and treated like “little girls;” as a group, they have less positive views of their physical attractiveness and their relations with male peers.¹⁹⁴ They may experience some anxiety as they wait to mature.¹⁹⁵ Normally, later-developing girls outperform other students because they focus on academic skills when other girls have shifted their focus to extracurricular activities.¹⁹⁶ The advantage for late-maturing girls is that they may not be criticized by parents and other adults.¹⁹⁷ The main disadvantage for late-maturing girls seems to be the temporary loss of social status

¹⁹⁰ Philip F. Rice, *Human Development: A Life-Span Approach*. (Upper Saddle River, N.J.: Prentice Hall, 1998), 323.

¹⁹¹ Sigelman and Rider, *Life-Span Human Development*, 134.

¹⁹² Sigelman and Rider, 134.

¹⁹³ Rice, *Human Development*, 323.

¹⁹⁴ Rice, 325.

¹⁹⁵ Sigelman and Rider, *Life-Span Human Development*, 134.

¹⁹⁶ Sigelman and Rider, 134.

¹⁹⁷ Rice, *Human Development*, 325.

because of their relative physical immaturity.¹⁹⁸

Early-maturing Boys

Early-maturing boys have greater build, strength,¹⁹⁹ and muscular tone, and are better able to excel in competitive sports, which enhances their social prestige and position.²⁰⁰ They are more confident, popular, and likely to be leaders among their peers than late-maturing boys.²⁰¹ At the same time, they are judged to be socially competent, attractive, and self-assured, and they enjoy greater social acceptance by their peers.^{202 203} Thus, early-maturing boys seem to be less moody and less likely to exhibit depressed mood than later-maturing boys.

The negative aspect of being an early-maturing boy include possible difficulties in school,²⁰⁴ and they are more likely to become involved in delinquency and substance abuse.^{205 206} Adults tend to expect more of them in terms of adult behavior and responsibilities, thus giving early-maturing boys less time to enjoy the carefree days that comes with childhood.²⁰⁷

Late-maturing Boys

Late-maturing boys generally have worse experiences than late-maturing girls.

¹⁹⁸ Rice, 325.

¹⁹⁹ Shaffer and Kipp Katherine, *Developmental Psychology*, 227.

²⁰⁰ Rice, *Human Development*, 323.

²⁰¹ Feldman, *Development Across the Life Span*, 283.

²⁰² Sigelman and Rider, *Life-Span Human Development*, 134.

²⁰³ Shaffer and Kipp Katherine, *Developmental Psychology*, 227.

²⁰⁴ Feldman, *Development Across the Life Span*, 398.

²⁰⁵ Feldman, 398.

²⁰⁶ Sigelman and Rider, *Life-Span Human Development*, 134.

²⁰⁷ Rice, *Human Development*, 323.

Boys who are smaller and lighter will be at a disadvantage than peers who more physically mature when it comes to sportive activities.²⁰⁸ It is also more likely to cause them to be less sure of themselves²⁰⁹ and make them socially awkward, insecure,²¹⁰ or score poorly on scholastic achievement,²¹¹ which will lower their self-concept²¹² and self-perception.²¹³ Thus, later-developing boys may experience some anxiety as they wait to mature²¹⁴ and face more behavioral and adjustment problems.²¹⁵ However, coping with those challenges may actually help late-maturing boys in some positive qualities, such as assertiveness and insightfulness.²¹⁶

Table 3: Advantages and Disadvantages of Early Girls and Boys, Middle Girls and Boys

Stages	Advantages	Disadvantages	Anxiety
Early Girls	<ul style="list-style-type: none"> • More positive self-concepts • Enjoy better personal relations than later-maturing girls 	<ul style="list-style-type: none"> • Less popular • Poorer performance at school • Higher rates of drop-out • Increased risk of delinquent behaviors • Lower self-esteem 	<ul style="list-style-type: none"> • Some pressures from parental restrictions • Less popular than prepubertal classmates • Innuendo and rejection by less mature girls

²⁰⁸ Feldman, *Development Across the Life Span*, 399.

²⁰⁹ Sigelman and Rider, *Life-Span Human Development*, 134.

²¹⁰ Broderick and Blewitt, *The Life Span*, 283.

²¹¹ Sigelman and Rider, *Life-Span Human Development*, 134.

²¹² Feldman, *Development Across the Life Span*, 399.

²¹³ Bosquet and Egeland, "The Development and Maintenance," 519.

²¹⁴ Sigelman and Rider, *Life-Span Human Development*, 134.

²¹⁵ Sigelman and Rider, 134.

²¹⁶ Feldman, *Development Across the Life Span*, 399.

Stages	• Advantages	• Disadvantages	Anxiety
Early Boys	<ul style="list-style-type: none"> • Excels in competitive sports • Self-confident • More popular • More likely to be leaders • More likely social prestige and position • More attractive • Less moody 	<ul style="list-style-type: none"> • Difficulties at school • Increased risk of delinquency and substance abuse • Less time to enjoy freedom that comes with childhood 	
Late Girls	<ul style="list-style-type: none"> • Good at academic skills • Less criticized by parent and adults 	<ul style="list-style-type: none"> • Temporary loss of social status • Less physical attractiveness perceived by male peers • Less relations with male peers 	<ul style="list-style-type: none"> • Experience some anxiety as they wait to mature
Late Boys	<ul style="list-style-type: none"> • Assertiveness • Insightfulness 	<ul style="list-style-type: none"> • Disadvantage in sports activities • Less sure of themselves • Poorer self-concept • Social awkwardness • Insecure • Variable in mood • Poor performance on school achievement tests • Face more behavior and adjustment problems 	<ul style="list-style-type: none"> • Experience some anxiety as they wait to mature

In sum, both early- and late-maturing youths have their advantages and disadvantages, and these studies help us to understand those who differ from the norm in the timing of their development as well. Even though late-maturing boys and early-maturing girls are more likely to be distressed, psychological differences between early and late matures become smaller and more mixed in nature by adulthood.²¹⁷ In order to understand adolescence, we probably need to take into consideration contextual factors affecting individuals, such as their historical exposure to parenting styles, peer group, cultural background, education environment, and so on. Moreover, the effects of the timing of puberty depend on the adolescent's perception²¹⁸ because people from different cultures think differently.²¹⁹ In order to help adolescents adjust well in life, Havighurst provides eight major developmental tasks as a goal for adolescents to accomplish:²²⁰

1. Accepting one's physique and using the body effectively
2. Achieving emotional independence from parents and other adults
3. Achieving a masculine or feminine social-sex role
4. Achieving new and more mature relations with age-mates of both sexes
5. Desiring and achieving socially responsible behavior
6. Acquiring a set of values and an ethical system as a guide to behavior
7. Preparing for an economic career
8. Preparing for marriage and family life

²¹⁷ Sigelman and Rider, *Life-Span Human Development*, 134.

²¹⁸ Sigelman and Rider, 134.

²¹⁹ Bjorklund, *Children's Thinking*, 442.

²²⁰ Rice, *Human Development*, 307.

In brief, pubescence is a natural process of each individual transition period that requires reciprocal reorganization of the individual and the context influencing cognition, emotion, behavior, and relationships.²²¹ We have to reflect upon adolescent anxiety from various perspectives, in the final analysis, as a dynamically evolving theoretical construct informed by physiologic, psychosocial, temporal, and cultural lenses. That is because an individual's development is variable, with reciprocal influences.²²²

Summary

The reason adolescence was chosen as the focus group is that researchers found that adolescents have to cope with more unpredictable stress, emotional impulsivity, and instability than any other age groups. And this emotional state persists over long periods of time, either enhancing or impeding physical well-being and good health.²²³ In addition, this is a critical transition period and an important stage of habit formation to cultivate abilities of awareness and adjust spiritual conditions.

The objective of this chapter is to find causes of adolescent anxiety based on a psychological understanding of adolescent development. Firstly, we analyzed adolescence based on definitions provided from various standpoints and explored the developmental process and theoretical constructions related to historical clues. Then, we critically studied adolescents' psychological development from the four dimensions of biological, cognitive, emotional, and social changes, primarily focusing on exploring the

²²¹ Curtis, "Defining Adolescence," 3.

²²² Rice, *Child and Adolescent Development*, 12–13.

²²³ Rice, 444.

cause for anxiety in the early and middle stages. At the same time, we must be careful that general adolescent anxieties do not reflect the wide range of outlying individual differences, such as in early and later maturing girls and boys. Clearly, the experience of anxiety for each adolescent or each stage cannot be statistically “averaged” to obtain a valid conclusion. Because “growth is uneven,”²²⁴ every individual encounters many visible and invisible factors such as peer group, parenting style, culture background, ethnicity, poverty, social economic behavior patterns, belief system, media, education environment, and so on. Each individual at different stages of development will encounter different degrees of anxiety in different periods.

Strategies to Deal with Anxiety

Definition of Anxiety

The term anxiety does not have a single definition across history;²²⁵ the original explanation could be tracked back to the early 16th century in the French “anxiété” or Latin “anxietas” from “anxius.”²²⁶ The definition from *Webster’s Third New International Dictionary* has three main aspects in meaning: “a strong or dominating blend of uncertainty,” “agitation” or “dread,” and “brooding fear about some contingency” and “a strong desire mixed with doubt and fear,” “deeply troubled” or “distressed.”²²⁷ The root in Latin is called “anxietas, which means ‘anguish’ or

²²⁴ Rice, *Child and Adolescent Development*, 12.

²²⁵ Daniel Freeman and Freeman Jason, *Anxiety: A Very Short Introduction*, (Oxford University Press, 2012), 10.

²²⁶ Abate and Jewell, *The New Oxford American Dictionary*, 71.

²²⁷ Philip Babcock Gove and Merriam-Webster Inc. *Webster’s Third New International Dictionary of the English Language*, (Unabridged. Springfield, Mass.: Merriam-Webster, 1993), 97.

‘solicitude,’ the other Latin root associated with anxiety is *angere*, meaning ‘to choke or squeeze’ or more figuratively, ‘to torment or cause distress.’”²²⁸ Scientists agree that “it is an emotion.”²²⁹ The DSM (the Diagnostic and Statistical Manual of Mental Disorders) uses the term “feeling,” or “dysphoria” and the Barlow refers to it as a “mood state.”²³⁰ Thus, anxiety is always considered with many synonyms: “‘fear,’ ‘foreboding,’ ‘worry,’ ‘disquiet,’ ‘tension,’ ‘unease,’ ‘restlessness,’ ‘watchfulness,’ ‘distress,’ ‘concern,’ ‘nervousness’ and the all-encompassing ‘suffering.’”²³¹

Moreover, experts have given different definitions according to their own fields of study. There are two different definitions from physiology used in ancient and modern situations. Professor Walter Cannon described anxiety as a “fight-or-flight response” for caveman ancestors, because according to the evolution of human beings, when a bear showed up, only the anxious cavemen ran fast enough, fought hard enough, or hid quickly enough to ensure our safety and survival.²³² However, in the modern world, researchers prefer to describe stress reactions as “allostasis” because we rarely meet a bear face-to-face but may work under stressful conditions, thus overtaxing our systems, causing wear and tear on our bodies, and setting up conditions for physical illness. Bruce McEwen (2002) described this stressed-out state as “allostatic load.”²³³

From the philosophical perspective, Tillich²³⁴ described “anxiety as man’s

²²⁸ Stahl, Meleo-Meyer, and Koerbel, *A Mindfulness-Based Stress Reduction*, 13.

²²⁹ Daniel Freeman & Jason Freeman, *Anxiety: A Very Short Introduction*, 5.

²³⁰ Daniel Freeman & Jason Freeman, *Anxiety: A Very Short Introduction*, 11.

²³¹ Stahl, Meleo-Meyer, and Koerbel, *A Mindfulness-Based Stress Reduction*, 13.

²³² Semple and Lee, *Mindfulness-Based Cognitive Therapy for Anxious Children*, 27.

²³³ Semple and Lee, *Mindfulness-Based Cognitive Therapy*, 27.

²³⁴ Tillich experienced in his own life the cultural crises and upheavals of Western society in the past three decades. Tillich’s concept was of course formulated before the emergence of the atom bomb and is

reaction to the threat of nonbeing.”²³⁵ But when the individual both “realizes the threat of meaninglessness and takes a stand against the threat—the result is a strengthening of the individual’s feeling of being a self, a strengthening of his perception of himself as distinct from the world of nonbeing, of objects.”²³⁶ The philosopher Niebuhr²³⁷ makes anxiety the central concept of his theological doctrine of man, reflecting thus: “every act of man, creative or destructive, involves some element of anxiety. Anxiety has its source in the fact that man is on one hand finite, involved like the animals in the contingencies and necessities of nature; but on the other hand man has freedom.”²³⁸ In short, “man, being both bound and free, both limited and limitless is anxious.”²³⁹

The psychologist R.R. Willoughby asserts that certain acts “may reasonably be understood as reactions to anxiety, namely suicide, the functional forms of mental disorder, and divorce, and that it is more logical to regard rising divorce, suicide, and mental disease rates as symptoms and products of the traumatically changing state of our culture and to regard anxiety also as a symptom and product of that cultural state.”²⁴⁰ The psychologist Sigmund Freud pointed out “anxiety as the crucial problem of emotional and behavioral disorders.” This point was substantiated by later psychoanalysis and also defined by various experts in recent research, that anxiety is the “fundamental phenomenon of neurosis,” “dynamic center of neuroses,” and “abnormal,” and that “it

undoubtedly a symbol by which many more people are able to comprehend the immediate threat of nonbeing.

²³⁵ May, *Meaning of Anxiety*, 12.

²³⁶ May, “Meaning of Anxiety,” 13..

²³⁷ R. Niebuhr, a man most intimately concerned with the economic and political issues of his times.

²³⁸ May, “Meaning of Anxiety,” 13.

²³⁹ May, 13.

²⁴⁰ May, 14.

would surprise most persons to realize how much of their behavior is motivated by a desire to escape anxiety by either reducing it or disguising it in one way or another.”²⁴¹

In a Buddhist perspective, the term anxiety has some symptoms associated with mental hindrances. According to the Buddha’s teaching, there are two specific terms from the five hindrances (Nivarana): restlessness and scruples (Uddhacca-kukkucca) and skeptical doubt (Vicikicchā). Nivarana is defined as “a technical term with reference to passions that hinder the attainment of mental calmness and tranquility and wisdom...as passions that prevent the realization of good and wholesome mental states.”²⁴² A further explanation follows:

1. Restlessness and scruples (Uddhacca-kukkucca): also consists of two passions, agitation (uddhacca) and worry (kukkucca). The former refers to the confused and agitated state of mind, to the lack of mental calmness, whereas the latter refers to indecision over one’s own action, i.e., indecision as to whether something one has done is right or wrong, or good or bad.
2. Skeptical doubt (Vicikicchā): the last hindrance in the list is doubt, about the Buddha’s teaching, i.e., *dhmma*, doubt about the training (*sikkha*) that the teacher has formulated, and so on. This doubt makes the mind of sentient beings incapable of attaining the discriminating knowledge of the things of existence.²⁴³

In addition, they provide the five causes for overcoming the five hindrances, using

²⁴¹ May, “Meaning of Anxiety,” 15.

²⁴² Gove and Merriam-Webster, *Webster’s Third New International*, 185.

²⁴³ Gove and Merriam-Webster, 187.

the calmness of mind (cetaso vūpasama) for the removal of agitation and worry and wise reflection (yoniso manasikāra) for the removal of doubt.²⁴⁴

Actually, the emotion of anxiety is considered as “a normal human emotion that we all experience,”²⁴⁵ “the crucial problem of emotional and behavioral disorders,” and the “fundamental phenomenon of neurosis.”²⁴⁶ However, compared with mature adults, adolescents have more opportunities to experience anxiety/emotion along with their physical and psychological changes. Professor Amy Beth Taublieb summed up four dramatic emotions that the adolescent will manifest, one, several or all of the following: “affective mutability, exaggerated emotional intensity, emotional explosiveness, and emotional/psychological withdrawal.”²⁴⁷ In addition, some researchers believe that “adolescents may engage in riskier behaviors than adults simply because they have the time and energy...and the risk-taking activities can take many forms which may cause injuries, such as suicide and violence, use of tobacco or illicit drugs, and risky behaviors related to sexuality or eating disorders.”²⁴⁸ All of these behaviors could clearly harm adolescents.

Conversely, many experts have pointed out that anxiety may have a positive effect as well. Professor Daniel Freeman and Jason Freeman proposed that anxiety could be a tool “to alert us to potential threat and to prepare us to react appropriately. And to send a

²⁴⁴ Gove and Merriam-Webster, 188.

²⁴⁵ Russ Harris *ACT Made Simple: An Easy-to-Read Primer on Acceptance and Commitment Therapy*, (Oakland, CA: New Harbinger Publications, 2009), 24.

²⁴⁶ May, *The Meaning of Anxiety*, 15.

²⁴⁷ Amy Beth Taublieb, *A to Z Handbook of Child and Adolescent Issues*, (Allyn & Bacon, 2000), 8.

²⁴⁸ Stickle, *Adolescent Psychology*, 165.

signal to others that they should be on guard.”²⁴⁹ And some experts considered that “anxiety serves a number of adaptive purposes. For example, anxiety facilitates our ability to plan for the future. Anxiety can signal impending threat or danger, and alert us to take action to avoid or cope with that potential danger.”²⁵⁰ Anticipation can play an important role due to the strong connection between perception and physiology.²⁵¹ Thus, in order to utilize this signal as a clue to prevent the threat and danger, the present study uses techniques from MiCBT to cultivate adolescent skills to be in charge of awareness and thereby better control their attention,²⁵² which would protect adolescents by encouraging them to stay away from risk-taking activities caused by anxiety.

Approach from CBT

The psychological study of anxiety may be as old as clinical psychology itself,²⁵³ but the study of specific psychological disorders of anxiety in children, adolescents, and adults with the development of cognitive behavioral therapy is only 20 years old.²⁵⁴ Cognitive Behavior Therapy is considered a widely implemented and evaluated intervention for treating anxiety disorders.²⁵⁵ There are various treatments for anxiety, with models that were first designed and applied to adults. However, such treatments are

²⁴⁹ Daniel Freeman & Jason Freeman, *Anxiety: A Very Short Introduction*, 9.

²⁵⁰ Semple and Lee, *Mindfulness-Based Cognitive Therapy*, 28.

²⁵¹ Semple and Lee, 27.

²⁵² Cayoun, *Mindfulness-Integrated CBT*, 232.

²⁵³ Eagle, “Engaging the ‘Wise Mind’,” 20.

²⁵⁴ H. Thompson Prout, *Counseling and Psychotherapy with Children and Adolescent: Theory and Practice for School and Clinical Settings* (Hoboken, New Jersey: Wiley, 2015), 3-6.

²⁵⁵ Floor M. Sauter, David Heyne, and P. Michael Westenberg, “Cognitive Behavior Therapy for Anxious Adolescents: Developmental Influences on Treatment Design and Delivery,” *Clinical Child and Family Psychology Review; New York* 12, no. 4 (December 2009): 311, <http://dx.doi.org/10.1007/s10567-009-0058-z>.

well-suited for adolescents because of their “growing cognitive capacities.”²⁵⁶

The treatment strategies for adult anxiety were protocolled by Barlow (1988) and Beck and colleagues (Beck, Ruch, Shaw, & Emery, 1979).²⁵⁷ A further typical program elaborated by Kendall and colleagues (2000) is called “Coping Cat Program” and is for children and young adolescents suffering from various anxiety disorders between the ages of 9 and 13.²⁵⁸ This program has 16 sessions divided into two content-based parts; the first part of the sessions, one through eight, are focused on skills training, and sessions nine through sixteen are focused on exposure tasks in a hierarchical sequence of anxiety-provoking situations.²⁵⁹ Among these, two parent sessions at the 4th and 9th session are included to provide psychoeducation on the child’s treatment goals.²⁶⁰ This treatment program has demonstrated efficacy in several randomized controlled trials across cultures and has been shown to be effective in the maintenance of treatment gains over time.²⁶¹

Based on this structure, Kendall made adjustments to create another similar program called the C.A.T. Project Manual program, changing the audience from children to adolescents 14 to 17 years old.²⁶² The project consists of a therapist manual and client workbook; the manual has 16 sessions and each session is 50 to 60 minutes in length with

²⁵⁶ Sauter, Heyne, and Michiel Westenberg, 320.

²⁵⁷ Bruce F. Chorpita, *Modular Cognitive-Behavioral Therapy for Childhood Anxiety Disorders*, (New York: The Guilford Press, 2006), 42.

²⁵⁸ Eva Szigethy, John R. Weisz, and Robert L. Findling, *Cognitive-Behavior Therapy: For Children and Adolescents*. (American Psychiatric Publishing, 2012), 252.

²⁵⁹ Rebecca H McNally Keehn, “The Coping Cat Program for Children with Anxiety and Autism Spectrum Disorder: A Pilot Randomized Controlled Trial,” *Journal of Autism and Developmental Disorders* 43, no. 1 (201301): 60. <https://doi.org/10.1007/s10803-012-1541-9>.

²⁶⁰ McNally Keehn, 60.

²⁶¹ McNally Keehn, 58.

²⁶² Philip C Kendall, *The C.A.T. Project Manual for the Cognitive-Behavioral Treatment of Anxious Adolescents*. (Workbook Publishing, 2002), 1-2.

more detailed strategies to specifically coordinate with the workbook, which contains exercises and tasks designed for adolescents.²⁶³ The reason to adjust the treatment from Coping Cat to the C.A.T. Project is because the content or focus of anxiety shifts along with increasing the age range from childhood to adolescence.²⁶⁴ There is less concern about separation from parents and animal fears and individuals start to face more realistic issues such as academic matters, interpersonal relations, dating, sexuality, risk-taking,²⁶⁵ struggles with a sense of identity, conflicts with parents, and other problems, which we mentioned in previous chapters. However, both programs have the same treatment principle of teaching children to recognize signs of anxious arousal and to let these signs serve as a cue to implement anxiety management techniques,²⁶⁶²⁶⁷ with cognitive and behavioral approaches expanding into mindfulness practice in MiCBT.

Cognitive (Thought)

The words from which “cognitive” derives are the medieval Latin *cognitivus*, from *cognit*, “known,” and from the verb “*cognoscere*,” related to the mental action or process of acquiring knowledge and understanding through thought, experience, and the senses, or a perception, sensation, notion, and intuition.²⁶⁸ As we know, thought has a profound effect on our behavior, affecting whether we engage or withdraw, persevere or give up, and the primary strategy for working with anxiety is related to

²⁶³ Kendall, *The C.A.T. Project Manual*, 1.

²⁶⁴ Kendall, *C.A.T. Project Manual*, 2.

²⁶⁵ Kendall, 2.

²⁶⁶ McNally Keehn, “Coping Cat Program for Children,”

²⁶⁷ Szigethy, Weisz, and Findling, *Cognitive-Behavior Therap*, 229.

²⁶⁸ Angus Stevenson and Christine A. Lindberg, *New Oxford American Dictionary*, 3rd ed. (Oxford; New York: Oxford University Press, 2010), 336.

psychoeducation.²⁶⁹ A spiritual practitioner would agree that how things are seen and how they are handled makes all the difference in terms of how much stress an individual will experience.²⁷⁰ Thus, the main process for therapists to work with children with anxiety is cognitive restructuring, which involves identifying and monitoring negative automatic thoughts and evaluating them with probabilistic reasoning and Socratic questioning.²⁷¹ Although people with anxiety often find this to be the more difficult and challenging aspect,²⁷² the best proposals for preparing for behavioral exercises begin with changing thinking and cognition.²⁷³

As in the Coping Cat Program, the first phase emphasizes psychoeducation²⁷⁴ and skills training. The strategies include identifying bodily arousal, engaging in relaxation, recognizing anxious thoughts (self-talk), using coping thoughts, and problem solving.²⁷⁵ These strategies preserve the same structure from the Coping Cat Program, which have been passed down to the C.A.T. Project. At the same time, the program is also devoted to exploring the nature of the teen's difficulties, increasing flexibility in thinking about problems, and learning active strategies to change the teen's and parents' ways of reacting when he or she becomes anxious.²⁷⁶

²⁶⁹ Gillihan, *Cognitive Behavioral Therapy Made*, 53.

²⁷⁰ Gillihan, 53-54.

²⁷¹ Lawrence A Palinkas, "Exposure or Cognitive Restructuring Were More Effective than Relaxation in Treating Post-Traumatic Stress Disorder," *Evidence-Based Mental Health* 1, no. 4 (Nov 1998), <https://search-proquest-com.uwest.idm.oclc.org/docview/1784037194?accountid=25358>.

²⁷² David A. Clark and Aaron T. Beck. *The Anxiety and Worry Workbook: The Cognitive Behavioral Solution*, (New York: Guilford Press, 2012), 98.

²⁷³ Clark and Beck, *Anxiety and Worry Workbook*, 98.

²⁷⁴ Szigethy, Weisz, and Findling, *Cognitive-Behavior Therap*, 231-32.

²⁷⁵ Szigethy, Weisz, and Findling, 231-32.

²⁷⁶ Kendall, *C.A.T Project Manual*, 1.

In the psychoeducation phase, the therapist presents four important concepts both in the Coping Cat Program and C.A.T. Program:²⁷⁷

1. Recognition of bodily reactions to anxiety and management of these symptoms – using relaxation.
1. Recognition of anxious self-talk and expectation.
2. Modification of anxious self-talk using coping thoughts and the use of problem-solving to develop a way to cope with anxiety more effectively.
3. Self-reward for effort in facing anxiety-provoking situations.

This particular study of identifying bodily reaction to anxiety provides advance protection; scholars regard the way to enhance understanding and awareness of anxiety as also alleviating a lot of distress and confusion, often making anxiety itself less overwhelming.²⁷⁸

Another specific strategy is FEAR, which is to monitor the thought when people need to manage anxious thoughts:²⁷⁹²⁸⁰

F= Feeling frightened?

E= Expecting bad things to happen?

A= Attitudes and actions that can help

²⁷⁷ Szigethy, Weisz, and Findling, *Cognitive-Behavior Therap*, 232; Kendall, *C.A.T Project Manual*, 1.

²⁷⁸ Susan M. Orsillo and Lizabeth Roemer, *The Mindful Way through Anxiety: Break Free from Chronic Worry and Reclaim Your Life*, (New York: Guilford Press, 2011), 13.

²⁷⁹ Szigethy, Weisz, and Findling, *Cognitive-Behavior Therap*, 233.

²⁸⁰ Kendall, *C.A.T Project Manual*, 1.

R= Results and rewards

These steps for practicing self-monitoring of thoughts are ways to enhance receptiveness to cognitive interventions to be employed later on. It is most likely more helpful when the skill being trained is in the client's zone of proximal development, but the clinician should consider if the clients need extra guidance and practice.²⁸¹ The other critical approaches from cognitive solutions are by Professors David A. Clark and Aaron T. Beck, who provided eight cognitive steps for training evaluating ability in situations through probabilistic reasoning, a kind of strategy for changing people's anxious thinking to normalized thinking through various kinds of realistic rationalization.²⁸²

Step 1: Normalizing from the start

Step 2: Catching automatic anxious thoughts

Step 3: Gathering evidence

Step 4: Doing a cost-benefit analysis

Step 5: Decatastrophizing the fear

Step 6: Correcting cognitive errors

Step 7: Generating alternative perspectives

Step 8: Practicing the normalization approach

The above interventions could be seen as a way to transform the anxious mind by

²⁸¹ Sauter, Heyne, and Michael Westenberg, "Cognitive Behavior Therapy for Anxious," 322.

²⁸² Clark and Beck, *Anxiety and Worry Workbook*, 101.

recalibrating automatic threats and danger cognitions, so they are more realistic, strengthening confidence in personal ability to cope with anxious concerns, and improving recognition of the safe and benign aspects of situations that make them feel comfortable.²⁸³

Furthermore, cognitive restructuring stratagems from other sources of generally received wisdom are another way to extend cognitive skills: originating from Dialectical Behavior Therapy (DBT), one of the derivative therapies from Cognitive Behavioral Therapy also provides skills to change clients' current negative coping mechanisms into positive ones based on three basic assumptions that could be seen as a kind of psychoeducation: a) all things are interconnected; b) change is constant and inevitable; c) opposites can be integrated to form a closer approximation, which is related to the principles in Buddhist perspectives.²⁸⁴ Such effective cognitive restructuring is achieved through practice exercises making use of both experience and reasoning to identify whether anxiety is necessary and whether what is perceived as dangerous is really safe.²⁸⁵

However, young clients with lower cognitive capacities probably find it difficult and challenging to engage in cognitive therapeutic techniques, so experts have suggested more relaxation training and cognitive self-instruction approaches,²⁸⁶ more concrete, behaviorally based activities and “real-life” practice opportunities.²⁸⁷ Because “learning

²⁸³ Clark and Beck, 101.

²⁸⁴ Bass, van Nevel, and Swart, “A Comparison between Dialectical Behavior”.

²⁸⁵ Chorpita, *Modular Cognitive-Behavioral Therapy*, 44-45.

²⁸⁶ Michael W. Vasey, *The Developmental Psychopathology of Anxiety*. (New York: Oxford University Press, 2001), 340.

²⁸⁷ Kenneth W. Merrell, *Helping students overcome depression and anxiety: A practical guide*, (Guilford Press, 2008), 67-69.

through doing” is a practice experience that may directly or indirectly change young people’s cognition,²⁸⁸ the further influence exerted by a clinician’s use of cognitive therapeutic techniques for young people will have the intended positive effect of stimulating them to deal with emotional and behavioral difficulties, which we are going to discuss in the following section.

As discussed above, cognitive intervention from Coping Cat, the C.A.T. Project and other relative cognitive education includes: listing anxious thoughts and feelings, identifying bodily arousal and anxious thinking; normalizing thinking by analyzing the reality of the situation; using concise concepts of FEAR to deactivate fear; and extending people’s cognitive range to include more rationality and wisdom with positive perspectives even from other relative derivatized therapy systems. The aim of a cognitive-behavioral program is to provide psycho-education that brings the client’s attention to both the internal and external²⁸⁹ to recognize and reframe negative thought patterns,²⁹⁰ which is the way to analysis or pushing out the negative thoughts. In sum, CBT sets up various of strategies to help young clients to manage problems in a more positive way by identifying and changing unhelpful thinking patterns. This is the basic concept of CBT: to train young clients to focus on changing the way they think (cognitive) as the first phase, and then change the way they act (behavior) as the second phase.

²⁸⁸ Sauter, Heyne, and Michael Westenberg, “Cognitive Behavior Therapy for Anxious,” 321.

²⁸⁹ Cayoun, *Mindfulness-Integrated CBT*, 49.

²⁹⁰ “CBT vs MBCT- What Is the Difference?” *Harley Therapy*, January 16, 2014.
<https://www.harleytherapy.co.uk/counselling/cbt-mbct-difference.htm>.

Behavior (Practice)

Based on looking at “negative spirals,” unhelpful thinking patterns are modified, leading to the next step of action implementation, which is always described as the application or practice approach. This phase is more related to behavior practice than psycho-education: clients are guided through specific practices through relaxation exercises, coping modeling, role-playing, exposure tasks, rewards, praises, and so on.²⁹¹ Among these, exposure is considered as the most effective and quick remedy for anxiety.^{292 293}

Generally, the goal of exposure is to generate moderate anxiety so that you can experience anxiety decreasing over time with repeated suitable practice; clients can learn that the situation is not dangerous and they are not helpless.²⁹⁴ The differences between various exposures involve modifications of the intensity, duration, or order of stimuli to make exposure work better according to different situations.²⁹⁵ But the final intent of exposure is to try to muster the client’s courage and help them climb out of their comfort zone.²⁹⁶ There are plenty of such examples in C.A.T. Program and other relevant researches.

The exposure task in C.A.T. Program begins with imaginal exposure, in which clients try to anticipate any kind of reaction to manage their anxiety; in-office exposure,

²⁹¹ Chorpita, *Modular Cognitive-Behavioral Therapy*, 45.

²⁹² Clark and Beck, *Anxiety and Worry Workbook*, 145.

²⁹³ Chorpita, *Modular Cognitive-Behavioral Therapy*, 44.

²⁹⁴ Clark and Beck, *Anxiety and Worry Workbook*, 136.

²⁹⁵ Chorpita, *Modular Cognitive-Behavioral Therapy*, 44.

²⁹⁶ Clark and Beck, *Anxiety and Worry Workbook*, 129.

where clients learn to manage low levels of anxiety through exposure in-session; followed by actual, in vivo experiences in more stressful situations. Additional behavior practice also consists of coping modeling, role-playing, exposure tasks and homework assigned in-sequence that is being learned in the first phase. The process is repeated in situations, whether helping them to face and master more stressful scenarios or a number of different anxiety-provoking situations.²⁹⁷ The last session uses multimedia applications via networks such as film clips or websites. In this way, teens consolidate what they have learned through informative and humorous modes of expression such as rap songs, mini-skits, cartoons, and so on, while sharing ideas in their own unique ways to help other teens learn how to manage anxiety.²⁹⁸

Professors Wendy K. Silverman and William M. Kurtines in *Anxiety Disorders* also emphasized exposure tasks during the main in-session and out-session activities, and the treatment explicitly states the specific exposure task the child is to attempt, e.g., what to do, when to do it, how long it would take. The self-control procedures focus on how to help them to identify his or her anxious thoughts and self-statements and their role in producing/maintaining anxiety and its disorders, while providing four concise and feasible steps called STOP to apply self-control strategies:²⁹⁹

S stands for “scared,”

T stands for “thoughts,”

²⁹⁷ Kendall, *C.A.T Project Manual*, 1-2.

²⁹⁸ Kendall, 62-63.

²⁹⁹ Jan N Hughes, Annette M. La Greca, and Jane C Conoley, *Handbook of Psychological Services for Children and Adolescents*, (New York: Oxford University Press, 2001), 233-234.

O stands for “other thoughts” or “other things I can do to handle my fear,”

P stands for “praise myself for successful handling of my fear and exposure.”

This progressive transformation feature is concise and step by step, which is in accordance with Diane Gehart and Bruce F. Chorpita’s perspectives. Scholar Diane Gehart used the targeting change as “differentiation increases, anxiety decrease,” which considers that it is helpful to separate goals into processes broken down into smaller steps.³⁰⁰ Professor Bruce F. Chorpita demonstrated that one of the central skills with exposure involves the knowledge of how to take a feared stimulus or item and break it down into smaller parts because without incremental steps, some items are simply too challenging to perform and thus cannot otherwise be addressed.³⁰¹ The consequences show that it is more effective to break these goals down into smaller steps.

Moreover, Bruce F. Chorpita’s proposed skill of exposure has a sub-goal function in his book *Modular Cognitive-Behavioral Therapy for Childhood Anxiety Disorders* because the approach of exposure happens along with the treatment. Within the chapters, it is obvious that all other supplemental strategies are designed to support exposure.³⁰² The function of some of the other strategies have been summed up as: “learning about anxiety” is designed to make exposure credible and acceptable to the child by providing a rationale and psychology education; the module of “rewards” is used when the participator is reluctant or half-hearted in participation in exposure; “cognitive

³⁰⁰ Diane R. Gehart, *Mastering Competencies in Family Therapy: A Practical Approach to Theory and Clinical Case Documentation*, (Belmont, CA: Brooks Cole, 2009), 290.

³⁰¹ Chorpita, *Modular Cognitive-Behavioral Therapy*, 74.

³⁰² Chorpita, *Modular Cognitive-Behavioral Therapy*, 125.

restructuring” is used when the participant has a pessimistic or negative cognition with exposure; “active ignoring” is used when whining, tincturing and resistance behaviors interfere with exposure; “time-out” is used when the participant uses avoidance strategies such as aggression or severe tantrums. ³⁰³

In addition, modeling is another important behavioral tool to reduce anxiety and fear responses by having students observe another individual who deals appropriately with the anxiety-provoking stimuli. Yet modeling is much more complex than simple imitation of behavior. Here are four kinds different of modeling.^{304 305}

1. Live Modeling: the model demonstrates as the direct target for the child.
2. Symbolic Modeling: the model enacts indirectly the behavior through film, video, photography, or some other medium
3. Covert Modeling: the child is asked to imagine the model interacting with the feared stimulus
4. Participant Modeling: the child first observes the model interacting with the stimulus and is then asked to perform the same behaviors as the model.

It is worthwhile to note that the modeling stimuli within a favorable context is designed to evoke simultaneously competing positive responses. The enactment of the targeted behavior is usually followed by an appropriate, positive consequence and a lack of negative consequences will influence the students to more likely experience vicarious

³⁰³ Chorpita, 92--97.

³⁰⁴ Merrell, *Helping Students Overcome Depression*, 180.

³⁰⁵ Chorpita, *Modular Cognitive-Behavioral Therapy*, 45.

reinforcement.³⁰⁶ But the modeling is never used alone, given the scarcity of evidence that it works without exposure. Instead, it is often implicitly combined with exposure.

In addition, the treatment works better when involving materials providing pictorial representation of treatment-related tasks. The relevant visually oriented materials from CBT treatment would be (a) handouts, for example, presenting somatic anxiety symptoms, (b) a flip-over or a whiteboard, (c) visual analogue scales for rating the strength of emotions or thoughts, (d) pictures/drawings to identify self-talk or diagrams when challenging maladaptive thoughts. These specific and vivid treatment models may stimulate engagement, affecting teen's treatment more effectively in application of therapeutic tasks, but the clinician must ensure that these materials are not patronizing and that the juvenile is matched with the developmental level of his or her peers. Of course, experts have suggested that visualization exercises are better when they involve real-life demonstrations, which can stimulate participation activity in the therapeutic process, and that activities such as drawing, writing poetry, or composing songs may be useful for adolescents to describe their thoughts and feelings.³⁰⁷

It is worthwhile to note, as Professor Bruce F. Chorpita emphasized, that the therapist should help the participants feel prepared enough and understand the reason for practice at the end of the learning program: providing relevant information about anxiety through cognitive restructuring processes.³⁰⁸ If not, the best way to deal with participants who appear unready to proceed to exposure is to redesign the exposure rather than to shift

³⁰⁶ Merrell, *Helping Students Overcome Depression*, 181.

³⁰⁷ Sauter, Heyne, and Westenberg, "Cognitive Behavior Therapy for Anxious," 324-325.

³⁰⁸ Chorpita, *Modular Cognitive-Behavioral Therapy*, 94.

to adjunctive techniques immediately. The therapist should try to design an exposure exercise and attempt to implement it. Until clear evidence of interference is observed, a choice can be made regarding how to address that interference.³⁰⁹

Summary

Anxiety has multiple definition from Latin, French, DSM, and science but is always considered with synonyms as a kind of an emotion relating to all-encompassing suffering. However, the Buddhist perspective provides the other symptoms associated with mental hindrances as restlessness, scruples and skeptical doubt, which is a state without mental calmness. Cognitive Behavior Therapy has modified the strategies for adults to an adolescent program called Coping Cat Program and C.A.T. to treat adolescent anxiety. The primary strategy to work with anxiety is focused on psychoeducation with cognitive restructuring utilized FEAR, and other four concepts and eight cognitive steps are used to train adolescents to evaluate situations through probabilistic reasoning as the first phase.

Behavioral intervention is a process of application or practice of what was learned from psychoeducation in cognitive strategies, which tries to encourage teens to move from anxiety towards the comfort zone. To face and then master a number of different kinds of anxiety-provoking situations through the feasible steps of STOP helps break down the complicated process into smaller steps, which include making specific points or targets for teens to focus on and repeating imaginal exposure, relaxation, exposure, role-

³⁰⁹ Chorpita, *Modular Cognitive-Behavioral Therapy*, 92.

playing, and rewards, whether in-session or out-session. In brief, the primary purpose is to guide teens to practice with these kinds of exercises to deal with one of the main problems with teenage anxiety: avoiding what they are afraid of. Further, the primary role for the therapist is to act as a guide who encourages, supports, and provides corrective opportunities for children to practice, experience, and learn that the bad things they fear do not usually come true or that things misperceived as threatening can eventually be seen as safe through different practice experiences. The whole process extends the possibility for these corrective learning experiences.

Mindfulness offers a tool to notice these triggers by developing ongoing awareness and acceptance of the present moment to recognize what is going on for the present moment: how you are thinking and feeling and experiencing things right now, to be less caught up in mental loops in the first place.³¹⁰ It can be seen as an experiential and feeling process. Although mindfulness practice involves a lot of work with recognizing thought patterns, it is much more “body-based” than CBT.³¹¹ This process involves taking a wider view, which is the next level of involvement.

Teaching Techniques of Mindfulness for Adolescents

Mindfulness and Investigation

Jon Kabat-Zinn considered mindfulness an ancient Buddhist practice that has profound relevance for our present-day lives.³¹² Mindfulness practice, inherited from the

³¹⁰ “CBT vs MBCT- What Is the Difference?”

³¹¹ “CBT vs MBCT- What Is the Difference?”

³¹² Kabat-Zinn, *Wherever you go, there you are*, 3.

Buddhist tradition, is increasingly being employed in Western psychotherapy to improve a variety of mental and physical conditions. The pilot intervention in this dissertation defined Investigation practice in a mindfulness program for adolescents. The Investigation worked directly with the ongoing training of experience, to practice directing bare “attention” to those experiences, to cultivate balance with external and internal factors, to develop awareness and compassion for oneself as well as others, and to deal effectively with anxiety in daily life.

Mindfulness (P. *sati*, Skt. *smṛti*) is often described as *satipaṭṭhāna* in Buddhism and is known in early Buddhist texts such as in the Majjhima Nikaya³¹³ and Digha Nikāya.³¹⁴ The word *satipaṭṭhāna* is a compound of *sati*+*paṭṭhāna*, as in the old Sanskrit version (Smṛty-upasthāna Sūtra).³¹⁵ The first part *sati*, originally meant “memory” but in Pali Buddhist usage, it far more frequently bears the meaning of attentiveness directed to the present—hence the makeshift rendering “mindfulness.” The second part *paṭṭhān*, is explained in two ways as “setting up” or “establishing.”³¹⁶ It is applied in the sense of the four ways of setting up mindfulness or as the four objective domains of mindfulness.

³¹³ Satipaṭṭhāna Sutta is one of the foremost early texts dealing with mindfulness in the Majjhima Nikaya No.10. “ Bhikkhus, this is the direct path for the purification of beings, for the surmounting of sorrow and lamentation, for the disappearance of pain and grief, for the attainment of the true way, for the realization of Nibbāna – namely, the four foundations of mindfulness.”

³¹⁴ Walshe, The long discourses of the Buddha, Digha Nikāya No 22. " There is, monks, this one way to the purification of beings, for the overcoming of sorrow and distress, for the disappearance of pain and sadness, for the gaining of the right path, for the realization of Nibbāna: that is to say the four foundations of mindfulness.”

³¹⁵ Walshe, *The long discourses of the Buddha*, 589.

³¹⁶ Ñāṇamoli Bhikkhu, and Bodhi Bhikkhu, *The Middle Length Discourses of the Buddha: A New Translation of The Majjhima Nikāya*. (Teachings of the Buddha. Boston: Wisdom Publications in association with the Barre Center for Buddhist Studies, 1995), 1189.

In the early Buddhist teachings, the discourses of mindfulness begin with a dialogue in which the Buddha addresses a group of students in a Kuru town (modern Delhi). The Buddha mentioned about “the purification of beings, for the surmounting of sorrow and lamentation, for the disappearance of pain and grief,”³¹⁷ stating that the only way to eliminate dukkha, physical and mental discomfort or dissatisfaction, is through the four foundations of mindfulness, *satipaṭṭhāna*. The four foundations of mindfulness, intended for the practitioner to repeat, are contemplations of body, feelings, mind, and mind-objects.³¹⁸ Thus the four *satipaṭṭhāna* are understood as either the four ways of setting up mindfulness or as the four objective domains of mindfulness, to be amplified in the rest of the sutta.³¹⁹ Mindfulness has been further utilized by many religious traditions to develop the body, mind, and spirit for thousands of years and has started to gain popularity in the Western as well.

Mindfulness³²⁰ was first translated into English in the term *sammā-sati* as “Right Mindfulness, the active, watchful mind” by Pali-language scholar T.W. Rhys Davids in 1881.³²¹ From this point, scholars and experts from different periods have given various definitions. Typically they accept Bhikkhu Bodhi’s perspective that “we have no word in

³¹⁷ Ñāṇamoli Bhikkhu and Bodhi Bhikkhu., *The Middle Length Discourses*, 145.

³¹⁸ Walshe, *Long Discourses of the Buddha*, 335-343.

³¹⁹ Ñāṇamoli Bhikkhu and Bodhi Bhikkhu, *Middle Length Discourses of the Buddha*, 1189.

³²⁰ Gethin, in “On Some Definitions of Mindfulness,” provided a previous definition: Monier Williams (1872) gives the following as the initial range of meanings: “to remember...to recollect, call to mind, bear in mind, think of, think upon, be mindful of, and this may have suggested the translation “mindfulness;” Childers’ 1875, Pali dictionary renders merely as “recollection,” adding, perhaps mindful that he was here dealing with a Buddhist technical term, “active state of mind, fixing the mind strongly upon any subject, attention, attentiveness, thought, reflection, consciousness;” for the expression *upaṭṭhitā sati* he gives “presence of mind” and for *satipaṭṭhāna* he gives “fixing the attention, earnest meditation.”

³²¹ Rhys T. W. Davids, *Buddhist Suttas*, (Oxford: Clarendon Press, 1881), 107.

English that precisely captures what sati refers to when it is used in relation to meditation practice” (Nyanaponika Thera, 1965, p. 9). In addition, Nyanaponika’s description of “bare attention” is more concise and technical:

Bare attention is the clear and single-minded awareness of what actually happens to us and in us, at the successive moments of perception...attention or mindfulness is kept to a bare registering of the facts observed, without reacting to them by deed, speech or by mental comment which may be one of self-reference (like, dislike, etc.) judgment or reflection. (Nyanaponika Thera, 1965)

Nyanaponika’s definition has had significant influence on the definitions of mindfulness adopted by the later-developed therapies Mindfulness-Based Stress Reduction (MBSR) and Mindfulness-Based Cognitive Therapy (MBCT),³²² which are utilized in health care settings with patients suffering from chronic pain and mental disorders.

As has been mentioned, the early definition of mindfulness in MBSR as defined by Jon Kabat-Zinn is: “... paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally.”³²³ Moreover, therapists Zindel Segal, Mark Williams, and John Teasdale, who from cognitive therapy drew up a preliminary manual of treatment that combined mindfulness practice into cognitive therapy as their new version of cognitive therapy, called “attentional control training,”³²⁴ further described the essence

³²² Gethin, “On Some Definitions of Mindfulness.”

³²³ Kabat-Zinn, *herever you go, there you are*, 4.

³²⁴ Segal, Williams, and Teasdale, *Mindfulness-based Cognitive Therapy for Depression*, 49.

of this moment-to-moment state: “to ‘be’ fully in the present moment, without judging or evaluating it, without reflecting backwards on past memories, without looking forward to anticipate the future, as in anxious worry, and without attempting to ‘problem-solve’ or otherwise avoid any unpleasant aspects of the immediate situation.”³²⁵

MiCBT mentions that as a training, mindfulness is experienced as a heightened sensory awareness of the present moment, requiring deliberate sustained attentional focus on sensory processes.³²⁶ These key characteristics (being alert and accepting the body sensations, emotions, and cognitive thoughts that arise during the individual’s experience) have been developed and reorganized by various researchers and institutions. Fortunately, experts consider that no matter how partially defined the focus, it will not affect the clinical application. As Gethin stated: “the difference in emphasis apparent in the theoretical definitions of mindfulness may not be so significant in the actual clinical application of mindfulness techniques.”³²⁷ The aim is to equip the participants to observe their thinking as it occurs in the present to protect people against future misthinking.³²⁸

Mindfulness training is focused on being nonjudgmental toward personal experiences in the present moment. Nevertheless, certain emotions or repetitive thoughts may persist, regardless of how much you try. When this happens, a deeper process behind the mindful experience called Investigation may be pursued. The verb “investigate” is defined in the *New Oxford American Dictionary* as: “carry out a system of formal inquiry

³²⁵ Teasdale, Segal, and Williams, “How Does Cognitive Therapy”

³²⁶ Cayoun, *Mindfulness-Integrated CBT*, 12.

³²⁷ Gethin, “On Some Definitions of Mindfulness.”

³²⁸ Segal, Williams, and Teasdale, *Mindfulness-based Cognitive Therapy for Depression*, 39–42.

to discover and examine the fact of (an incident, allegation) so as to establish the truth.”³²⁹ In the *Longman Dictionary of Contemporary English* it is defined as “attempt to find out the truth about or the cause of something such as a crime, accident, or scientific problem.”³³⁰ Both definitions highlight what is vital when looking for the cause in order to find out the truth, corresponding with the Buddhist Pāli canon’s term *dhamma-vicaya*.

In general, vicaya is translated into English as Investigation.³³¹ Dhamma-vicaya is translated as “Investigation of Dhamma” or “Investigation of Phenomena properly.”³³² In Buddha’s meditation teachings, the primary concern for Investigation of phenomena is to understand each and every thing clearly and completely, without any iota of doubt towards natural phenomena,³³³ or to examine the cause and the cause of its cause.³³⁴ What follows is canonical evidence on Investigation through various examples from the Pāli suttas:

In the Vitakkasaṇṭhāna Sutta (20) of the Majjhima Nikāya, one is asked to examine distracting thoughts (*dhamma*) by investigating what is the cause and the cause of its cause.³³⁵ In the Parivimaṃsana Sutta of the Saṃyutta Nikāya, “one is asked to investigate the cause or the reason or the condition or the source of a thing as to why it

³²⁹ Stevenson and Lindberg, *New Oxford American Dictionary*, 914.

³³⁰ Wang, Ying. *Longman Dictionary of Contemporary English* 朗文当代高级英语辞典. 5th ed. (Beijing: Foreign Language Teaching and Research Press, 2014), 1333.

³³¹ Baudh, “Satta Bojjhanga Sutta.”

³³² Baudh.

³³³ Baudh.

³³⁴ Bhikkhu, “The Notion of Investigation (Vicaya) in Buddhism.”

³³⁵ Ñāṇamoli Bhikkhu and Bodhi Bhikkhu, *Middle Length Discourses of the Buddha*, 211.

happens: *Tam kissa hetu?* What is the reason of this or that? What is the source of this suffering (dukkha)?”³³⁶ In this sutta, the purpose of Investigation is to understand the cause, such as dukkha, as to why something happens.

These quotations given in the section on Investigation shows how it is to analyze phenomena as they occur in terms of cause and effect.³³⁷ It shows that some phenomena of which we become aware of are only the effects of an as yet unclear cause, and can only be ultimately resolved by uncovering their fundamental root cause.³³⁸ It emphasizes the process that investigation of it implies analysis of the Dhamma — the essential truths of existence and all things whatsoever.³³⁹

However, in Buddha’s meditation teaching, Investigation of states (*dhamma-vicaya*) is a designation for wisdom (panna),³⁴⁰ underlying the ability to observe things as they truly are.³⁴¹ The practitioner gains discernment and intelligence³⁴² by having enough awareness³⁴³ and wisdom,³⁴⁴ and then is able to observe in the present moment without judging mind-and-matter phenomenon.³⁴⁵ In other words, the result of Investigation is to analyze body and mind, components of material phenomena as they

³³⁶ Dharma Priya Bhikkhu, “Notion of Investigation (Vicaya) in Buddhism,” 4.

³³⁷ Thānissaro Bhikkhu., *Right mindfulness*, 102.

³³⁸ Ajahn Thiradhammo, *Contemplations on the seven factors of awakening*, (Belsay, Northumberland: Aruna Publications, 2012), 40.

³³⁹ Susan Elbaum Jootla, *Investigation for Insight*. (Buddhist Publication Society, 1983), 2-3.

³⁴⁰ “Mizzima Business Weekly: Seven Factors of Enlightenment,” *Newstex Global Business Blogs*, January 17, 2019. <http://www.proquest.com/docview/2168479605/citation/B880D7DDA8444C2FPQ/1>.

³⁴¹ Douglass Smith and Justin Whitaker. “Reading the Buddha as a Philosopher.” *Philosophy East and West* 66, no. 2 (April 2016): 518.

³⁴² Suvaco and Bhikkhu, “A Home for the Mind.”

³⁴³ Thiradhammo and Harnham Vihara, *Contemplations on the Seven Factors of Awakening*, 41.

³⁴⁴ Jootla, *Investigation for Insight*, 4.

³⁴⁵ Jootla, 2–3.

really are, based on enough wisdom and awareness.

In the Cankī Sutta (95) of the Majjhima Nikāya, three types of phenomena are investigated, namely: (1) physical, (2) verbal and (3) mental behaviors.³⁴⁶ The way to gain discernment is to investigate physical phenomena in the body: looking at the arising and disappearing of physical phenomena right here. To put it into more concrete terms for practice, one investigates the six sense organs and the six respective classes of sense objects, which are the basis of all consciousness, contact, feeling, perception and mental activities.³⁴⁷ Thus, the function of Investigation of direct experience³⁴⁸ plays a central role for the attainment of the spiritual liberation called nibbana or the end of all suffering in the Buddha's teaching.

Though *dhmma-vicaya* has a central role for attaining the final liberation of enlightenment, the purpose of this project was not to guide adolescents to end all suffering as part of a religious practice. Rather, the process was to learn the basic principles of cause and effect and apply it to relative conditions. Although indirect inspiration of desirable behaviors could have also occurred, the goal was to help adolescents to reflect on thinking patterns with rational thought rather than emotion, via an Investigation practice. This training becomes meaningful once such analytical thinking takes places in relation to information gained from outside of the program to influence how the adolescent subjects live their lives.

³⁴⁶ Sutta, "Foundations of Mindfulness," 775.

³⁴⁷ Jootla, *Investigation for Insight*, 2–3.

³⁴⁸ Thiradhammo and Harnham Vihara, *Contemplations on the Seven Factors of Awakening*, 48.

Key Elements in Teaching Mindfulness to Adolescents

As research has shown, adolescents are part of a group that is most uninterested and unaccepting of inner practice because they are not as naive as children in younger age groups but are not as emotionally stable as adults. There are some strategies provided from scholarly and clinical perspectives about how to attract their interest or reduce their resistance to mindfulness practice. Even if we can find some teaching principles from limited resources, these different views are incompatible.

According to Dr. David Fontana and Ingrid Slack's perspectives, it may not be easy to convince adolescents to accept mindfulness without direct tangible evidence and enough cultural background. That's because of two especial reasons among this group. Firstly, teenagers are more easily influenced by what their peers think. They may reject something that is generally unacceptable to their peers or secretly hide their interests, fearing their friends might think them weird. Secondly, they are often self-conscious and image-conscious and need to be convinced that what they are doing is acceptable and could offer them considerable benefits.³⁴⁹ Thus, Fontana and Slack provided an appropriate method to introduce meditation to this group in more acceptable ways and attract their attention.

The first idea is based on adolescents' need to create characteristic topic titles about mindfulness' potential benefits (instead of using words directly from meditation), such as "develop your potential," "improve your memory," "do better

³⁴⁹ Fontana and Slack, *Teaching meditation to children*, 180.

in your exams,” “increase your concentration,” “creativity and confidence,” and so on. The second idea is to provide pictures of people that children admire, such as actors, sportsmen, and other famous and successful people who are known to meditate and who might be role models for children. The third idea is to display captions to arouse interest, such as “What do these people share in common? Come along and see.”³⁵⁰ In addition, Dr. Debra E. Burdick suggests providing group teaching for teens, which could be a very powerful way to help students who are resistant to the practice of letting go engage in the process as they observe their peers enjoying the process.³⁵¹

Experts hold opposing views about teaching methods for teenagers versus methods for adults. Dr. Carolyn Williams-Orlando in the *Teaching Meditation to Children as Part of Psychotherapy* writes: “teaching meditation to children in psychotherapy requires a different process than teaching to adults.”³⁵² However, Debra E. Burdick in *Mindfulness Skills for Kids and Teens* writes about the methods, “are not dramatically different from teaching kids to adults, and mindfulness exercises that are used with adults can be adapted to fit different ages and abilities.”³⁵³ This perspective is similar with Dr. Daniel Rechtschaffen’s statement in his book *The Way of Mindful Education* that the essence of mindfulness teaching would stay the same for different ages because even very

³⁵⁰ Fontana and Slack, *Teaching meditation to children*, 180.

³⁵¹ Debra Burdick, *Mindfulness Skills for Kids & Teens: A Workbook for Clinicians & Clients with 154 Tools, Techniques, Activities & Worksheets*, (PESI Publishing & Media, 2014), 12.

³⁵² Carolyn Williams-Orlando, “Teaching Meditation to Children as Part of Psychotherapy.” *Integrative Medicine* 12, no. 4 (Aug/Sep 2013): 27-32,

<http://www.proquest.com/docview/1438016981/fulltext/3CD006FD83DE4E9BPQ/1?accountid=25358>.

³⁵³ Burdick, *Mindfulness Skills for Kids & Teens*, 12.

young children have the ability to learn how to witness their own sensations, emotions and thoughts, becoming aware of the mind, heart and body. Nevertheless, there are some different developmental stages to be aware of and different languages to be used according to the students' ages.³⁵⁴

Furthermore, author Carolyn Williams-Orlando provides a more comprehensive perspective by simplifying the practice in specific aspects regarding different groups of adolescents by applying age-appropriate modifications such as session duration and structure, use of language, and visual aids.³⁵⁵ Thus, these experts have provided different points from various perspectives, helping us to gain more clarity: we learn that it is better to adapt some aspects, such as session length, language, form, and interactive activities based on different developmental stages according to psychology and neurological characteristics and different abilities as well. Case in point, Professors Saltzman and Goldin modified the original version of adult practice using a Self-Compassion Scale from Kristin D. Neff and developed the mindfulness-based stress reduction program for children and their parents. The result has shown that the adult scale could be used with high schoolers (mid-adolescence), but that the language is too advanced for use with middle schoolers (early adolescence). Further research disclosed that the children's version was better suited for middle school (early adolescent) students.³⁵⁶ Let's continue to explore what details need to be incorporated into early and middle adolescents'

³⁵⁴ Daniel Rechtschaffen, *The Way of Mindful Education: Cultivating Well-being in Teachers and Students*, (WW Norton & Company, 2014), 124.

³⁵⁵ Williams-Orlando, "Teaching Meditation to Children."

³⁵⁶ Neff, Kristin D. "The Development and Validation of a Scale to Measure Self-Compassion," *Self and Identity* 2, no. 3 (July 2003): 223–50. <https://doi.org/10.1080/15298860309027>.

teachings.

Techniques for Early Adolescents

For mindfulness implementation for early adolescents (11-14 years of age) (from sixth to eighth grade, middle school students), as Daniel Rechtschaffen suggested, silent practice can last up to 20 minutes and lessons can last from 30 minutes to an hour.³⁵⁷

However, author Carolyn Williams-Orlando indicated that the length of practice for 10 to 13-year-olds begin with 10 to 13 minutes.³⁵⁸ These two researchers have slightly different time length perspectives when it comes to implementing their practice.

The research from Saltzman and Goldin demonstrates that the children's version is more appropriate for early adolescents. Dr. Carolyn Williams-Orlando also did studies on 10 to 13-year-olds, and had a similar perspective that children around this age are, by nature, playful and can learn through play therapy. Allowing children to play assists in the goal of making mindfulness a more desirable practice. The practitioners might allow, invite, and create play while teaching meditation in psychotherapy, perhaps using some kinds of toys, such as singing bowls, drums, beads, and mandalas to capitalize on children's strengths of play and their innate need for rhythm.³⁵⁹

Daniel Rechtschaffen suggested that lessons could be taught with explanations of their benefits and how they can be integrated into their lives. Other communication

³⁵⁷ Daniel, *Way of Mindful Education*, 131.

³⁵⁸ Williams-Orlando, "Teaching Meditation to Children."

³⁵⁹ Williams-Orlando.

exercises could be used such as council practices and dyad discussions, which could help students learn how to integrate these practices into their worlds.³⁶⁰ But Rechtschaffen did not show strategies to guide students to engage in dyad discussions and integrate their practices into their daily life. In addition, he pointed out that mindfulness practices should provide directions and lead towards personal problem resolution, which early teenagers will face throughout their maturation process, and some other mindfulness pointers for early stages are provided as follows:³⁶¹

- Self-doubt and insecurity may rear their heads at this age; students are actively developing their identity and fill their thoughts with comparison against others, having feelings of being “not good enough.” Mindfulness practices support students and help them to witness these thought patterns without feeding them.
- Body changes and gender identity issues are very strong at this age. Bringing self-acceptance and relaxation to the body can be of great support. Learning to be present with their emotional intensity can be a daunting task for adolescents, but they might find that learning to open their heart to whatever is happening in the body is of profound benefit.
- Bullying steps up a notch at this age. Social-emotional skills and communication exercises can help classes, schools, and whole societies address this concern.

Understanding the emotions of self and others is much more possible at this point

³⁶⁰ Daniel, *Way of Mindful Education*, 131.

³⁶¹ Daniel, *Way of Mindful Education*, 131-132.

of cognitive development; cultivating this understanding can be a very effective way of relieving the pressures of bullying, if not ending it all.

Techniques for Middle Adolescents

According to Daniel Rechtschaffen's perspective, mindfulness implementation for middle adolescents (14-18 years of age, ninth to twelfth grade of high school) can last longer than in early adolescence. The practice could last 10 to 20 minutes, and the lessons can be held from 30 minutes to an hour and a half. In addition, middle adolescents can specifically begin gaining a real understanding of how the world affects them and how they in turn affect the world. He even considered that they can take week-long mindfulness retreats, where they practice for full hour-long silent sittings.³⁶² Related information indirectly shows that middle adolescents already have abilities similar to adults. In addition, he pointed out that mindfulness practices should provide the direction and lead in solving what middle adolescents will face through growing up, and addition mindfulness pointers for middle stage are provided in the following as well.³⁶³

- Life for teens is very peer-centered; it can be important to weave in social components to the trainings to make it more engaging. You can show students how these practices support self-esteem and strengthen social skills.

³⁶² Daniel, *Way of Mindful Education*, 134.

³⁶³ Daniel, 135.

- Share with students how kindness is sometimes seen as uncool by teenagers, but that deep down, everyone wants to be liked and have friends. You can help students see how cool being kind and compassionate is.
- Be aware of how sensitive teenagers are about body issues (and just about everything.) Teens are far more insecure than any other age group. Mindfulness practices are amazingly supportive in helping teens maintain a grounded sense of self.

Obviously, teaching methods for early and middle adolescents tend to direct guidance abstractly and are more related to basic needs. In addition, other elementary techniques are also appropriate for both early and middle adolescents. As Dr. Debra E. Burdick proposed in her book *Mindfulness Skills for Kids and Teens*, kids and teens would much rather be doing something fun than boring. This is also a kind of tool to address their resistance and to have some fun and laughter, which could help the client enjoy themselves before settling down to a quieter formal practice.³⁶⁴

Moreover, to give choice within boundaries during the sessions is indispensable, as emphasized by Carolyn Williams-Orlando. Psychologists have considered that children love choice and fully participate in the exercises when they have the freedom to choose. At the same time, humanistic psychology has been proposing that answers lie within the self and that people are drawn to what they need for healing. Thus, choice is the way to

³⁶⁴ Burdick, *Mindfulness Skills for Kids & Teens*, 16-17.

elicit desire, will, participation, compliance, and empowerment. Choice within boundaries not only allows children to feel that they have some level of control and safety³⁶⁵ but also guides their behavior within the scope of orientation.

It is worthwhile to mention that experts also emphasized the significance of participation to prepare and create a conducive environment in the classroom before students arrive to maintain calmness and relaxation. Fontana and Slack suggested displaying some kind of music or lighted candle to create a relaxing and pleasant atmosphere because a peaceful environment will help students quickly understand that it is quiet time, that their attendance is voluntary, and that no disruptive behavior will be tolerated. Uncooperative or uninterested students will likely be asked to leave immediately to maintain this specific, quiet environment.³⁶⁶

Daniel Rechtschaffen suggested asking the group if they have ever heard about mindfulness before introducing the definition of mindfulness. If so, inviting them to share what they have heard prevents the student from parroting back to us what they think we want them to say, in which their true thoughts would be lost.³⁶⁷ This is also a practical way to understand that mindfulness is not like other subjects, where information is provided as a kind of knowledge communication, instead inviting them to make their own discoveries and experiences.

We can take notice of the importance of well-preparedness during the beginning

³⁶⁵ Williams-Orlando, "Teaching Meditation to Children."

³⁶⁶ Fontana and Slack, *Teaching meditation to children*, 184.

³⁶⁷ Daniel, *Way of Mindful Education*, 141.

of the process. The format used for introducing and practicing mindfulness skills is crucial for success with students' experiential practice as well. He provided the basic layout of a mindfulness lesson for different age groups as follows:³⁶⁸

- Opening mindful moment
- Check-in and report back
- New lesson introduction
- Practice
- Sharing/council
- Journaling
- World discovery
- Closing mindful moment

At the end of the process, Carolyn Williams-Orlando suggested reserving the last 10-15 minutes to calming and clearing the mind³⁶⁹ or encouraging them to share freely without judgment, writing words or drawing a picture about what it was like for them to do that skill and what came up for them. The implementers may then use what they hear during the sharing period to assess progress and to give feedback, shaping mindfulness practice by reinforcing, encouraging, and giving tips to increase skills at the ending process.³⁷⁰

³⁶⁸ Daniel, 145.

³⁶⁹ Williams-Orlando, "Teaching Meditation to Children."

³⁷⁰ Burdick, *Mindfulness Skills for Kids & Teens*, 17.

Summary

As stated previously, mindfulness is known in early Buddhist texts as *satipaṭṭhāna*. A profound definition emerged after Sati was translated as “mindfulness” into English by T. W. Rhys Davids in 1881. Even then, various definitions could neither faithfully nor comprehensively reflect the meanings of sati. Yet this limitation does not affect its clinical application, as confirmed by studies. Effectiveness has been confirmed by various research, resulting in the spread of MBSR and MBCT in health care, mental health, and school education sectors. As the program developed and became more specific, people become more concerned about modifying it for teens.

Thus, experts have proposed to modify the adult version to become simplified and playful by focusing on session duration, comprehensible language, and form that is age-appropriate based on their physical and psychological development. In addition, some key approaches that could attract young people’s interest include using tools to support visualization, understanding, and practice, keeping the process playful and fun, and providing choice in active participation.

Of course, sufficient preparedness before the class is required, as well as arrangements for reasonably ending the process verbally and nonverbally, without judgment. This process not only helps students to reflect on what have been learned but also creates a peaceful time for deeper insight and unifies the resounding theme in the sessions that they have been going through. The ultimate goal is to attract children rather than repel them from the experience of meditation, hopefully encouraging the potential

for home practice and further exploration as they grow into adulthood.

Conclusion

As stated above, mindfulness is widely accepted theoretically and empirically in the treatment of various mental disorders and life stressors, yet it has been limited in its past application to adolescents. Researchers have gone beyond just pointing out the necessity of modifying the training process for this critical transition period group based on their characteristics and interests to cope with their unpredictable anxiety. This pilot study explored three aspects in order to develop the Investigation Practice Mindfulness Program for adolescent anxiety.

In the first phase, I reviewed the relevant information from the field of psychology to explore the cause of anxiety based on the developmental characteristics of adolescents from the four dimensions of biological, cognitive, emotional, and social changes in the early and middle stages. The primary reasons that there was a focus on the early stage were: the transition period from parents' protection, facing peak conformity when reacting with peers, stronger egocentric behaviors, struggles with identity, more or less vague perceptions of the body, need for belonging with family, peer groups, and school community, and some conditions resulting in increased problematic behavior. With the expectation of more physical maturation, middle adolescents have three main tendencies compared to early adolescents. Their cognitive ability is more fully developed, with demonstrated abstract thought, and they are driven to find special competence, which results in a variety of ego states compared to early adolescence. Middle adolescents start to think about the future and setting goals. Relationships with parents

becomes more distant, peer groups develop into cliques or crowds, and there is more tendency to interact with the opposite sex romantically as well. In addition, there are some other unpredictable factors such as cultural background, ethnicity, poverty, behavior patterns, media environment, and so on.

The second phase explored existing approaches from Cognitive Behavior Therapy (CBT), which is considered a most effective treatment among the various typical treatments for youth anxiety. The extended projects called Coping Cat and C.A.T. lay stress on treatment to teach clients to recognize signs of anxious arousal with cognitive and behavior training on body relaxation and reaction. The additional concise and feasible steps of FEAR and STOP are meant to help separate goals into processes and break them down into smaller steps. However, the thought pattern with analysis recognizes the signs of anxiety. Moreover, although mindfulness provides the way to notice these triggers by developing awareness to experience the present moment, Investigation provides the way to look at what is behind the experience, which is a more direct exploratory method to stop negative thoughts resulting from the triggers. In order to create a suitable Investigation program, the following information was prepared in advance.

The third phase started with learning the definition of mindfulness and Investigation from the original texts in order to provide the principles for guidance, allowing more flexibility during the process. Modern experts provide relevant teaching techniques to promote the effectiveness of teaching through two ways. Firstly, there is an emphasis on preparation needed before the program. Sufficient preparation themes

are related to reducing teens' resistance to mindfulness practices and increase their interest in practice. There are other methods to stimulate their interest in various ways, such as creating interesting topics, quoting well-known words from famous people who are known to meditate, or displaying captions to arouse their interest. Secondly, there is a focus on modifications and simplification during the teaching process, such as session duration, age-appropriate language, using tools to support visualization, keeping the process playful and fun, and providing them with choice in active participation. The ending process is utilized to create a peaceful time, review the relevant themes, and provide a time for questions and answers.

As can be seen in the above exploration of the question of “why” adolescents are anxious and “what” existing research have been doing for anxiety via CBT programs, I reviewed information on teaching mindfulness to adolescents, in other words, “how” to improve the integration of Investigation into a mindfulness program. These three sections in interrelationship and interaction produce a new treatment system. Each of them in conjunction will facilitate a new treatment protocol to alleviate adolescents’ anxiety in modern education.

CHAPTER III. METHODOLOGY

As stated in the literature, all individuals experience difficulties in adjusting during their adolescent period, because it is a time to face both internal and external changes that cause fluctuations in mood and intense reactions and heighten anxiety for adolescents in each stage. In general, untreated anxiety can lead to several negative physical and mental health outcomes and threats to adolescent's abilities to achieve academic success, to personally thrive. Mindfulness research includes Mindfulness-Based Cognitive Therapy (MBCT), Mindfulness-Based Stress Reduction (MBSR), and Mindfulness-integrated Cognitive Behavior Therapy (MiCBT), which are utilized to address stress, depression, and trauma by staying in the present moment to observe experience through body sensation, emotion, and thinking. These therapies have been shown to be effective at protecting people from future misthinking. However, guidance on the way to stay in the present was not clear and specific. This study is designed to develop the curriculum by integrating Investigation practice into a mindfulness process to cultivate participants' ability to observe the present experience more directly and alleviate their anxiety.

This chapter will describe the methodology used to explore how Investigation practice worked for those who completed the six-session online training. The quantitative research method was utilized as the primary approach to collect the data. Pre- and post-surveys were used according to two different methods: a) self-reporting survey form called Beck Anxiety Inventory (Appendix D) as primary comparison data with initial anxiety scores, and b) self-reporting survey forms called Child Adolescent Mindfulness

Measure (Appendix E) as primary comparison data with initial mindfulness scores. Additionally, the measure form called “Class Evaluation Form” was used to for participants to reflect on the understanding and benefits from the program (Appendix F) after completing the program.

This chapter outlines how this process was structured in three phases. In the first phase, the recruitment process utilized a demographic questionnaire to gather general information, such as participant’s name, age, and ethnicity arranged into different classes. This information was helpful to determine whether prospective participants met the criteria to participate in this study program. An additional procedure was a parent meeting for parents/guardians to obtain a general picture of the process. The second phase involved introducing, educating, and implementing the Investigation practice into mindfulness process within a six-session online program. The third phase obtained data through questionnaires, surveys and identifying the provision of confidentiality.

The organized themes and categories show how the Investigation of Investigation Practice of Mindfulness Program works for those who had completed the study program. Therefore, various options were engaged to maintain an openness about the objective of the study from multiple perspectives. Each phase is discussed in the following.

Recruitment Strategies and Procedures

Participants in this study were adolescents aged 11- 17 who submitted the consent application form and had completed the six-session Mindfulness Investigation program. The initial plan was to recruit 20-26 students from a Chinese class in a Buddhist temple located in North America. As it turned out after the screening process, the ideal number

of participants was 20. The initial recruitment number range was made flexible to reserve six extra participants in case people missed sessions for different reasons. As a result, the minimum number was 20 and the maximum number was 26 students. Ten to thirteen participants age 11 to 13 years old were in the early adolescent group. The other ten to thirteen participants age 14 to 17 years old were in the middle adolescent group. The reason to have separate groups was due to the differences in developmental phases in cognitive functions and intelligence. A time limit was also required to make each session more manageable and productive.

Criteria for Inclusion

Three categories of evaluation forms (appendixes) were used to recruit the participants during the initial assessment to evaluate the students using the following inclusion criteria:

- a. Applicant in the age group between 11 to 17.
- b. The first 26 applicants fulfilling the inclusion criteria.
- c. Those interested in understanding their inner processes and mindfulness practice.
- d. Applicants who scored below 36 on the Beck Anxiety Inventory. These applicants are considered as low to medium risk of anxiety, which was suitable for the purpose of this study.
- e. No history of past or present trauma from abusive use of drugs or alcohol.

- f. Non-cognitively impaired students may join the study because of their ability to understand the material in class. In addition, the parental consent form can be used for the screening process as well.

Criteria for Exclusion

Applicants were excluded from the study if they fell under the following criteria:

- a. People who are under 11 or over 17 years old.
- b. People who did not sign the Consent Form.
- c. Parents who did not sign the Parental Informed Consent Form.
- d. Applicants who scored 36 or higher on the BAI exhibit are considered as having high/concerning levels of anxiety, which was not suitable for the purpose of this study.
- e. Applicants with a history of past or present trauma from abusive use of drugs or alcohol. Those who were on medication or counseling therapy for anxiety were excluded because they belong to a high-risk category.
- f. Cognitively impaired students were not included due to their inability to understand the material in class or even relate to the level of anxiety experienced.

Participants were selected based on the first 26 applications fulfilling the inclusion criteria without prejudice. Participants were not excluded based on ethnicity, sexual orientation, gender identity, etc. The participants were reminded of their voluntary participation in the program and had an option to discontinue attendance or terminate the program at any time.

Parents' Meeting

The parents' meeting was an indispensable element to facilitate the program because the online program had high demands, with equipment requirements such as efficient internet and available microphone and video, of which the parents needed to be properly advised. At the same time, it was a significant opportunity to meet and provide information to the parents as well as to inform them about their child's participation and the study guidelines of the program.

The parents' meeting was only provided for parents whose child met the inclusion criteria. The researcher and parents attended the meeting one week before class started via Zoom. During the orientation process, the researcher explained the rationale of the study and introduced the contents of each session for parents to have a general picture of the process/program. Not only that, but there was also a review of the "Parental Informed Consent" Appendix B with parents to make sure that they understood what the research project was about and the participation of their child in the program.

Moreover, parents were reminded to assist and support their child in preparation before class. Such preparation required students to have:

- a. A set of colored pens, a towel, flowers and fruits, paper, and pens, which would be needed during different sessions.
- b. A computer with speakers, microphones, and video capability. A network with sufficient speed and reliability, with the Zoom App downloaded prior to class. A cell phone was not recommended during class.

c. While participating in classes, students were expected to be in a quiet and protected place to ensure student would not be disturbed.

d. Zoom sessions required that students be online 15 minutes in advance of each class.

The students had to log on 5 minutes in advance and be punctual.

In addition, the roster of names was shown to ensure that each student was available with their schedule before moving on to the question time. It was also an opportunity to collect feedback from parents regarding their thoughts and concerns. At the end of the meeting, the researcher stated clearly that participation in this study was voluntary and that participants could choose to withdraw at any time. Parents were provided with the Crisis Hotline number and were reminded to call 911 if there was an emergency.

Outline of the Model Program (Appendix I)

The curriculum of Investigation Practice of Mindfulness Program was developed utilizing three resources as follows: a) A comprehensive literature review to understand adolescent development from biological, cognitive, emotional, and social aspects, b) Information gathered from existing therapies for management of anxiety from CBT, c) A brief review of mindfulness teaching techniques for adolescents based on the above research to create a comprehensive curriculum outlined as a six-session, weekly program. Each session had five components and was consistent with the primary principle of the mindfulness and Investigation study in terms of theories, mindfulness exercises, group activities, discussion and sharing, for heuristic guidance on the practice of reducing anxiety.

This general curriculum for both early adolescents and middle adolescents has some slight differences in duration, language, interactive activities, and visual aids, as we learned in the literature section, based on the different developmental stages according to psychological and neurological characteristics. and different abilities. It was better to adopt some aspects according to the specific conditions. The following paragraphs will go into detail about the five components of the weekly sessions.

1. Check-in and Report Back

At the beginning of class, check-in is a time for the facilitator to create a relaxing environment and inspire the attendees' attention. These may have included some form of music, questions, or games that are in accordance with each session's components, encouraging attendees to settle down and establish group connectivity. For sessions 2 to 5, the attendees were invited to share how their daily self-practice was by using questions to guide the attendees to review their recently learned contents. As for the sessions, 1 session was added for a welcome meeting as well as session 6, dedicated to summarizing what they have learned from the mindfulness experience. Further information was provided in the curriculum.

2. Transition Phase

After check-ins with each attendee and reviewing the key points from the last session, this phase utilized stories, metaphors, and aphorisms connected to the new topic, as a bridge to direct the student's attention to new information about the psychoeducation component.

3. Psychoeducation

Scholars have considered adolescence to be a period of growing cognitive capacities.³⁷¹ The theoretical content will help them further understand what they have learned and apply them more flexibly with: What? Why? and How? This kind of theoretical learning helps to bring out the individual needs and uniqueness in their Investigation practice of Mindfulness. This section was shown before formal practice through multiple ways, such as PowerPoint, videos, pictures, and stories and so on.

4. Activity Practice

Based on the study theme, practical activities were designed according to different themes, such as relaxation exercises, game participation, and mindfulness practice. These activities are related to adolescents' physical and mental development needs and mindfulness teaching techniques. The primary direction of teaching provided the opportunity for participants to explore their sensations and connect with their own feelings. Moreover, the question-and-answer session together with group sharing provided a platform for participants to reflect on their inner experiences and learn how to express their feelings and emotions. These steps were necessary in the Investigation of mindfulness to understand the inner self, with responses and help to release anxiety. At the same time, the facilitator could utilize their sharing to shape the primary theories and techniques by reinforcing, encouraging, and giving tips to increase understanding and skills.

³⁷¹ Sauter, Heyne, and Michael Westenberg, "Cognitive Behavior Therapy for Anxious," 320.

5. Closing Moment

At the end of each session, there was a brief review of the key points from psychoeducation and activity practice learning. At the same time, it was necessary to reserve some time for participants to ask questions. It was also a perfect opportunity to make clarifications before moving on. In addition, participants received a Daily Self-Design-Practice topic for at-home practice. These practices had two characteristics: first, the practice was designed in relation to the techniques that were learned during the day's session, which paved the way for students to consolidate their skills. Second, there were always two option schemes for students to choose, which was the most comfortable pattern for them. At the end, an explanation was provided to the attendees on how to apply the existing techniques into their self-practice activity using mindfulness, paying attention, and seeing whatever it was that they were doing. The next topic was briefly mentioned before ending the class.

It is worth mentioning that according to scholar Daniel Rechtschaffen's³⁷² study, the length of each session needs to be slightly different. The lessons for early adolescents can last from 30 minutes to an hour, while for middle adolescents they can last longer, from 30 minutes to an hour and a half.¹² Thus, this program was designed with beginning welcome sessions and ending goodbye sessions for early and middle adolescents to have slightly different time lengths, 60 minutes and 70 minutes, respectively. The rest of the

³⁷² Daniel Rechtschaffen is author of *The Way of Mindful Education* and *The Mindful Education Workbook*. He is the founding director of Mindful Education, a mindfulness and social emotional learning platform for educators.

sessions, sessions 2 to 5, were around 45 minutes for each class.

Data Analysis

In order to explore how Investigation Practice of Mindfulness Program worked for those who completed the six-sessions, a quantitative research method was utilized through data collection. One of the quantitative evaluation tools was called the post-pre survey; participants rated themselves twice on each intended outcome to assess participants' perception of changes in their knowledge and skills, personal attributes, or impact on their future behavior and aspirations before and after a course, program, or workshop.³⁷³ Three different types of surveys were required, as will be described below.

As previously described, through the process, participants were invited to rate themselves twice on the Beck Anxiety Inventory (BAI) to compare anxiety levels before and after the program. Further, the Child and Adolescent Mindfulness Measure (CAMM) was utilized before and after the program to compare their mindfulness level as well. The first initial self-report scale helped with assessments in the recruitment process; those who scored mild to moderate on the anxiety scale, 35 to 1, were invited to participate in the 6-week mindfulness program. It was necessary to inform those adolescents who scored 36 or higher on the BAI exhibiting “potentially concerning levels of anxiety,” and the ones receiving clinical treatment for anxiety disorders were screened out from participating in the program. The last exit self-reporting scale was used as comparison

³⁷³ “Notes on the Pre- and Post- Survey,” ReadexResearch, accessed August 2021, <http://www.readexresearch.com/notes-on-the-pre-and-post-survey/>

data with their initial scale. McConaughy suggested asking interviewees to complete this scale prior to the appointment for the clinical interview. The researcher reviewed responses ahead of time and asked questions about key problems identified on the self-report.³⁷⁴ In a word, pre- and post- scores of anxieties and mindfulness were charted on a table or graph to show the effects of anxiety and mindfulness.

In addition, the participants only rated themselves once on the Class Evaluation Form, one week after completing the program. This form was issued to students to assess the effectiveness of the study from varies of section. All of the data analysis follows quantitative methods to indicate information in figure form, with special attention to number of respondents and nonrespondents.

Measures of Anxiety

Beck Anxiety Inventory (BAI) (Appendixes D): The Beck Anxiety Inventory (Beck, 1988) was used to assess the severity of anxiety. Participants answered 21 items on a 4-point scale (0= never, 3=always) with scores of 0-21 indicating low anxiety, 22-35 indicating moderate anxiety, and 36 or above indicating potentially concerning levels of anxiety.

³⁷⁴ Stephanie H. McConaughy, *Clinical Interviews for Children and Adolescents: Assessment to Intervention*, 2nd ed. (New York: The Guilford Press, 2013), 95.

Measures of Mindfulness

Child and Adolescent Mindfulness Measure (CAMM) (Appendix D):

Mindfulness was assessed using the Child and Adolescent Mindfulness Measure.³⁷⁵

Participants answered 10 items on a 5-point scale (4=never, 0= always). This measure has been recognized for its reliability and validity with a sample of adolescents.

Evaluation with Curriculum

The Class Evaluation Form was designed by the instructor to assess the quality of the study, with two sections. The first two sections were about general class evaluations related to class organization and instruction and will not be discussed in detail because they are not related to the research question. The purpose for participants assessing these two sections was for the instructor to adjust the course structure and teaching skills in the future and the related data is not included in the figure.

The third section used to assess how much the participants understood the contents about Investigation from multiple topics through the learning process. Participants answered 8 items in the Early Group and 9 items in the Middle Group on a 5-point scale (5=excellent, 1=poor), with 1 item as an open-ended question at the end of this section.

³⁷⁵ Greco, Baer, and Smith, "Assessing Mindfulness in Children and Adolescents," *Psychological Assessment* 23, no. 3 (2011), 606.

The fourth section used to assess how much benefit they received from each exercises practice. Participants answered 6 items on a 5-point scale (5=excellent, 1=poor), with 1 item as an open-ended question at the end of the section. The purpose of the evaluation process was to obtain feedback to assess whether those exercises helped them to apply the mindfulness and Investigation into their practice.

In general, the above forms designed to assess their internalized adaptive functioning with physical, feelings, emotions and thoughts from their leaning experience. The range of scores for these variables were used to identify variables that answer the research questions of the study. Meanwhile, it was to also assess the effectiveness of this program and make improvements for future programs as well.

Provisions of Confidentiality

In order to protect the rights of the participants involved in the study, this research was approved by the Institutional Review Board (IRB) at the University of West in Los Angeles, California, USA. The Informed Assent form was given to each adolescent participant. Parents/legal guardians were provided with the Informed Consent-Parent/Legal Guardian form to consent to their child participating in the study. The data obtained from the demographic questionnaire, measure forms, evaluation of class form, interview audio-recordings and the documentation of data analysis was protected very confidentially during the study.

To ensure accuracy and reliability of the study results, the researcher's biases were not injected into the study or during data collection phase. The researcher remained objective with a non-judgmental view. The researcher adopted suggestions

from Williams and Morrow as preventive measures or provisions: “We suggest that there are three major categories of trustworthiness to which all qualitative researchers must attend: integrity of data, balance between reflexivity and subjectivity, and clear communication of findings.”³⁷⁶ Furthermore, all documents generated from this study were kept in a secure and locked safe throughout the study and will remain there for five years from the completion of the study before being deleted or removed.

Conclusion

The present chapter describes the plan for a better organization for the IPMP program and highlights the suitable methods for collecting and explaining the data. First and foremost, it presents the recruitment strategies and procedures for selecting the participants using the criteria before the start of the program. I provided a Parents’ Meeting only for parents whose child met the inclusion criteria to introduce the IPMP program in brief, to remind them to prepare required equipment in advance, such as efficient internet, an available microphone, and video and to describe other considerations as well.

The above outlines the curriculum model, with five phases in each session and integration of the literature learning into the IPMP program. I then highlight the research design, data collection, and data analysis. The data was completed by administering a participant registration form, obtaining parents’ signatures, and approving the data

³⁷⁶ Emma Rossiter Cullen, “The Tipping Point in Adolescents: Exploring the Factors Involved in Adopting a Mindfulness Practice.” (PhD diss., Alliant International University, 2016). <http://search.proquest.com/psychology/docview/1868419855/fulltextPDF/959DEE0623354FF2PQ/1?accountid=25358>.

presented. Each of these phases affected the data collected. Additionally, the study adheres to all of the University of the West quality standards and guidelines, such as IRB requirements and dissertation committee oversight.

CHAPTER IV. RESULTS

The purpose of this chapter is to explore how the Investigation of Mindfulness Practice works on adolescents' ability to implement awareness and the influence of Investigation practice on their personal competencies in reducing anxiety. Through the process, the findings presented in this chapter are organized by the research question, and the participants were assigned a code number (pseudonyms) for identification purposes. This chapter concludes with a summary of the results.

Chapter III outlines the data collection and analysis process, and the present chapter reports the results of the data analysis. The data collection used the Pre- and Post-Beck Anxiety Inventory (BAI; Beck, 1988) and Child Adolescent Mindfulness Measure (Greco, Baer, & Smith, 2011). Both measures reflect a gradual progression of change in anxiety and mindfulness, illustrated in corresponding figures. Further,

additional findings relevant to the research questions are presented from the "Class Evaluation Form." Each theme was reflected in the self-reports from participants to capture the experience of the participants. The findings will further be described in this section.

Statistical Analysis:

1. Demographics

In total, 27 participants were divided into two groups. One group's ages ranged from 11 to 13 years old and was identified as the Early Group, with a total of sixteen participants, while the Middle Group ranged from ages 14 to 17 years old

and consisted of eleven participants. The following two figures summarize the demographic characteristics as reported by each participant in the Early Group and Middle Group recruited at the beginning of the program. The figure lists the participant's assigned code number, i.e., the Early Group coded as E and the Middle Group coded as M in order to maintain confidentiality of gender, age, grade level, religious or spiritual affiliation, length of mindfulness experience, and attendance.

Figure 1 illustrates the demographic characteristics reported by each participant in the Early group. There were seven female and nine male participants whose educational levels ranged from 5th to 8th grade. Among them, eight participants (50%) were Buddhist, eight participants (50%) indicated "none" as their religious preference, three participants (18.75%) had mindfulness experience, while thirteen participants (81.25%) had no mindfulness experience before entering this program. Of the group, three participants (19%) attended 4 times, six participants (37%) attended 5 times, and 7 participants (44%) attended 6 times.

Figure 2 indicates the demographic characteristics reported by each participant in the Middle group. There were four female and seven male participants whose grade level ranged from 8th to 11th grade. Among them, one participant (9.09%) was Christian, four participants (36.36%) were Buddhist, six participants (54.54%) marked "None" as their religion, four participants (36.36%) had mindfulness experience, and seven participants (63.63%) had no mindfulness experience before entering this program. During the program, two participants (18.09%) attended 4 times, three participants (27%) attended 5 times, and six participants (55%) attended 6 times in sessions.

According to the assessment criteria, participants who did not attend at least five sessions or did not return BAI or CCAM forms within the two-week period after the program were not included into the final assessments on the figures. The reason for excluding the former is that participants who did not attend enough sessions would skew the data due to their lack of sufficient experience acquired from the course content. The latter participants who did not return sufficient self-reporting score forms would lack comparative data. The participants E15, E16, M10, and M11 attended 4 times, and E13 and E14, who did not return the pre -and post -forms, were disqualified from inclusion in the final assessment. Thus, outcomes on the Early group are based on data derived from 12 participants, while outcomes on the Middle group are based on data derived from 9 participant

Table 4: Demographic Characteristics of Early Group

Name	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14	E15	E16
Gender	F	F	F	F	M	M	M	F	M	M	M	M	F	M	M	F
Age	12	13	13	11	11	11	12	12	12	G	11	12	12	13	13	11
Grade	6	8	8	7	5	5	6	6	6	6	5	6	7	8	7	6
Religious	None	Buddhism	Buddhism	Buddhism	None	Buddhism	Buddhism	Buddhism	None	None	Buddhism	None	None	None	None	None
Mindfulness experience	No	yes	yes	yes	No	No	No	No	No	No	No	No	No	No	No	No
Number of courses attended	5	5	6	6	6	5	6	6	5	5	6	5	6	4	4	4

Table 5: Demographic Characteristics of Middle Group

	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11
Gender	F	F	F	M	M	M	M	M	M	F	M
Age	15	16	16	16	15	14	16	16	14	16	15
Grade	10	11	10	11	9	8	11	11	9	11	9
Religious	Buddhist	Buddhist	Buddhist	None	None	None	Buddhist	None	Christian	None	None
Mindfulness experience	No	Yes	No	No	Yes	No	No	Yes	No	Yes	No
Number of courses attended	6	6	5	6	6	6	6	5	5	4	4

2. Self-Report Assessment of Anxiety from Pre- and Post- Survey

A paired sample anxiety self-report was conducted to determine whether the group means for each of the forms had changed significantly from pre- to post-assessment. The Beck Anxiety Inventory (BAI; Beck, 1988) was the criterion measure of anxiety used to collect pre- and post-test scores of anxiety. The scores were compared to track the progress of participants. The BAI form consisted of 21 items on a 4-point scale (ranging 0 as never up to 3 as always) with the total scores ranging from 0-21 indicating low anxiety, 22-35 indicating moderate anxiety, and 36 or above indicating potentially concerning levels of anxiety. The results from the Early Group and Middle Group and their rates are charted on figures to show main effects on anxiety.

a. Early Group BAI Assessment

The overall results from the BAI tests issued to the Early group prior to and after the study show a decline of 33.84% in anxiety scores. Of the total 12 participants, there were 9 who showed a decline in BAI scores, while 1 showed no change and 2 showed an increase in scores. The participants' individual rate of decline in anxiety are as follows: 3.57%, 25%, 29.41%, 36.36%, 36.84%, 40%, 53.85%, 75%, and 78.57% respectively. There was 1 participant showing no change, with starting and ending scores of 14. There were 2 participants who showed an increase in scores: E7 started with a score of 4 and ended with 8; and E10 scored 0 initially and ended with 3.

Table 6: Demographic Characteristics of Middle Group

		Number of episodes	Feeling hot	Weakness in legs	Unable to relax	Fear of worst happening	Dizzy or lightheaded	Heart pounding / racing	Unsteady	Terrified or afraid	Nervous	Feeling of choking	Hands trembling	Shaky / unsteady	Fear of losing breathing	Difficulty in Fear of dying	Scared	Indigestion	Faint / lightheaded	Face flushed	Hot / Cold sweats	Total of Pre	
E1	Pre	2	2	2	3	2	3	3	1	1	2	0	1	1	0	3	0	2	1	3	1	0	33
	Post	1	1	1	2	2	1	1	1	2	2	0	1	0	0	1	2	2	0	0	1	0	21
E2	Pre	0	1	1	2	2	2	2	1	2	3	1	2	1	1	1	2	1	0	2	1	0	28
	Post	0	0	0	1	1	1	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	6
E3	Pre	0	1	0	1	2	0	1	0	1	2	0	1	0	1	0	0	1	0	0	2	1	14
	Post	1	1	0	2	2	2	0	1	0	1	0	0	1	1	0	0	0	1	1	0	0	14
E4	Pre	2	2	0	1	0	0	2	0	1	3	0	1	0	0	0	0	1	0	0	2	1	16
	Post	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	4	
E5	Pre	0	3	0	3	2	1	1	2	0	1	0	0	1	2	0	0	0	1	1	0	1	19
	Post	0	0	0	1	2	1	1	0	1	2	0	0	1	0	0	0	1	0	1	0	1	12
E6	Pre	0	2	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	4
	Post	0	1	0	0	1	2	1	0	1	1	0	0	0	0	0	0	1	0	0	0	0	8
E7	Pre	1	0	0	2	1	1	0	0	1	2	0	1	0	0	0	2	0	1	1	1	2	16
	Post	1	0	0	1	2	0	0	0	2	2	0	0	0	1	0	0	2	0	0	1	0	12
E8	Pre	0	2	0	1	1	2	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	10
	Post	0	1	0	0	1	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	6
E9	Pre	1	2	1	1	3	1	0	2	1	2	0	1	2	3	0	1	2	1	0	1	3	28
	Post	0	2	1	0	2	1	2	1	0	2	1	0	2	3	0	1	2	3	1	1	2	27
E10	Pre	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Post	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
E11	Pre	0	3	0	1	3	0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	0	13
	Post	1	3	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	6
E12	Pre	0	3	0	3	0	1	1	0	0	1	0	0	1	0	0	0	2	0	0	2	3	17
	Post	0	3	0	2	0	0	1	0	0	1	0	0	1	0	0	0	1	0	1	2	2	12

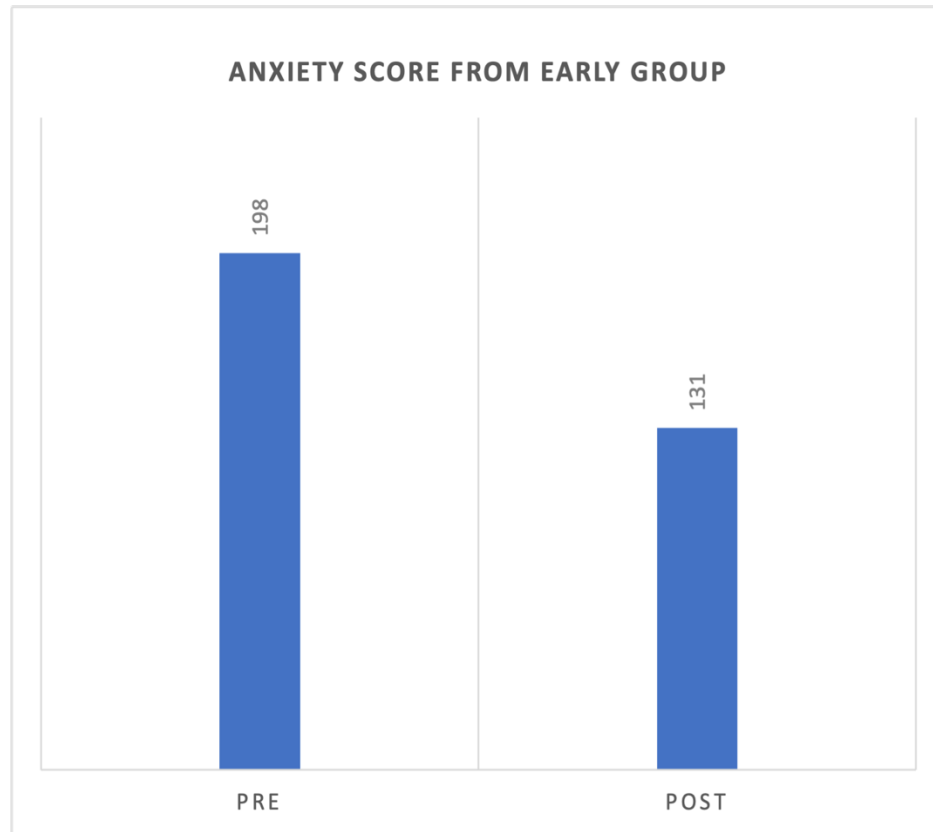


Figure 1: Contrast Pre-and Post-Score of Anxiety from Early Group

b. Middle Group BAI Assessment

The outcome measures of the BAI tests issued to the Middle Group prior to and after the study show a decrease of 27.97% in anxiety scores. Of the total 9 participants, 6 showed a decline, 1 showed no change, and 2 showed an increase in BAI scores. Of those who showed a decline in results, the participants showed a decline in anxiety individually as 19.05%, 33.33%, 39.53%, 81.82%, 100%, and 100%, respectively. There was 1 participant showing no change, with starting and ending scores of 5. There were 2 participants showing an increase in scores: specifically, M5 having starting and ending scores of 14 and 16, and M7 with starting and ending scores of 5 and 8, respectively.

Table 7: Pre- and Post- Score of Anxiety from the Middle Group

		Numberness or tripling	Feeling hot	Weakness in legs	Unable to relax	Fear of worst happening	Dizzy or lightheaded	Heart pounding / racing	Unsteady	Terrified or afraid	Nervous	Feeling of choking	Hands trembling	Shaky / unsteady	Fear of being control	Difficulty in breathing	Fear of dying	Scared	Indigestion	Fear / lightheaded	Face Flushed	Hot / Cold sweats	Total of Pre
M1	Pre	0	1	1	3	3	2	3	2	3	3	0	0	2	3	3	0	3	3	3	1	3	42
	Post	0	0	2	2	3	2	3	1	3	3	0	1	1	0	3	0	1	3	3	0	3	34
M2	Pre	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	3
	Post	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M3	Pre	0	1	1	0	0	1	0	0	0	1	0	2	2	0	0	2	0	0	0	1	0	11
	Post	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
M4	Pre	1	1	0	2	2	1	2	1	2	2	0	0	0	1	0	0	1	0	1	0	1	18
	Post	0	2	0	2	2	1	0	0	1	1	0	0	0	0	0	0	0	0	0	1	2	12
M5	Pre	0	2	1	1	0	1	1	0	0	1	0	0	0	1	0	0	0	0	3	1	2	14
	Post	0	1	1	2	1	1	3	0	0	1	0	0	0	1	1	1	0	0	1	1	1	16
M6	Pre	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
	Post	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M7	Pre	0	0	0	1	0	0	1	0	0	0	2	0	0	0	0	0	0	1	0	0	0	5
	Post	0	0	0	1	2	0	2	0	0	0	1	0	0	0	1	0	0	1	0	0	0	8
M8	Pre	1	3	2	3	3	3	2	2	3	3	1	2	1	3	1	2	3	2	2	0	1	43
	Post	1	2	0	2	2	2	2	1	2	2	0	1	1	2	0	1	2	1	2	0	0	26
M9	Pre	0	1	0	2	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	5
	Post	1	0	0	0	1	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	5

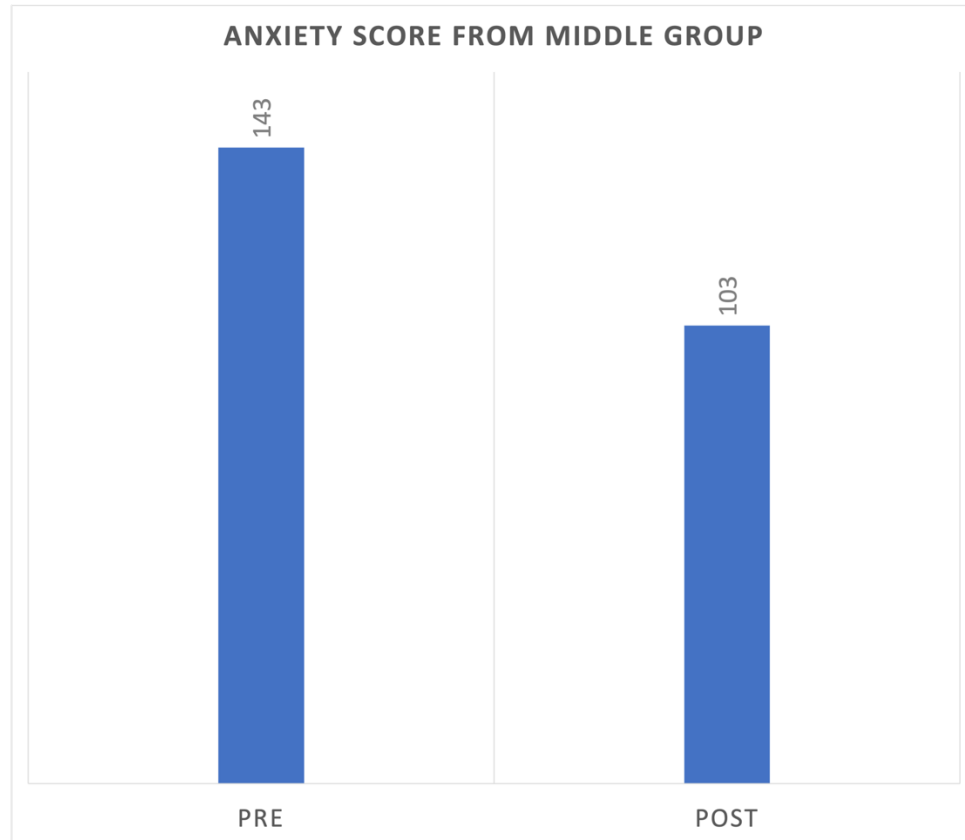


Figure 2: Pre-and Post-Score of Anxiety from Middle Group

Based on the score information, results from both groups indicated that the majority of participants (76.19%) had diagnosable anxiety before treatment but that anxiety decreased following completion of the Investigation of Mindfulness program. Although the post-treatment results for E6 and E10 were higher than those collected before study, these differences were not significant. However, the post-treatment results on M5 and M7 were higher than those collected before study.

3. Self-Report Assessment of Mindfulness from Pre- And Post-Scores

A paired sample mindfulness self-report was conducted to determine whether the group means for each of the forms had improved significantly from pre- to

post assessment.

The Child and Adolescent Mindfulness Measure (Greco, Baer, & Smith, 2011) is a 10-item mindfulness measure with answers on a 5-point scale (4=never to 0= always). Note that each eligible participant has a corresponding sequential order as in the BAI assessment to maintain anonymity, consistency, and authenticity of outcome measures. Those precise statistics from pre- and post- results show a remarkable trend in both groups, as demonstrated in the diagram shown below.

a. Early Group Mindfulness Assessment

Based upon the statistics in the Early Group, most participants showed improved mindfulness. Among the 12 participants, 9 showed various degrees of improvement with outcomes of 2.63%, 6.67%, 9.09%, 10.34%, 34.48%, and 35.29%; 3 showed dramatic increases by 63.16%, 100%, and 145% respectively. There was 1 participant with no change, having started and ending scores of 21. There were 2 participants showing declined results, with E7 having starting and ending scores of 34 and 21 and E11 having starting and ending scores of 32 and 31, respectively.

Table 8: Pre- and Post- Score of Mindfulness from the Early

		I get upset with myself for having feelings that do not make sense.	At school, I walk from class to class without noticing what I am doing.	I keep myself busy so I do not notice my thoughts or feelings.	I tell myself that I should not feel the way I am feeling.	I push away thoughts that I do not like.	It is hard for me to pay attention to only one thing at a time.	I get upset with myself for having certain thoughts.	I think about things that have happened in the past instead of thinking about things that are happening right now.	I think that some of my feelings are bad and that I should not have them.	I stop myself from having feeling that I do not like.	Total of Pre
E1	Pre	2	1	4	3	2	1	2	2	2	2	21
	Post	2	4	2	1	1	2	2	2	3	2	21
E2	Pre	2	3	1	2	0	2	2	2	3	2	19
	Post	3	4	3	4	1	3	4	3	4	2	31
E3	Pre	3	2	4	3	3	4	1	4	3	3	30
	Post	3	3	4	3	2	3	3	4	3	4	32
E4	Pre	3	4	2	3	3	4	3	1	3	3	29
	Post	4	4	4	4	4	4	4	4	3	4	39
E5	Pre	1	4	1	1	0	1	0	1	1	1	11
	Post	3	4	3	2	3	3	3	2	2	2	27
E6	Pre	4	4	4	4	4	4	4	2	4	4	38
	Post	4	4	3	4	4	4	4	4	4	4	39
E7	Pre	3	4	4	4	2	3	3	3	4	4	34
	Post	3	2	4	3	2	2	1	1	3	0	21
E8	Pre	4	4	3	2	3	4	3	1	3	3	30
	Post	4	4	4	4	3	4	2	1	4	3	33
E9	Pre	2	4	3	1	2	1	3	0	1	0	17
	Post	3	3	2	3	1	0	4	3	3	1	23
E10	Pre	4	4	3	4	1	2	4	2	4	1	29
	Post	4	3	3	3	4	4	3	2	3	3	32
E11	Pre	4	4	4	4	4	0	4	1	3	4	32
	Post	4	4	4	4	3	0	4	1	3	4	31
E12	Pre	3	1	2	2	0	0	2	1	2	0	13
	Post	4	2	4	4	0	1	4	3	4	0	26

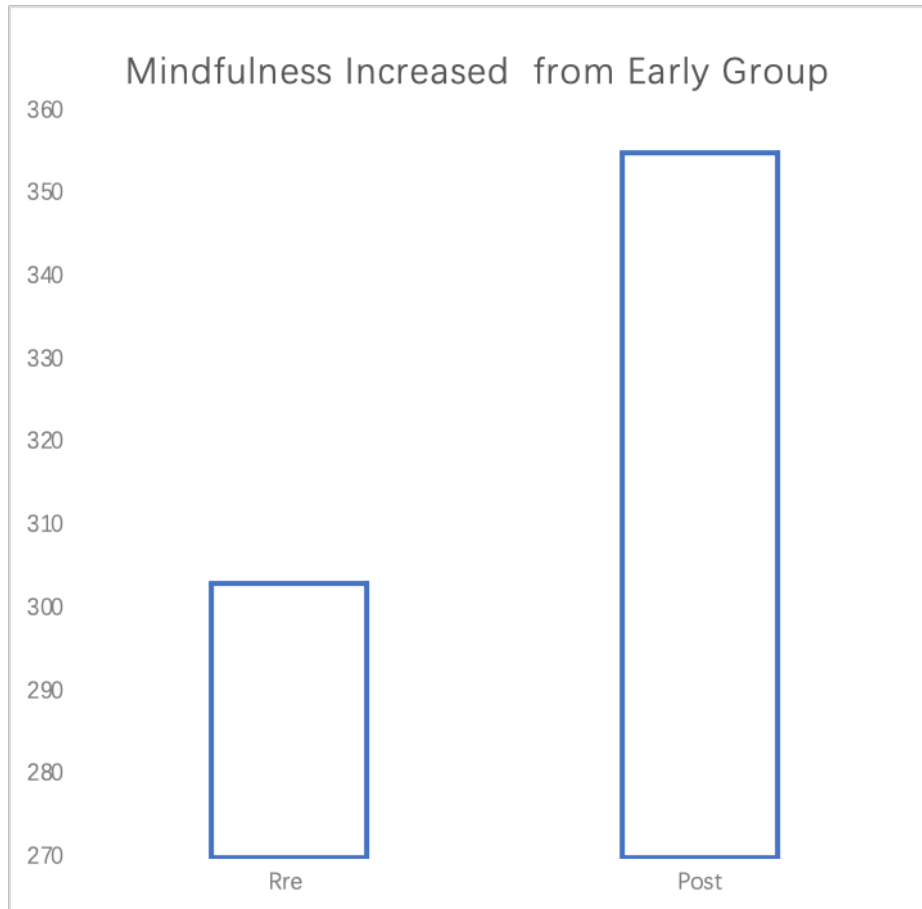


Figure 3: Contrast Pre-and Post-Score of Mindfulness from Early Group

b. Middle Group Mindfulness Assessment

Statistics reflected a sharp trend in the Middle Group, with all of the participants having variable rates of improvement in mindfulness. Among the 9 participants, there were 4 who showed a slight increase in mindfulness with rates of 4.17%, 5.26%, 6.06%, and 10.00%; 3 participants who showed sharp rates of incline as 23.33%, 35%, and 59.09%; and 2 participants who show dramatic increases by 100% and 111.11%.

Table 9: Pre- and Post- Score of Mindfulness from the Middle Group

		I get upset with myself for having feelings that do not make sense.	At school, I walk from class to class without noticing what I am doing.	I keep myself busy so I do not notice my thoughts or feelings.	I tell myself that I should not feel the way I am feeling.	I push away thoughts that I do not like.	It is hard for me to pay attention to only one thing at a time.	I get upset with myself for having certain thoughts.	I think about things that have happened in the past instead of thinking about things that are happening right now.	I think that some of my feelings are bad and that I should not have them.	I stop myself from having feeling that I do not like.	Total of Pre
M1	Pre	3	0	0	1	0	0	2	0	0	3	9
	Post	3	0	0	1	1	0	3	4	2	4	18
M2	Pre	4	3	4	4	4	4	4	3	4	4	38
	Post	4	4	4	4	4	4	4	4	4	4	40
M3	Pre	1	2	2	1	2	3	1	3	0	2	17
	Post	1	2	2	3	2	3	2	3	2	3	23
M4	Pre	2	3	2	3	4	1	2	3	2	2	24
	Post	4	4	3	2	2	2	1	3	2	2	25
M5	Pre	2	2	3	2	1	1	1	3	2	3	20
	Post	2	3	3	2	2	1	3	2	2	2	22
M6	Pre	3	2	1	2	3	2	3	2	3	1	22
	Post	4	4	2	4	4	3	4	2	4	4	35
M7	Pre	3	1	1	3	3	4	4	3	4	4	30
	Post	4	4	3	4	4	4	4	2	4	4	37
M8	Pre	1	2	1	0	0	1	0	1	2	1	9
	Post	1	2	1	2	2	2	2	2	3	2	19
M9	Pre	4	3	4	4	4	1	4	1	4	4	33
	Post	3	4	3	4	4	2	4	3	4	4	35

Positive scale effects were found on the self-report on Child and Adolescent Mindfulness Measure from pre- to post-survey: 90.47% participants showed improvement in mindfulness. While the post self-report findings on E7 and E11 were lower than those collected before study, this difference was not significant.

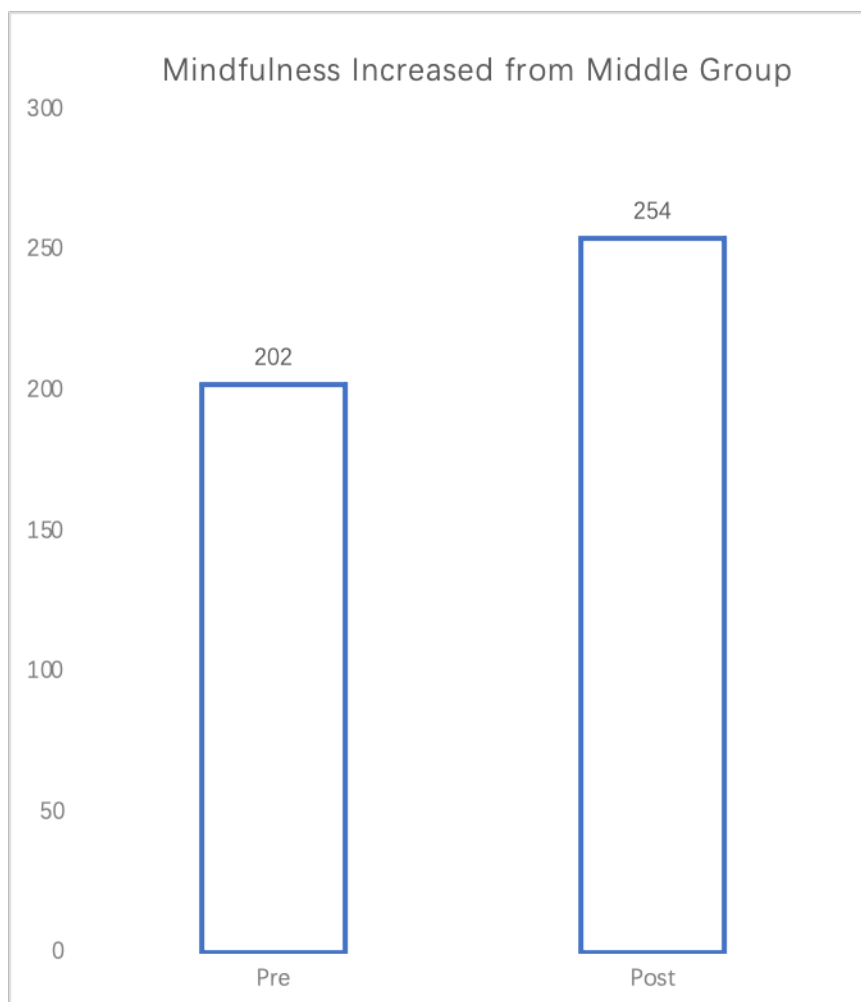


Figure 4: Pre-and Post-Score of Mindfulness from Middle Group

4. Self-report on Class Evaluation Form

The Class Evaluation Form was designed to assess the quality of the study through the learning process, with four sections. The first two sections are general class evaluations about the class organization and instruction. As previously mentioned, since

they are not related to the research question, they are not shown in detail in the figures (however, this assessment may help the instructor to improve the course structure and teaching skills in the future). In addition, the results with regard to the other themes are shown below.

The third section was used to measure how much the participant understood “Investigation” based on a self-reported score in answer to research questions. The participants assessed their abilities in identification and practical application with regard to multiple themes. For instance, the items “c,” “d,” and “e” assessed how much they understand Investigation into identifying their body, emotions, and thoughts. Meanwhile, the items “b,” “f,” and “g” were to assess how they apply the principle of Investigation when sending awareness into body sensations, emotions/feelings and so on. Moreover, for clarification, the item “the meaning of cause and effect” was an extra item that was only arranged for the Middle Group. The reason for introducing this terminology of cause and effect only to the middle group instead of to the early adolescents is due to their more mature reasoning ability and their ability to fully demonstrate abstract and hypothetical thinking due to hormonal and brain development. Thus, Participants answered 8 items in the Early Group and 9 items in the Middle Group on a 5-point scale (5=excellent, 1=poor).

The fourth section was used to assess how much benefit the participants received from each exercise practice. Among them, the “Hand Clench Exercise,” “Towel Exercise,” “Breath practice” and “Book Touching” were used as a group practice during the class. The other two exercises of “Pillow Awareness” and “Hand Washing” were used for self-practice at home. Thus, Participants answered 6 items in both groups on a 5-point

scale (5=excellent, 1=poor), with 1 item as an open-ended question at the end of the section.

a. *Evaluation of Understanding Investigation and Sending Awareness*

The following are the overall results from the Class Evaluation Form. There were 8 items assessed by the 11 participants from the Early Group but without participation of E12, who did not submit the Class Evaluation Form. There were 9 items assessed by 9 participants from the Middle Group. The self-report score showed a great understanding of sending awareness to nourish a specific area on item “b” with a score of 82. It showed a significant score with identifying body sensations, emotions/feelings and thoughts in item “c,” “d,” and “e”: 80, 90, and 82, respectively. Meanwhile, the results showed a good score for applying Investigation as sending awareness to body sensations and to emotions/feelings in items “f” and “g,” 81 and 77, respectively.

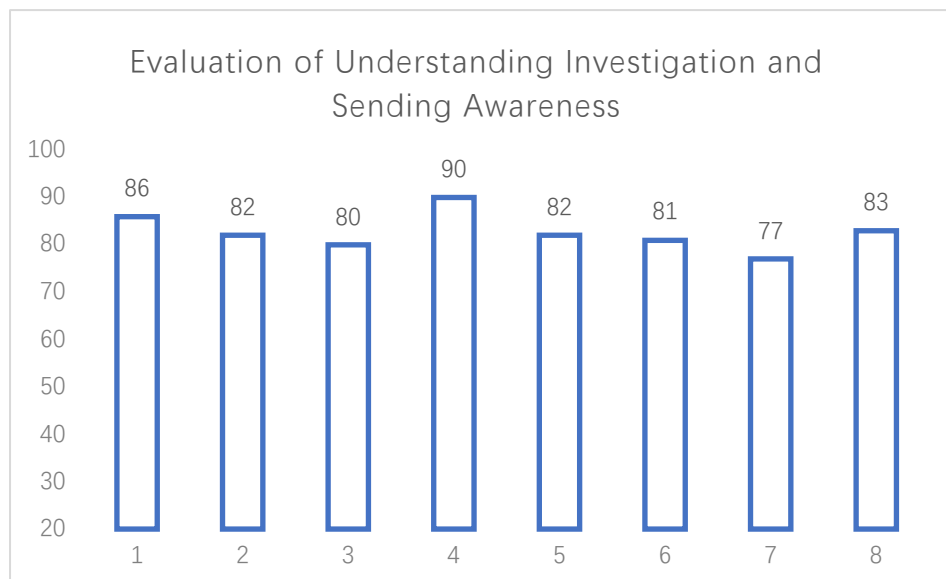


Figure 5: Evaluation of Understanding Investigation and Sending Awareness

b. Contents Evaluation from the Middle Group for Specific Concept of “Cause and Effect”

Three participants showed 5, five participants showed 4, one participant showed 3.

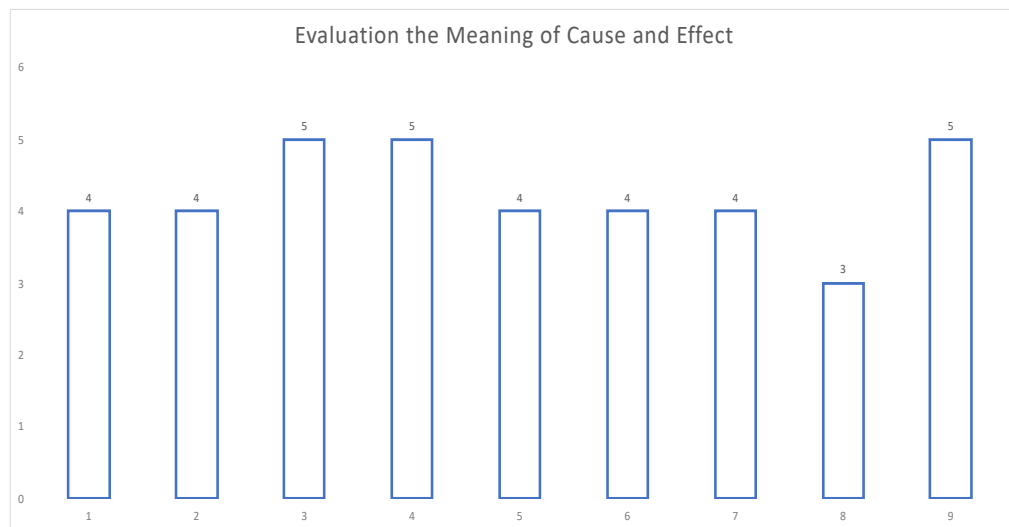


Figure 6: Evaluation the Meaning of Cause and Effect

c. The Evaluation of Exercises

The result score showed that the participants experienced the most effectiveness regarding the “Hands Clench Exercise” in item “a,” with 81. The second greatest benefit was from “Breath Practice with Fruit or Flower” in item “c,” with 79. The outcome showed a great score in the “Towel Exercise” in item “b” and the “Pillow Awareness” in items “d,” with scores of 72 and 73, respectively. However, there were less benefits from the “Hands Washing” in items “f” and “Book Touching” in item “g” with scores of 65 and 66, respectively.

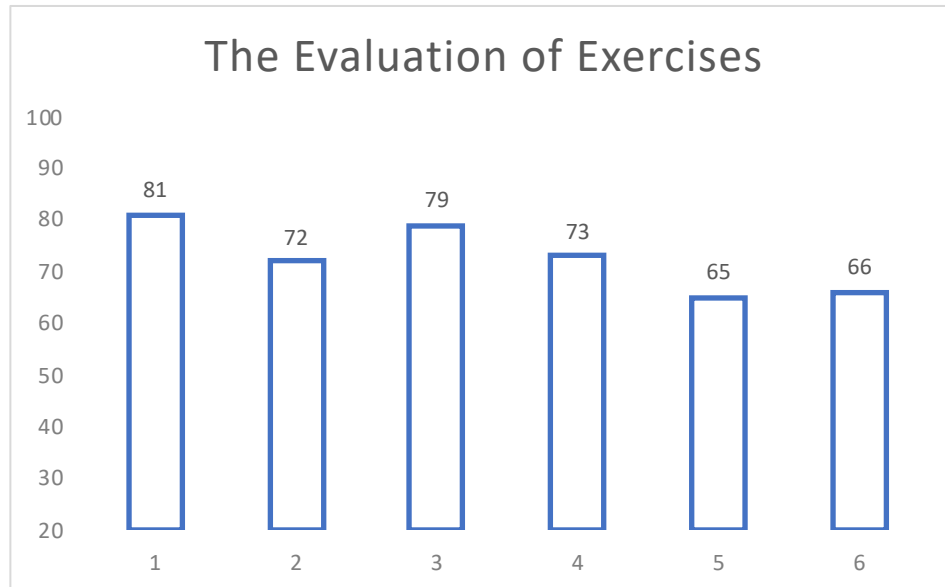


Figure 7: The Evaluation of Exercises

Conclusion

In total, there were 21 participants who attended enough sessions and completed the required forms in the two groups combined. A further presentation about the emerging results from the data collected on self-reports using the Beck Anxiety Inventory showed that the Early group anxiety scores were lower than those of the Middle group. However, the data collection from the Child and Adolescent Measure showed that the Middle group had a much higher mindfulness score than the Early group. It answered the research questions that Investigation practice intervention would reduce adolescents' symptoms of anxiety and increase the level of mindfulness.

Moreover, three themes from the Class Evaluation Form have been reorganized into different categories in order to find out more regarding the research questions. The final scores showed how the Investigation Practice of Mindfulness Program provided a clue for adolescents to explore inner feelings and cultivate abilities of understanding self

and others. All of this answered the research question: the Investigation Practice of Mindfulness Program helped adolescents with understanding and experiencing the Investigation practice and cultivated the ability to observe and perceive benefits and effects from the learning process. On the other hand, the findings do offer some guidance for the direction of this study as well as subsequent research. A further discussion about the process of interpretating these findings will be provided in the next chapter.

CHAPTER V. DISCUSSION

As discussed above, the purpose of this research is to introduce, educate, and implement Investigation practice into a mindfulness program to alleviate adolescent anxiety. The hypothesis for this pilot study was that adolescents participating in this IPMP project would report decreases in anxiety in their exit questionnaire in comparison to their initial questionnaire. After the 21 qualified participants evaluated the curriculum, the researcher had developed and implemented, feedback provided via self-reports and interview interpretation showed a positive influence, as analyzed in the previous chapter.

The information about the participants' core categories and themes that emerged from the interview data analysis are described in this section. The themes are reflected with some quotes from the interviewees to capture the experience of the participants. At the same time, the below summarizes some online teaching strategies for adolescents based on the researcher's teaching experience and furthermore identifies the strengths and limitations of this research program for the purpose of further improvement. It ends by reporting the implications of this research project. Additional findings relevant to the research questions are presented as well.

Interview Information

In an attempt to know the effectiveness of the Investigation Practice of Mindfulness Practice for adolescents who attended the program, an Exit interview based on participant's willingness to share their experiences was conducted. The interview findings were arranged in two related aspects: firstly, exploring how they understood the Investigation of mindfulness, whether from theoretical learning or personal practical

experience, with further subdivisions into two categories. Secondly, seeking to extract the relative benefits of class-exercise practices or self-practice in daily life. This data was organized into two categories: understanding the Investigation practice and benefits from this experience. The benefits were collected in five subcategories: relaxation and concentration, identifying the feeling and emotions, ability of expression, assisting interpersonal relationships, improving sleep quality.

In total, 14 adolescents from the early group volunteered to participate in the final exit interview and 11 adolescents signed up in the Middle Group. At the end of the program, feedback from only 11 interviewees from the Early Group and 9 interviewees from Middle Group were used to measure outcomes as demonstrated in the following figures shown below. The measurement outcomes excluded the participants who did not attend at least five sessions due to insufficient experience with the course content. The feedback from volunteers who missed the scheduled interview date was excluded as well.

In addition, it is important to clarify that the purpose of the in-depth interview is not to get answers to questions or to test hypotheses, but as scholar Irving Seidman considered: “the root of in-depth interviewing is an interest in understanding the experience of other people and the meaning they make of that experience.”[1] In order for the interviewees to enjoy and share their perspectives freely, some relative strategies of interviewing adolescents were used as mentioned in the methodology section. For instance, creating a safe environment, showing respect, building rapport and trust, soliciting interviewee’s thoughts and feelings nonjudgmentally, and adjusting the language to reflect the interviewee’s personal cognitive level are flexible strategies used during the interview process.

1. Understanding the Investigation of Mindfulness

The concept of Investigation based on understanding and experiencing mindfulness, was explained to the participants and clearly detailed in the literature section. Investigation, emphasizing sending awareness to a particular specialized area of experience, is an additional tool to be utilized after attaining mindful calmness. Once mindfulness is established, the practitioner can engage in sending awareness as if sending nutrition to nourish those specialized areas of focus, being alert to arising and waning of sensation and bringing attention to the cause and effect connection of experience. The Towel exercise was specially designed for experiencing sending awareness into a particular specialized area and some other exercises were designed according to this principle as well. Thus, to assist in relevant understanding of Investigation, the concept will be divided in two sections showing the sending of awareness and the cause and effect in two tables as depicted below: Understanding Investigation from Sending Awareness, Understanding Investigation from Cause and Effect.

Table 10: Responses of Participants on Understanding Investigation of Mindfulness from Sending Awareness

Evaluator	Understanding Investigation from Sending Awareness
E1	Participant shared her experience with a relaxing aroma, stating: “At first, the sending awareness was a bit difficult, because I didn’t practice enough, but after practicing more and more, it got easier... Actually, sending awareness is one of the attractive practices for me, because sometimes my neck and arms are sore and painful, and feels less sore or painful after sending the attention to those parts.”
E2	Participant did not talk about the sending awareness directly, but she described the three steps immediately and without any hesitation. Actually, the three steps are more precisely described with sending awareness practice, which included breath-relaxing, stay-here-now, and sending awareness. She shared: “I follow these three steps in order, I do not feel like skipping anything, when I practice it, I become more aware of my emotions, and have more concentration.”
E4	Participant was glad that she learned how to release her stress, and she likes to practice consolidating and sending all awareness to different areas of her body. It helps her to notice well herself as well as her surroundings.
E5	Participant stated: “Before, I don’t know mindfulness at all, but now I know mindfulness is being aware of the things I do and how it affects myself and others.” From the research’s class notes, the participant had shown interest in the program since the Towel Exercise. The participant also provided feedback that he will apply this skill as a part of his physical exercise routine.

Evaluator	Understanding Investigation from Sending Awareness
E8	Participant expressed that various exercise practices helped her to experience relaxation, calmness, and more focus on the present moment. However, she was uncertain of the exact understanding of “sending awareness.”
E9	Participant described awareness of the body sensation as moving the attention to help him calm down. Sending the awareness helped him understand his feelings and become more emotionally stable. Currently, for him, mindfulness is not only the impression of the Buddha meditating on the ground anymore.
E10	Participant stated: “Sometimes I am not really aware what I’m doing, and sending awareness helped to alert and stop away from some unnecessary thoughts.”
M1	Participant had specifically described that: “Sending awareness is most attractive to me, with purposely focusing on the head, and moving down to the shoulder and then go through each part of the body with the gentle breath preventing my mind from being so busy or overthinking about so many other things, it makes me super comfortable and relaxed.”
M2	Participant described the changing conditions when she practiced the Towel Exercise. The process of tension and release from tightness helps her become more aware with how actions affect her bodily sensations, and how these sensations travel through each part of the body. After practicing more frequently this exercise by herself, she developed her own way of how to practice mindfulness.

Evaluator	Understanding Investigation from Sending Awareness
M7	Participant described his experiences of Deep Breathing with Flower/Fruit, which assisted him in maintaining awareness in the present moment, and he attained deeper understanding with sending awareness from practicing the Towel Exercise. He shared that he applied these skills from both exercises to deal with his bodily sensations and be released from recent negative emotions.
M8	Participant described sending awareness from his experience in a more detailed way: “It is more like when you breathe in and breathe out during meditation, you also become aware of how you feel, whether the body sensation is relaxed, comfortable, or uncomfortable, or having negative or positive feelings. Sometimes, a very small thing can be noticed.”

Table 11: Responses of Participant Understanding Investigation of Mindfulness from the Concept of Cause and Effect

Evaluator	Understanding Investigation from Cause and Effect
M3	The participant considered that cause and effect is easier to understand because it is a part of science for her, such as when she practices the body scan which is most effective for her. The more she relaxed, the more relaxation will be happened.
M4	The participant shared that cause and effect is a fundamental law: as you do something, something will happen. As he sends awareness to different parts of his body, these parts react correspondingly. He also emphasized that: “Sending awareness is one of the most effective one for me, which makes me most focused compared to smell the fruit one. It’s a nice time to leave the surroundings and just focus on inside.”

Evaluator	Understanding Investigation from Cause and Effect
M5	The participant thought cause and effect as someone does something and the response to it. How do they react it or behave: the results will happen after something. He described the experience with sending awareness: “Raising the awareness and focusing into one part and looking at what is happening there produced some touching and cool feeling for me.” Moreover, he also shared that: “I learned a lot from this educational program, and being aware of own emotions, thoughts and behavior, which affects myself and other people as well.”
M6	The participant expressed that he understood cause and effect in scientific concepts. Every action has an equal or opposite reaction; there is always a response whenever you do something, whether you are aware there are some kinds of links to another. The response does not come immediately but it will take time and its might not come back. His personal practice with sending awareness is just going step by step, sending awareness and focusing on one subject at a time.
M9	The participant said modestly: “I guess whenever there is something happens, that is the cause and those influences on others. When something happens in our lives, we need to find the solution.” At the same time, he also shared his recently changes in daily life. He realized that he has difficulty with focusing while in the online class, he put away his phone, and closed anything that could be distracting to him. To reduce stress, he wouldn’t push everything until the last day of the exam.

The aim of this interview interpretation was to examine the effectiveness of an empirically validated Investigation of Mindfulness program from personal experience. The findings showed that the Towel exercise was one of the favorite and effective

practices for many participants. Among them, there were multiple participants who shared their practice experience with sending awareness, which resulted in being more aware of body sensations, emotional changes, and surroundings. The positive statements about understanding the concept of cause and effect applied by the participants were effective with cognitive and behavioral improvements in daily and future lives.

2. Benefits from Learning / Experience

The statistics from interview interpreted illustrate the participant's unique experiences as well as physiological, psychological, emotional, and cognitive changes during the learning process. The emergent themes that overlap in the adolescents' experiences in the program are arranged into conceptual categories as five themes. The themes are presented in a form to reflect a category of change correspondingly. The themes and the benefits for each participant will be discussed further in the following tables.

Table 12: Benefits with Relaxation and Concentration from Practicing

Evaluator	Relaxation and Concentration
E2	The participant considers that mindfulness practice is a period of time to completely relax and not think about anything else, to adjust your mood, and to calm your mind with more concentration. And then she shared her experience: “I like to practice it a little bit before I do my homework, so I can more concentrate on my homework.”
E5	The participant said sincerely that he feels sad when worried about something. The Fruit and Towel exercise helped him to relax his arms muscles and body sensations.
E7	The participant considered that the Fruit and Flower Exercise helped him to stay with warm, relaxing feelings and resulted in much more concentration.
E8	The participant shared that Hands Clench, Fruit and Flower Breath, and Book Touching helped her calm herself down and focus easier. Moreover, she emphasized that she received deep feelings with the three steps of Body Scan practice, which was the most touching for her; it made her “stay away from home, school and calm down to stay with herself.”
E10	The participant emphasized that he had a wonderful experience with Towel Exercise, which helped him to deeply relax and focus better. (Actually, that is the significant point from the specific training process with Investigation of sending awareness.)
E11	The participant said that the activity of Fruit Breath, Water Flower and listening to music were very effective to relax and calm down.
M3	The Body scan was the most effective exercise for her; it made her a lot more relaxed and she could clarify what was bothering her.

Table 13: Benefits with Identifying Feelings and Emotions from Practice

Evaluator	Identity Feeling and Emotions
E2	She shared that she used to pull her ear and touch her arm when she got nervous before a formal competition. After this learning program: “Now, I might be mindful for a while, and calm down myself first, don’t think about the problem that helps me not get into the terrible state right away, and to adjust my mood.”
E3	At the beginning and the ending, that told me that: "When I want to lose my temper, then mindfulness breath can make my brain feel I’m not in bad condition and adjust my body to relax and tell my brain that is fine; it helps my mental health.”
E6	Breath practice helped to reduce my worries.
E11	The participant expressed he received benefits from his favorite practices such as Fruit Breath, Water Flower and listening to music, with wonderful experiences during the learning program, which developed his awareness ability and ability to be aware when anger arose.
M1	She appreciated that a series of theoretical studies and exercise practice helped her to understand and observe her feelings and reasons for them, which is a part that she never noticed and was confused about.
M3	She noticed that she didn’t like to write the answer down (when we reflected on inner feelings during group sharing) but realized that it helps her to make an even clearer picture about her feelings after she wrote it down.
M4	He found that something related to touch was the most effective practice to connect with deep feelings.
M5	He expressed that he is not such an emotional person, but this program helped him become even more calm: “Because I aware of my own thoughts and emotions more often.” The behavior affects other people as well.

Evaluator	Identity Feeling and Emotions
M7	He expressed that he improved in his ability to be aware from the Fruit Breath and Towel exercises, which showed the way to deal with stress/anxiety when facing difficulty with homework and exams. It will be used in the future as well.
M9	The participant shared there were a few exercises that helped him to be aware of his emotions, even though he has “some other feelings that I don’t know how to explain, something like I find a place where I could be by myself.” He has been using the breath practice for some kinds of negative emotions.

Table 14: Benefits with Improved Ability with Expression from Practice

Evaluator	Improved Ability with Expression
E4	She had some difficulty with describing feelings and emotions during the group sharing at the beginning, but “I get improved to express my feeling after learning. Now, If I angry with my family I can tell them how I felt.”
E9	The participant shared that he used to hide his emotions and sometimes caused conflict with his sister, but “this study program helps me to express my feeling and emotion in daily life with my sister.”
M6	The participant found out a different way to help himself to understand mindfulness cognized from his own experience. He said: “The process of sharing to guide me to speaking out a type of running through his own thought process which is a kind of recreating process to remember the feeling at the time. I find that helps me to understanding myself and mindfulness.”
M9	The participant considered some exercises as a kind of therapy to guide him with expressing his feelings and emotions. He said: “It does help me to express my worries. Overall, it’s kind of like output a place where I can say my problems.”

Table 15: Benefits with Assisting Interpersonal Relationships from Practice

Evaluator	Assisting Interpersonal Relationships
E1	She expressed that she felt dejected when she was getting angry with somebody, but now the program helped her to know it is best to communicate with them to find the solution.
E9	The participant described some stories between him and his younger sister. He started to express his anger when his young sister made him mad. The situations have been get much better with family members.
M7	He was interested with the Fruit Breath and Towel exercises, which helped him to improve awareness of inner feeling. Further, he has been using sending awareness to release the strength of anger and feeling out the body when facing conflicts with his brother.
M8	He expressed that this program helped him to reduce social anxiety with recent conflicts with friends.
M9	The participant said that he realized the importance of explaining his feelings and that he will try to explain himself more if facing any relationship difficulties with others in the future.

Table 16: Benefits with Improved Sleep Quality from Practice

Evaluator	Improved Sleep Quality
E1	She described the process of the Pillow Awareness Exercise: “I lie on the pillow to relax as much as I can, and then like you told us, to relax and my attention goes down and fell in asleep earlier.” This is a serious difficulty that she wanted to deal with, as she wrote on the registration form.
E6	He shared a few words that Pillow Awareness did help him to fall asleep quickly recently.
E7	He considers the study and practice process very helpful with relaxing his brain and improving quality of sleep in daily life.

Evaluator	Improved Sleep Quality
E8	She said with a lower and pleased voice that Pillow Sending Awareness helped her to sleep well.
M1	Participant shared that Pillow Awareness is effective for her to sleep when she practices every time.

These participants, each of whom had experience participating in the Investigation of Mindfulness practice program for adolescents and knowledge of the principles relevant to this study, were interviewed, and the results have been reorganized into the five themes discussed above. Positive statements showed that the Investigation of Mindfulness practice has been a kind of skill to deal with some challenges and resulted in overlapping benefits after implementation, such as helping with relaxing physical sensations and improving sleep quality; being able to concentrate more on homework and finding an adequate study space; identifying negative feelings and improving expressive ability with arising emotions, which helped to assist in interpersonal relationships.

Problem-Solving Strategies

Despite the challenges experienced during the process, the researcher learned valuable lessons about working with and teaching adolescents, especially regarding the process of working with the interviewees, an integral part of gleaning data and insights. Thus, this section will share some personal experiences in which the researcher learned about adolescents through the teaching process. Hopefully, it may serve as a point of reference for those who work with adolescents and lend understanding about reaching this population effectively.

The most challenging and difficult situation in class at the beginning of the

program was that some attendants opted to leave their cameras off and microphones muted in the first session. This impacted the class environment and prevented their attention from being fully engaged in their learning. The objective regulation method to deal with this situation was to re-arrange the participants who were more active and open-minded to balance the class environment. The subjective strategy was to pay attention to their behaviors and responses. Researcher identified insecurities and fears behind their behaviors by guiding them to express their inner feelings and needs instead of requiring them to turn on the camera or unmute the microphones directly, thus creating a safer connection and environment for both the facilitator and the participants.

Researcher chose to arrange siblings of the same family into separate classes—the purpose of this separation was to prevent recurring negative attitudes and behavioral patterns, which could lead to negative influences on the group as a whole. At the same time, it also prevented broadband crowding due to multiple family members being in the same group at the same time and reduced interruptions from other members of the household.

Researcher decided to set up rules to prevent participants who objected to closing their eyes during the process of formal practice due to their feelings of uncertainty and/or self-image issues. Researcher provided a music bell as a signal to inform them of the start of formal practice. It created a sense of familiarity and safe environment by having a ritual for everyone to get used to. This specific routine was maintained at the start and end of each formal practice session during the group mindfulness practice. The feedback from the participants expressed that the bell helped them to be more aware of sounds as well as facilitate their focus and attention.

Researcher paid attention to participants who demonstrated resistance due to the influence of their parents or friends, their own previous negative experience in other situations, or assumptions that mindfulness is a religious practice, by asking for their feedback and experiences with the practice or learning in a timely manner. I provided them with feedback when they had any questions or curiosity. Researcher also solved any issues and guided them with further practice.

Researcher used some other detailed approaches to protect their feelings of sensitivity during the class and interview process, for instance: taking notice of their personalities by identifying hobbies and strengths for later use when mediating arising issues; asking them to share or answer questions equally as other participants; taking notice of their own unique talents; chatting with them to develop connections. In a word, the main principle is to express respect and genuineness toward all, showing that they were cared for rather than being ignored or left out of the group. In addition, the researcher checked with their parents for any special or unique behaviors. These details helped to improve connections with the participants and created a sense of safety behind the practice. At the same time, there were some other details that boosted the class environment with positive energy: praising participants who signed up on time, giving the feedback when they asked the questions, and providing positive affirmations, which helped the participants became more open-minded and relaxed in class.

Strengths of the Program

Throughout this process, this research project demonstrated many strengths. First and foremost, all of the participants' Assent Forms and Parent/Legal Guardian Informed Consent Forms were turned in on time, and the program could initiate formal research

immediately. Secondly, more than ninety percent of the participants completed and submitted the relevant information forms, such as the registration forms, pre-BAI, post-BAI, pre-CCAM, post-CCAM, and final evaluation forms on time. This timely submission was the foundation for the researcher to collect and compare data on time. The evaluation feedback sheets from the participants not only provided data for comparison, but also for further development and improvement.

Moreover, several strengths were identified by evaluators from their learning experience. First, they gave high scores on class organization, which clearly stated class objectives and activities guidance. Second, the exercises incorporated movement themes that helped participants to bring awareness back into their bodies, such as the hand clench exercise, towel exercise, and breathing practice with fruit and flower. Third, they agreed that group activities and sharing processes created a relaxing time and helped them to be more open-minded in the group. Fourth, they preferred those questions that guided them to reflect on their inner experience within their deep feelings. Participants felt inspired by the principle of practice and flexibly applied it to their daily activities to help them to succeed more in sports, social relationships, and so forth.

In addition, the way researcher collected data on measures of anxiety and mindfulness provided the possibility for timely comparison and analysis. The data collection utilized a quantitative research method to gather self-reported measures about anxiety and mindfulness from pre- and post-surveys as a comparative. Moreover, a qualitative research method using interviews yielded results replete with in-depth data, including non-verbal cues that enrich the authenticity, diversity, and reliability of the data.

Finally, in terms of curriculum, the structure of the script provided instructions for

new instructors to guide the Investigation practice. The script could be used in gradually progressing steps to facilitate the mindfulness program into further practice as well. The program could be easily improved and implemented and adapted to treat other age groups as well. In term of findings, the results of this research provide clinicians and mindfulness teachers with a better understanding of how to guide adolescents to apply further mindfulness practices and facilitate that learning process. This program is considered as a good baseline project for participants to extend mindfulness as a practice tool to mitigate anxiety in daily life.

Limitations and Recommendations for Further Research

One of the limitations of this research project was the disadvantage of a small sample size, given there were only 21 participants. All of them attended the same school and most of them were of a similar race. Thus, one of the recommendations for future research is to increase the diversity of the group by acquiring participants from different schools, races, and location regions, so as to explore if the results could be replicated or would produce new revelations if the participants were from various backgrounds.

The other limitation identified from one of the feedbacks was that meeting on Zoom prevented authentic feeling and connection, which created some barriers and disconnection with the practice environment and impacted efficacy of practice. In light of the results, the researcher highlights the following two recommendations for comparative studies conducting further research. Firstly, regarding motivations for participants to engage in the Investigation Practice of Mindfulness Program, four themes emerged: willingness, curiosity, and introduction by friends or parents. Further research could focus on those different motivators to look for correlation with these themes in the results.

Next, a comparison between programs that deliberately try to introduce Investigation into the mindfulness process versus programs that deliberately try to withhold Investigation from the mindfulness process needs to be made.

In addition, based on the findings of this research, the researcher presents the following recommendations for facilitators who teach Investigation practice in a mindfulness program for early and middle stage adolescents:

1. Including IPMP model as a part of the mindfulness training
2. Developing continuing education processes for coaches regarding adolescents' communication/ language style
3. Incorporating daily worries and themes on diversity into discussion topics.

Implications of this Research

This dissertation project intentionally selected a high in mood fluctuation population, early and middle adolescents, to be the focus of inquiry and exploration. The thematic analysis found strong indications that mindfulness had a positive influence on their personal competencies. Many of the adolescents shared significant shifts in their opinion towards mindfulness as an education process. The adolescents identified several factors throughout the process that helped them to create changes in their behaviors.

In terms of personal experience, the adolescents found various positive influences through the learning process. Participants felt more able to relax easily, more able to connect to their body sensations, more able to reflect on their inner feeling, and more able to deal with negative emotions. Participants also felt more able to manage their homework, more able to deal with relationships with family and friends, more optimistic

outlook towards the future, and confident about focusing on their own personal interests.

In terms of group learning, the adolescents participating in this study experienced positive peer influences. Participants acquired healthy coping skills by learning from peers' varied perspectives and practice. Participants developed self-awareness and self-discovery by listening to others with similar issues. Participants improved communication and socialization skills in a supportive and safe setting. Participants further reported being more socially competent and more able to deal with interpersonal relationships well.

In terms of findings, this mindfulness-based Investigation Practice project seems to be a good model for adolescents to manage their anxiety. The thematic analysis will be helpful for those who work with adolescents in mindfulness groups by providing insight into experiences of adolescents learning approaches to deal with anxiety. The feedback from the guides and adolescents in this pilot study can offer guidelines on treating anxiety in adolescents for other programs, schools or educational systems, spiritual care organizations, and psychological services.

Conclusion

The scholars have indicated that adapting mindfulness intervention for adolescents was one of the most challenging part of mindfulness teaching program. This developed project added an Investigation practice into the mindfulness process and was evaluated by 21 qualified participants. This chapter incorporated the feedbacks and suggestions from the evaluators, the dissertation committee, and researcher to reflect insight into adolescents' experience and value of being in the process.

The interview interpretation from recorded transcripts were reorganized into two categories with five themes, which also shared the participants' unique experiences and overlapping benefits from practice and learning. On the other hand, these relative interpretations have showed how the Investigation Practice of Mindfulness Program provided a clue for adolescents to explore feelings and cultivate abilities of understanding self and others. The interview interpretation do offer some guidance for the direction of this study as well as subsequent research.

The challenge experienced from the researcher was summarized as the problem-solving strategies about online teaching experience. Each approach provided the problem-solving skills and explained the reasons with different situations. The feedback could be developed and administered at the end of the dissertation to assess the strengths and limitation of the process from the participant's attitudes, knowledge, and behaviors. Those specific contents from the program would be helpful to evaluate the potential effectiveness of the intervention. Those data from this pilot research could be incorporated to further improve and develop the IPMP curriculum in the next steps. The summaries and suggestions as indicated above would be a good starting point for those who work with adolescents and lend understanding to reach this population effectively. It provided the guideline to other programs and education and spiritual systems to work with adolescents. It facilitated the IPMP program from a point of reference for further implication into mindfulness practice with youth.

CHAPTER VI. CONCLUSION

Autobiographical Interlude

Leibniz, German philosopher, said the leaves on a tree are each unique;³⁷⁷ that is, no individual is the same as another because everyone develops from personal associations, with their own background, cultural environment, and worldview. Thus, in order to provide a theological perspective on mindfulness-based research intervention, it is important to be as transparent as possible about my theoretical perspective, practical experience and personal motivations.

Growing up, my parents used to educate my siblings and me by planning a regular schedule and created some rules to avoid unfairness and conflicts among the family members. I spent the most part of my childhood life growing up in a friendly environment and shared through our small group with my sister and brother. Over the years, I was influenced by Confucian-influenced traditional Chinese culture that emphasized: “Do to others as you would have them do to you.”³⁷⁸ It cultivated my interpersonal philosophy to have less conflict with others. Specifically, I do not discriminate against others, I do not use negative speech about the work of other people, I do not share any gift that I don’t prefer, and am less selfish. These habits bring me to

³⁷⁷ Peter Pesic, “Leibniz and the Leaves,” *Philosophy Now* 30 (2000): 18-21.

³⁷⁸ Bi Jiwan 毕继万, “Jisuo buby, Wushi yuren = Jizhi suoyu, Shizhi yuren” 己所不欲, 勿施于人= 己之所欲, 施之于人? [Do unto others as you would have them do unto you = do unto others as you would have them do unto you], *Wuwen Jianshe 语文建设* 6 (2000): 37.
<http://www.cqvip.com/qk/81729x/2000006/12394197.html>

have a more comfortable relationship with others and avoid unnecessary troubles in my daily life.

Though my grandmother was a lay Buddhist disciple, I was never able to connect with this community or find ways to develop my spiritual practice until I encountered my grandmaster, who inspired my interest in the Buddha's teachings. She has broken my initial impression of monastics as those who are separate from the community and from secular society for the development of spiritual growth through strict practice. In order to further my understanding and knowledge of Buddhism, I entered the Minnan Buddhist College which is most well-known in China for my BA program. This learning experience became the groundwork of my Buddhist theoretical foundation throughout the six years of my early monastic life.

Moreover, experiences garnered at the Fourth World Buddhist Forum absolutely changed my limited perspective. I realized that the conference may not have immediate effects but have positive perspectives that extend to society to guide people's behavior when I saw its effect upon important TV programs or published articles in magazines. As the author Christopher S. Queen summed up: "some Buddhist environmental activists have been effective in helping shape the orientation of an existing environmental group."³⁷⁹ I don't consider this conference as a waste of finances. On the other hand, engaged Buddhist activity plays a vital role in society. The social networks developed

³⁷⁹ Christopher S. Queen, *Engaged Buddhism in the West*. (Boston, Mass.: Wisdom Publications, 2000), 164.

during the conference play an indispensable role in each community and for individuals as well.

After that, my personal interest was more directed towards Humanistic Buddhism, which is more related to the formal ministerial definition:

... traditionally refers to offices of leadership in the Christian church, but there has been a growing recognition that it also describes the way the mission of the whole church is conducted. Both in terms of specific offices (ministers) and in terms of the work of church in general, ministry has biblical roots. In Hebrew, *sheret* (“to serve”) applies to temple officers and was normally translated *leitourgein* in the Septuagint.³⁸⁰

From this definition, the core meaning of ministry is service, whether in an office, church or temple, which is the extent of my narrow, limited and personal understanding of “altruism,” the Bodhisattva’s vow to help others. Some experienced spiritual leaders told me that becoming a minister could be the best opportunity to practice the Bodhisattva’s way to develop both the conditions of good fortune and wisdom. Thus, I shifted my self-education journey from theoretical learning to studying psychology and applying this knowledge to practice in order to be equipped to help others with implementing experience.

My focus of study at the Doctor of Buddhist Ministry program at University of the West was generally on how Buddhist theories and practices can be applied to the role

³⁸⁰ Mircea Eliade and Charles J. Adams, in *The Encyclopedia of Religion*, (New York: Macmillan Publishing Company, 1987), 538.

of a spiritual practitioner. In particular, I was interested in and motivated to bring more opportunity and space for spiritual practice and care to the young generation. This research project's idea about mindfulness for adolescents germinated before I registered into the DBMin program. It motivated me to re-explore and reintegrate resources available from my existing knowledge or related experiences that I had acquired previously.

The first and most impactful process of my spiritual growth was attending intensive meditation retreats from various traditions in 2004 with Ven. Guang Chao from the Sri Lankan tradition, under whom the Ven. Gavesi Thera (1918-2003) taught meditation at the Devanapethis International Samatha Vipassana Meditation Center in Palkekele, Kundasale, Sri Lanka. Over the years, this practice rooted deeply as my meditation experience and directed me to pursue awareness and wisdom. Additional silent meditation retreats from the Thai tradition in Northern California in 2015 also served as important experiences while I was completing the eight-week Mindfulness Training Course in Mindfulness-Based Stress Reduction in Los Angeles as well. Both experiences expanded my spiritual experience and teaching methods.

However, the training process as a chaplain intern in Clinical Pastoral Education (CPE) at the Children's Hospital in Los Angeles broadened my thinking about faith practice in general and more particularly my role in interacting with others both inside and outside of my own faith tradition. The spiritual themes that emerged for me after this unit of CPE were not only generally of taking care of one's inner growth, but also opening a path to inspire others to be aware of their internal needs, whether it be the incarnational ministry of Christ, ministry of presence, theology of death, ministry of the

Holy Spirit or self-care. During the process, I developed a more enhanced understanding of interfaith dynamics and explored more theological connections with other faiths through dialogue with others, while guiding mindfulness practices for young patients and their families.

Firstly, one of my learning goals focused specifically on my pastoral competency with supervisors and peers from different traditions. The hospital setting brought me into contact with people from diverse backgrounds: culturally, ethnically, religiously, and socioeconomically, which reflected the diversity and advantage of this learning program. The relationships and engagement I experienced here were something beyond my expectations, both encouraging and challenging me.

Secondly, I had some apprehensions about meeting new people and talking to strangers about their personal issues without an appointment. In reflection of this learning process, most of my communication skills culminated in my MA thesis titled “A Comparative Study of Buddhist Counseling and Modern Counseling Techniques.” The techniques learned in modern psychological counseling provided me with the elemental structures of communication skills when I visited patients and their families. It helped me to gather information from verbal and non-verbal cues while utilizing closed and open-ended questions as well.

The specific counseling qualities of Buddhism such as compassion, empathy, and equanimity helped me to develop rapport with patients and their family. The combination of Buddhist counseling psychology with western counseling psychology was both feasible and desirable.

Moreover, learning about intrinsic consciousness from the Abhidhamma, about characteristics of mental factors and consciousness, provided a clear picture of connections between body, mind, and consciousness. It not only helped me to release from my personal biases but become more capable of adjusting myself to whatever I encountered and of gaining more rational connections with my family members and friends. At the same time, I understood others more easily through their bodily postures, behaviors, language, and motivation. These techniques facilitated the quality of communication with youths and their families during my visits. This experience affected my individual interviews for data collection as well.

Thirdly, the lectures on self-care, Islam, child abuse, palliative care, and family dynamics were most insightful. Each of these aspects enhance my ability to provide a compassionate presence through deeper understanding of my own needs as a minister and how I can best care for myself, as well as how to better understand the patients that I serve, whether they come from a non-Buddhist perspective, are with DCFS, are in the process of dying—on a more psychological level, how patients and their families relate to one another and the care that they are receiving. Having training on resourcing and the ability to practice resourcing exercises made it easier for me to make this natural application in my clinical work.

The feedback from youths after guiding them to practice mindfulness showed that they changed their attitude from being uninterested about mindfulness and increased their interest. The experiences from guiding participants from different faiths in mindfulness helped to educate me regarding areas of knowledge that I lacked. The effective results of guiding youths to practice mindfulness became a catalyst developing my interest in

attaining more knowledge about teaching mindfulness to the younger generation. At the same time, I realized that chaplaincy demands a very interpersonal relationship that comes with a level of knowledge of various faiths, concerning their needs and how they relate to the environment of the hospital and the condition of illness and death. All of these aspects are important, and I found myself improving upon the quality of ministry that I gave as a result because I better understood myself and how I could better relate to patients and their families.

Inevitably, my research analysis is based on my experience of personal spiritual growth from meditation practice, theoretical learning, and chaplaincy experiences. I was led to add “Investigation” practices to a MBCT program and mindfulness-based research intervention and to write about the secularization of mindfulness for youth. This research is significant for psychology education and spiritual care and falls within the circle of socially engaged Buddhist theories and practices.

Conclusion

As has been described, the purpose of the current research project was to introduce, educate, and implement Investigation practices to advance the mindfulness process for adolescents to reduce anxiety. To achieve this goal, several key topics have been explored in the literature section to explore questions of “why” they are anxious, based on four dimensions of biological, cognitive, emotional, and social conditions for early and middle adolescents. The researcher explored “what” does existing research has done for adolescent anxiety from Cognitive Behavior Therapy strategies, specifically focusing on useful approaches from advanced projects in “Coping Cat” and “C.A.T.” The researcher also explored “how” to develop the intervention in advance based on studying

various empirically validated model of teaching mindfulness skills with early and middle adolescents. The highlighted research helped with understanding the “why,” “what,” and “how” when facilitating Investigation practice into a mindfulness process as a well-integrated intervention for youth to manage their anxiety.

After the program implemented its six sessions and was evaluated by 21 qualified participants from the Early and Middle groups, the overall findings showed that 76.19% participants experienced decreased anxiety and 90.47% participants showed improvement in mindfulness. Other positive finding from the interviews demonstrates that the IPMP program significantly improved participants’ ability to relax and concentrate as well as the ability to identify feelings and emotions, thus improving interpersonal relationships and boosting psychological well-being in participants. All the data facilitated reflective insight into the adolescents’ experience and demonstrated the value of being in the process.

In addition, the challenges experienced by the researcher were summarized as problem-solving strategies about online teaching experiences at the end of the dissertation. Each approach demonstrated problem-solving skills, provided strategies and explained the reasons for different situations. As described at the end of the dissertation, evaluation feedback was developed and administered to assess the strengths and limitation of the process from the participant’s attitudes, knowledge, and experience. The specific content from the program would facilitate further evaluation of the potential effectiveness of the intervention. Relevant data from this pilot research could be incorporated to further improve and develop the IPMP curriculum in its next iteration.

The above findings show that the IPMP curriculum would be a good starting point

for those interested in adding Investigation practice into a mindfulness program working with adolescents. The strategies and suggestions from the evaluations support the IPMP program as a point of reference for further implication into mindfulness practice with youth anxiety. Such feedback may shape guidelines in other programs and education and spiritual systems working with adolescents and boost understanding about reaching this population effectively.

In sum, the evaluations and findings described in the current research were an important response to the calls in the hypothesis and research questions. The Investigation Practice of Mindfulness Program (IPMP) within six sessions may serve as a guide for clinicians working to facilitate a mindfulness process geared towards resolving adolescent anxiety. The principle of Investigation practice can be applied to balance adolescents' internalized and externalized perceptions, tracing back to the original meaning of education.

BIBLIOGRAPHY

- Abate, Frank R. and Elizabeth Jewell. *The New Oxford American Dictionary*. New York: Oxford University Press, 2001.
- Arnett, Jeffrey Jensen. "G. Stanley Hall's Adolescence: Brilliance and Nonsense." *History of Psychology* 9, no. 3 (2006): 186–97.
<http://dx.doi.org/uwest.idm.oclc.org/10.1037/1093-4510.9.3.186>.
- Balk, David E. *Adolescent Development: Early through Late Adolescence*. Pacific Grove, CA: Brooks/Cole Pub. Co., 1994.
- Barrett, David E. "The Three Stages of Adolescence." *The High School Journal* 79, no. 4 (1996): 333–39.
- Bass, Christopher, Jolene van Nevel, and Joan Swart. "A Comparison between Dialectical Behavior Therapy, Mode Deactivation Therapy, Cognitive Behavioral Therapy, and Acceptance and Commitment Therapy in the Treatment of Adolescents." *International Journal of Behavioral Consultation and Therapy* 9, no. 2 (2014): 4–8. <http://dx.doi.org/10.1037/h0100991>.
- Batchelor, Martine. "Meditation and mindfulness." *In Mindfulness*, pp. 157-164. Routledge, 2013.
- Baudh, Jeet. "Satta Bojjhanga Sutta." *Bodhi Path* 20, no. 1 (2021): 23–28.
- Bee, Helen L. *The Developing Child*. 6th ed. New York, NY: HarperCollins College Publishers, 1992.
- Berk, Laura E. *Infants, Children, and Adolescents*. 5th ed. New Zealand, 2005.
- Bhikkhu, Dharma Priya. "The Notion of Investigation (Vicaya) in Buddhism." *Asia Pacific Journal of Religions and Cultures* 1, no. 1 (2017): 27–38.
- Biegel, Gina M., Kirk Warren Brown, Shauna L. Shapiro, and Christine M. Schubert. "Mindfulness-Based Stress Reduction for the Treatment of Adolescent Psychiatric Outpatients: A Randomized Clinical Trial." *Journal of Consulting and Clinical Psychology* 77, no. 5 (2009): 855.
- Bjorklund, David F. *Children's Thinking: Developmental Function and Individual Differences*. Pacific Grove, CA: Brooks/Cole Pub. Co., 1995.
- Blos, Peter. *On Adolescence: A Psychoanalytic Interpretation*. New York: Free Press of Glencoe, 1962.
- Bosquet, Michelle, and Byron Egeland. "The Development and Maintenance of Anxiety Symptoms from Infancy through Adolescence in a Longitudinal Sample." *Development and Psychopathology; Cambridge* 18, no. 2 (April 2006): 517–50.
- Broderick, Patricia C., and Pamela Blewitt. *The Life Span: Human Development for Helping Professionals*. 2nd ed. Upper Saddle River, N.J.: Pearson Merrill Prentice Hall, 2006.

- Brown, Lesley. *The New Shorter Oxford English Dictionary on Historical Principles*. New York; Oxford University Press, 1993.
- Burdick, Debra. *Mindfulness Skills for Kids & Teens: A Workbook for Clinicians & Clients with 154 Tools, Techniques, Activities & Worksheets*. Eau Claire: PESI Publishing & Media, 2014.
- Bi Jiwan毕继万. "Jisuo buby, Wushi yuren = Jizhi suoyu, Shizhi yuren" 己所不欲, 勿施于人= 己之所欲, 施之于人? [Do unto others as you would have them do unto you = do unto others as you would have them do unto you]. Wuwen Jianshe语文建设 6 (2000): 37. <http://www.cqvip.com/qk/81729x/2000006/12394197.html>
- Cayoun, Bruno A. *Mindfulness-Integrated CBT: Principles and Practice*. John Wiley & Sons, 2011.
- "CBT vs MBCT- What Is the Difference?" *Harley Therapy*, January 16, 2014. <https://www.harleytherapy.co.uk/counselling/cbt-mbct-difference.htm>.
- Chorpita, Bruce F. *Modular Cognitive-Behavioral Therapy for Childhood Anxiety Disorders*. New York: The Guilford Press, 2006.
- Clark, David A., and Aaron T. Beck. *The Anxiety and Worry Workbook: The Cognitive Behavioral Solution*. New York: Guilford Press, 2012.
- Collins, W. Andrew, and Stan A. Kuczaj. *Developmental Psychology: Childhood and Adolescence*. New York: Macmillan Pub. Co., 1991.
- Cullen, Emma Rossiter. "The Tipping Point in Adolescents: Exploring the Factors Involved in Adopting a Mindfulness Practice." PhD diss, Alliant International University, 2016, <http://search.proquest.com/psychology/docview/1868419855/fulltextPDF/959DEE0623354FF2PQ/1?accountid=25358>.
- Cunningham, M. J., V. M. Wuthrich, R. M. Rapee, H. J. Lyneham, C. A. Schniering, and J. L. Hudson. "The Cool Teens CD-ROM for anxiety disorders in adolescents." *European child & adolescent psychiatry* 18, no. 2 (2009): 125-129.
- Curtis, Alexa. C. "Defining Adolescence." *Journal of Adolescent and Family Health* 7, no. 2 (2015): 11.
- Davids, T. W. Rhys. *Buddhist Suttas*. Oxford: Clarendon Press, 1881.
- Eagle, Joshua Lev. "Engaging the 'Wise Mind' of a Teen: Incorporating Mindfulness Practice into a Group Therapy Protocol for Anxious Adolescents." *PhD diss., Massachusetts School of Professional Psychology*, 2008. <https://search.proquest.com/docview/304817822/abstract/22BDD2D71F78436DPQ/3>.
- Eliade, Mircea, and Charles J. Adams. *The Encyclopedia of Religion*. New York: Macmillan Publishing Company, 1987.
- Feldman, Robert S. *Development Across the Life Span*. 8th ed. Pearson India Education Services, 2018.

- Fontana, David, and Ingrid Slack. *Teaching Meditation to Children: A Practical Guide to the Use and Benefits of Meditation Techniques*. Shaftesbury, Dorset: Element, 1998.
- Freeman, Daniel and Freeman Jason. *Anxiety: A Very Short Introduction*. Oxford University Press, 2012.
- Galanti, Regine. *Anxiety Relief for Teens: Essential CBT Skills and Self-Care Practices to Overcome Anxiety and Stress*. Zeitgeist, 2020.
- Gehart, Diane R. *Mastering Competencies in Family Therapy: A Practical Approach to Theory and Clinical Case Documentation*. Belmont, CA: Brooks Cole, 2009.
- Gethin, Rupert. "On Some Definitions of Mindfulness." *Contemporary Buddhism* 12, no. 1 (May 2011): 263–79. <https://doi.org/10.1080/14639947.2011.564843>.
- Gillihan, Seth J.. *Cognitive Behavioral Therapy Made Simple: 10 Strategies for Managing Anxiety, Depression, Anger, Panic, and Worry*. Emeryville: Callisto Media Incorporated, 2018.
- Gove, Philip Babcock, and Merriam-Webster Inc. *Webster's Third New International Dictionary of the English Language, Unabridged*. Springfield, Mass.: Merriam-Webster, 1993.
- Greco, Laurie A., Ruth A. Baer, and Gregory T. Smith. "Assessing mindfulness in children and adolescents: development and validation of the Child and Adolescent Mindfulness Measure (CAMM)." *Psychological, assessment* 23, no. 3 (2011): 606.
- Greenfield, Patricia M., Heidi Keller, Andrew Fuligni, and Ashley Maynard. "Cultural pathways through universal development." *Annual review of psychology* 54, no. 1 (2003): 461-490.
- Harris, Russ. *ACT Made Simple: An Easy-to-Read Primer on Acceptance and Commitment Therapy*. Oakland, CA: New Harbinger Publications, 2009.
- Hidaka, Brandon H. "Depression as a Disease of Modernity: Explanations for Increasing Prevalence." *Journal of Affective Disorders* 140, no. 3 (2012): 205–14. <https://doi.org/10.1016/j.jad.2011.12.036>.
- Hughes, Jan N, Annette M. La Greca and Jane C. Conoley, *Handbook of Psychological Services for Children and Adolescents*. New York: Oxford University Press, 2001.
- Hoffman, Lois Wladis. *Developmental Psychology Today*. New York: Random House, 1988.
- Jennings, Samuel J., and Jerry L. Jennings. "Peer-Directed, Brief Mindfulness Training with Adolescents: A Pilot Study." *International Journal of Behavioral Consultation and Therapy* 8, no. 2 (2013): 23.
- Jootla, Susan Elbaum. *Investigation for Insight*. Buddhist Publication Society, 1983.
- Kabat-Zinn, Jon. *Wherever You Go, There You Are: Mindfulness Meditation in Everyday Life*. New York: Hyperion, 1994.

- Kabat-Zinn, Jon, University of Massachusetts Medical Center/Worcester, and Stress Reduction Clinic. *Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain, and Illness*. New York, N.Y.: Pub. by Dell Pub., a division of Bantam Doubleday Dell Pub. Group, 1991.
- Kendall, Philip C. *The C.A.T. Project Manual for the Cognitive-Behavioral Treatment of Anxious Adolescents*. Workbook Publishing, 2002.
- Lekander, Mats. "Ecological Immunology: The Role of the Immune System in Psychology and Neuroscience." *European Psychologist* 7, no. 2 (2002): 98–115. <https://doi.org/10.1027/1016-9040.7.2.98>
- Lee, Jennifer, Randye J. Semple, Dinelia Rosa, Lisa Miller. "Mindfulness-Based Cognitive Therapy for Children: Results of a Pilot Study." *Journal of Cognitive Psychotherapy* 22, no.1 (2008): 15-28. <https://www.proquest.com/docview/89070941/fulltextPDF/2BE04275E91F47E7PQ/1?accountid=25358&parentSessionId=wkdPt%2Fj4ttGBH%2Fd7wkZEBG6ZDHe87kh3dpuG4QC1QCs%3D>.
- LeVine, Robert A. "Ethnographic Studies of Childhood: A Historical Overview." *American Anthropologist* 109, no. 2 (June 2007): 247–60. <http://dx.doi.org/10.1525/aa.2007.109.2.247>.
- Mathews, Brittany L. "Relations of Parent-Child Relationships and Biological Factors with Anxiety in Early Adolescence: Examining the Mediating Role of Emotional Factors." *Ph.D., Kent State University*, 2015. <https://search.proquest.com/psychology/docview/1733329373/abstract/9E0E7183B7924369PQ/1>.
- May, Rollo. *The Meaning of Anxiety*. Ronald Press, 1950.
- McConaughy, Stephanie H. *Clinical Interviews for Children and Adolescents: Assessment to Intervention*. 2nd ed. New York: The Guilford Press, 2013.
- Mckinney, Cliff, and Kimberly Renk. "A Multivariate Model of Parent-Adolescent Relationship Variables in Early Adolescence." *Child Psychiatry and Human Development; New York* 42, no. 4 (August 2011): 442–62. <http://dx.doi.org/10.1007/s10578-011-0228-3>.
- McNally Keehn, Rebecca H. "The Coping Cat Program for Children with Anxiety and Autism Spectrum Disorder: A Pilot Randomized Controlled Trial." *Journal of Autism and Developmental Disorders* 43, no. 1 (201301): 57–67. <https://doi.org/10.1007/s10803-012-1541-9>.
- Merrell, Kenneth W. *Helping students overcome depression and anxiety: A practical guide*. Guilford Press, 2008.
- Meschke, Laurie L., Christina Renee Peter, and Suzanne Bartholomae. "Developmentally Appropriate Practice to Promote Healthy Adolescent Development: Integrating Research and Practice." *Child & Youth Care Forum* 41, no. 1 (2012): 89-108.
- "Mental Health by the Numbers," *National Alliance on Mental Illness*, accessed January 01, 2022, <https://www.nami.org/mhstats>

- “Mizzima Business Weekly: Seven Factors of Enlightenment.” *Newstex Global Business Blogs*, January 17, 2019.
<http://www.proquest.com/docview/2168479605/citation/B880D7DDA8444C2FPQ/1>.
- National Institute of Mental Health (NIMH), “*Any Anxiety Disorder*.” National Institute of Mental Health, <https://www.nimh.nih.gov/health/statistics/any-anxiety-disorder>.
- Ñāṇamoli Bhikkhu, and Bodhi Bhikkhu. *The Middle Length Discourses of the Buddha: A New Translation of The Majjhima Nikāya*. Teachings of the Buddha. Boston: Wisdom Publications in association with the Barre Center for Buddhist Studies, 1995.
- Neff, Kristin D. “The Development and Validation of a Scale to Measure Self-Compassion.” *Self and Identity* 2, no. 3 (July 2003): 223–50.
<https://doi.org/10.1080/15298860309027>.
- Oppo, Annalisa, Marta Schweiger, Arianna Ristallo, Giovambattista Presti, Francesca Pergolizzi, and Paolo Moderato. “Mindfulness Skills and Psychological Inflexibility: Two Useful Tools for a Clinical Assessment for Adolescents with Internalizing Behaviors.” *Journal of Child and Family Studies* 28, no. 12 (Dec 2019): 3569-3580,
<https://www.proquest.com/docview/2288316355?accountid=25358>.
- Orsillo, Susan M., and Lizabeth Roemer. *The Mindful Way through Anxiety: Break Free from Chronic Worry and Reclaim Your Life*. New York: Guilford Press, 2011.
- Palinkas, Lawrence A. “Exposure or Cognitive Restructuring Were More Effective than Relaxation in Treating Post-Traumatic Stress Disorder.” *Evidence-Based Mental Health* 1, no. 4. (Nov 1998):18-21. <https://search-proquest-com.uwest.idm.oclc.org/docview/1784037194?accountid=25358>.
- Pesic, Peter. “Leibniz and the Leaves.” *Philosophy Now* 30 (2000): 18-21.
- Price-Mitchell, Marilyn. “Mindful Warriors: Meditation for Teenagers.” *Roots of Action*. Published: October 8, 2012. <http://www.rootsofaction.com/meditation-children-teens-mindful-warriors>.
- Prout, H. Thompson. *Counseling and Psychotherapy with Children and Adolescents: Theory and Practice for School and Clinical Settings*. Hoboken, New Jersey: Wiley, 2015.
- Queen, Christopher S. *Engaged Buddhism in the West*. Boston, Mass.: Wisdom Publications, 2000.
- Rechtschaffen, Daniel. *The Way of Mindful Education: Cultivating Well-being in Teachers and Students*. WW Norton & Company, 2014.
- Rice, F. Philip. *Child and adolescent development*. Prentice Hall, 1997.
- . *Human Development : A Life-Span Approach*. Upper Saddle River, N.J. : Prentice Hall, 1998.

- Saltzman, Amy. *A Still Quiet Place: A Mindfulness Program for Teaching Children and Adolescents to Ease Stress and Difficult Emotions*. Oakland, CA: New Harbinger Publications, Inc., 2014.
- Santrock, John W. *Children*. 10th ed. Boston: McGraw-Hill, 2008.
- . *Life-Span Development*. New York: McGraw-Hill, 2011.
- Sauter, Floor M., David Heyne, and P. Michiel Westenberg. “Cognitive Behavior Therapy for Anxious Adolescents: Developmental Influences on Treatment Design and Delivery.” *Clinical Child and Family Psychology Review* 12, no. 4 (2009): 310–35. <https://doi.org/10.1007/s10567-009-0058-z>.
- . “Cognitive Behavior Therapy for Anxious Adolescents: Developmental Influences on Treatment Design and Delivery.” *Clinical Child and Family Psychology Review; New York* 12, no. 4 (December 2009): 310–35. <http://dx.doi.org.uwest.idm.oclc.org/10.1007/s10567-009-0058-z>.
- Segal, Zindel V., J. Mark, G. Williams, and John D. Teasdale. *Mindfulness-Based Cognitive Therapy for Depression*. 2nd ed. New York: Guilford Press, 2013.
- Semple, Randy J., and Jennifer Lee. *Mindfulness-based Cognitive Therapy for Anxious Children: A Manual for Treating Childhood Anxiety*. Oakland, CA: New Harbinger Publications, 2011.
- . “Mindfulness-Based Cognitive Therapy for Children.” In *Mindfulness-Based Treatment Approaches*. pp 161-188, Academic Press, 2014.
- Shaffer, David R., and Kipp Katherine. *Developmental Psychology: Childhood and Adolescence*. 8th ed. Pacific Grove: Wadsworth Cengage Learning, 2010.
- Shell, G. Richard. *Bargaining for Advantage: Negotiation Strategies for Reasonable People*. 2nd ed. New York: Penguin Books, 2006.
- Shigaki, Cheryl L., Bret Glass, and Laura H. Schopp. “Mindfulness-Based Stress Reduction in Medical Settings.” *Journal of Clinical Psychology in Medical Settings* 13, no. 3 (September 1, 2006): 209–16. <https://doi.org/10.1007/s10880-006-9033-8>.
- Siegler, Robert S. *Children’s Thinking*. Upper Saddle River, N.J.: Prentice Hall, 1998.
- Sigelman, Carol K., and Elizabeth A. Rider. *Life-Span Human Development*. 5th ed. Australia ; Thomson/Wadsworth, 2006.
- Smith, Douglass, and Justin Whitaker. “Reading the Buddha as a Philosopher.” *Philosophy East and West* 66, no. 2 (April 2016): 515–II.
- Solomon, Robert C. *What is an Emotion?: Classic and Contemporary Readings*. 2nd ed. New York: Oxford University Press, 2003.
- Stahl, Bob, Florence Meleo-Meyer, and Lynn Koerbel. *A Mindfulness-based Stress Reduction Workbook for Anxiety*. New Harbinger Publications, 2014.
- Stambler, Morris J.L. “100 Years of Adolescence and Its Prehistory From Cave to Computer.” *Routledge* 70, no. 1, 22-39 (2017).

- Stevenson, Angus, and Christine A. Lindberg, eds. *New Oxford American Dictionary*. 3rd ed. Oxford; New York: Oxford University Press, 2010.
- Stickle, Fred E., ed. *Adolescent psychology*. United Kingdom: McGraw-Hill/Dushkin, 2006.
- Sutta, Satipaṭṭhāna. *The Foundations of Mindfulness*. Translated. by Nyanasatta Thera. Kandy; Buddhist Publication Society, 1993.
- Suvaco, Phra Ajaan Suwat, and Thanissaro Bhikkhu. "A Home for the Mind," *Access to Insight*, edition 2002, <https://ibcclibrary.thanhsiang.org/files/accesstoinight/html/lib/thai/suwat/homeformind.html>.
- Szigethy, Eva, John R. Weisz, and Robert L. Findling. *Cognitive-Behavior Therapy: For Children and Adolescents*. American Psychiatric Publishing, 2012.
- Taublieb, Amy Beth. *A to Z Handbook of Child and Adolescent Issues*. Boston: Allyn & Bacon, 2000.
- Teasdale, John D., Zindel Segal, and J. Mark G. Williams. "How Does Cognitive Therapy Prevent Depressive Relapse and Why Should Attentional Control (Mindfulness) Training Help?" *Behaviour Research and Therapy* 33, no. 1 (January 1, 1995): 25–39. [https://doi.org/10.1016/0005-7967\(94\)E0011-7](https://doi.org/10.1016/0005-7967(94)E0011-7).
- Thiradhammo, Ajahn. *Contemplations on the Seven Factors of Awakening*. Belsay, Northumberland: Aruna Publications, 2012.
- Vasey, Michael W. *The Developmental Psychopathology of Anxiety*. New York: Oxford University Press, 2001.
- Vasta, Ross, Marshall M. Haith, and Scott A. Miller. *Child Psychology: The Modern Science*. 2nd ed. New York: J. Wiley & Sons, 1995.
- Yoo, Sung-Kyung. "Adolescent Psychology: Achievement." Ewha Womans University. Accessed August 8, 2018. Video, 29:30. <https://open.163.com/newview/movie/free?pid=MA5T0OVM&mid=MA5T2QODK>.
- Walshe, Maurice O'Connell. *The Long Discourses of the Buddha: A Translation of the Dīgha Nikāya*. Boston: Wisdom Publications, 2012.
- . *Thus Have I Heard: The Long Discourses of the Buddha Dīgha Nikāya*. A Wisdom Intermediate Book. London: Wisdom Publications, 1987.
- Wang, Ying. *Longman Dictionary of Contemporary English* 朗文当代高级英语辞典. 5th ed. Beijing: Foreign Language Teaching and Research, 2014.
- Weiss, Allen. "Mindfulness Is Not a Cure for Everything." *Tricycle: The Buddhist Review*, Accessed June 6, 2018. <https://tricycle.org/trikedaily/investigation-mindfulness/>.

- Williams-Orlando, Carolyn. "Teaching Meditation to Children as Part of Psychotherapy." *Proquest*. Accessed December 3, 2020.
<http://www.proquest.com/docview/1438016981/fulltext/3CD006FD83DE4E9BPQ/1?accountid=25358>.
- Willson, Rob. *Cognitive Behavioural Therapy for Dummies*. Chichester, West Sussex, England: John Wiley, 2006.
- Wikipedia contributors, "Adolescence." *Wikipedia, The Free Encyclopedia*, accessed Sep, 2018. <https://en.wikipedia.org/wiki/Adolescence>

APPENDIX A: Participant --- Assent Form

My name is Xiaowen Zhang. I am a doctoral student in the Doctor of Buddhist Ministry program at University of the West in the state of California. I am inviting you to participate in a research study about a new tool of Mindfulness practice to help adolescents to manage their anxiety in daily life.

Your parents know about this study and give permission for you to be involved. If you agree, I will invite you to take a six-session online class weekly, with six different topics. An exit interview will be open for you to sign up for at the end of the sixth class, for students who want to share their experience.

You do not have to be in this study. No one will be mad at you if you decide not to do this study. Even if you start the study, you can stop later if you want. You may ask questions about the study at any time.

If you decide to be in the study, I will not tell anyone else how you respond or act as part of the study. Even if your parents or teachers ask, I will not tell them about what you say or do in the study.

Signing here means that you have read this form or have had it read to you and that you are willing to be in this study.

Name of the Participant: _____

Signature of the Participant: _____

Date: _____

APPENDIX B: Parent/Legal Guardian --- Informed Consent Form

My name is Xiaowen Zhang. I am a doctoral student in the Doctor of Buddhist Ministry program at University of the West. I am writing a dissertation about adolescents titled “Investigation Practice of Mindfulness Program as a Balance Intervention to Manage Adolescent Anxiety.” This study is based on understanding adolescents' psychological makeup and physical development to create a suitable process that integrates mindfulness / Investigation into daily practice in order to provide clues for them to understand their inner balance and cultivate abilities of self-understanding, self-regulation, and self-management.

This form is an invitation for your child to participate in a mindfulness research project. Please read this consent form, which is only a part of the process of informed consent and to understand any accompanying information on what the research project is about and what your child’s participation will involve. Please feel free to ask if you would like more details about anything that is mentioned or information not included here.

Purpose:

Mindfulness practices have come from ancient traditions. Modern scientific research shows us that these practices help improve mental focus, physical health, stress resiliency, and an overall sense of well-being. Adolescence is a crucial period that cultivates personal habits, cognitive patterns, and interpersonal skills.

This pilot study is to introduce, educate, and implement an Investigation of mindfulness program for adolescents to help them manage their anxiety. The program

will take place through theoretical learning, practical exercises, mindfulness-experience, game participation, group discussion and sharing to provide comprehension, deep understanding, recognition, and regulation of the emotions of worry and anxiety. The activities of this study will provide clues for the participants to understand themselves and develop their inner ability of self-understanding, self-regulation, and self-management.

Eligibility:

You are eligible to participate in this study if:

1. Teenagers in the age group between 11 to 17.
2. Students who are registered in a Chan Shan Temple Chinese Class, in Toronto, Canada.
3. Those interested in understanding their inner processes and mindfulness practice.
4. Adolescents who scored below 36 on the Beck Anxiety Inventory. These participants are considered as having low to medium risk of anxiety, which is suitable for the purpose of this study.
5. No history of past or present trauma from abusive use of drugs or alcohol. A simple pre-class questionnaire or verbal confirmation can be used for the screening process.
6. Non-cognitively impaired students can join the study because of their ability to understand the material in class. A simple pre-class questionnaire or verbal confirmation from the parents can be used for the screening process.
7. Participants are not excluded from the study based on their ethnicity, sexual orientation, gender identity, or trauma from Covid.

Your Participation:

The study will consist of a general questionnaire at the beginning. Participants will join in a six-week program where the participants will utilize an online platform to study how to manage their anxiety through the practice of mindfulness. At the end, your child is invited to fill out the result questionnaire and have a video-recorded interview which will take about 20 – 30 minutes to complete.

Risks, Benefits and Research Withdrawal

Although there may be potential risks of triggering higher anxiety or trauma, exposing struggles with cultural, sexual and gender identity, and exacerbating social phobias, the potential benefits outweigh the risks. Teens will acquire mindfulness skills of inquiry to cope with their anxiety. They will acquire healthy coping skills through learning from their peers' experiences. They will enhance self-awareness and self-discovery through normalizing their experiences. They will improve their communication and socialization skills through interactions with peers. They will learn grounding exercises to self-regulate anxiety. They will learn to identify and recognize safe and unsafe behaviors. They will be able to control and be prepared for the unexpected and regain balance by establishing a safety plan.

In addition, due to the voluntary nature of participation in this study, if for any reason a participant wants to exit the program, he/she is free to do so without any obligation. Particularly, with more sensitive issues like thoughts of suicide, participants will be provided with the number of the Canadian Crisis Hotline or Suicide Prevention Hotline. It is hoped that once they understand the cause and effect of such emotions, their level of anxiety will decrease as this study is carried out for the purposes of Investigation.

Crisis Hotline in Canada:

Covenant House Teen Hotline: 1-800-999-999

Ontario Mental Health Helpline: 1-866-531-2600

Crisis Call Center: 1-800-784-6778

Confidentiality:

You (your child) have a right to privacy and all information such as your name, email address, and other personally identifiable information will remain confidential. Video recordings will only be used for transcription and then be deleted. No personally identifiable information will be publicly released. Your personal information will be used solely for tracking purposes.

When the results of the research are published or discussed in conferences, no information will be included that would reveal your identity. Interview transcripts will be stored a minimum of five years to facilitate further research on this topic, but personal information identifying the source of these data will be removed.

Contacts:

Any questions related to this study that have not been answered for you (your child) before, during, or after your child's participation in the study can be answered by contacting: Xuewu (Xiaowen Zhang) by phone number: 626-662-8838 or email: xuewu30@gmail.com, or the dissertation supervisor Dr. Jitsujog Gauthier at (626) 571-8811 ext. 345, or by email: jitsujog@uwest.edu. For further questions about the rights of research participants, you can contact the UWest IRB committee at IRB@uwest.edu.

Signature and Acknowledgement:

I have reviewed, understand and agree with the information provided to me, which relates to my child's participation in this research study. I acknowledge that I have had a chance to ask questions to help me understand what my participation and my child's participation will involve. I acknowledge having received a copy of this agreement. I understand that by signing this consent form I am not giving up any of my legal rights.

Printed Name of Participant (Adolescent)

Printed Name of Parent/Legal Guardian

Date

Signature of Parent/Legal Guardian

Date

Address

Email

Phone

Investigator's Signature Date

APPENDIX C: Demographics Questionnaire

My name is Xiaowen Zhang. I am a doctoral student in the Doctor of Buddhist Ministry program at University of the West. I am writing a dissertation on the adolescent, titled as “Mindfulness – Meditation as a Contemporary Education Approach for Managing Adolescent’s Anxiety.” This study is based on understanding adolescents’ psychological makeup and physical development to create a suitable process which integrates mindfulness / Investigation into daily practice in order to provide clues for them to understand their inner balance and cultivate well abilities of self-understanding, self-regulation, and self-management.

Welcome to join this program and thank you for your interest in my study. In order to make sure that you meet the criteria for participation, I have a few general questions for you:

About yourself.....

Name _____

Age _____

Gender _____

Grade Level _____

Telephone No. _____

E-mail _____

Race/Ethnicity _____

Religious/Spiritual Affiliation _____

Address _____

APPENDIX D: Beck Anxiety Inventory (BAI)

Below is a list of common symptoms of anxiety. Please carefully read each item in the list. Indicate how much you have been bothered by that symptom during the past month, including today, by highlighting the number in the corresponding space in the column next to each symptom.

	Not at all	Mildly, but it did not bother me much	Moderately- it was not pleasant at times	Severely –it bothered me a lot
Numbness or tingling	0	1	2	3
Feeling hot	0	1	2	3
Wobbliness in legs	0	1	2	3
Unable to relax	0	1	2	3
Fear of worst happening	0	1	2	3
Dizzy or lightheaded	0	1	2	3
Heart pounding / racing	0	1	2	3
Unsteady	0	1	2	3
Terrified or afraid	0	1	2	3
Nervous	0	1	2	3
Feeling of choking	0	1	2	3
Hands trembling	0	1	2	3
Shaky / unsteady	0	1	2	3
Fear of losing control	0	1	2	3
Difficulty in breathing	0	1	2	3
Fear of dying	0	1	2	3
Scared	0	1	2	3
Indigestion	0	1	2	3
Faint / lightheaded	0	1	2	3
Face flushed	0	1	2	3
Hot / Cold sweats	0	1	2	3

APPENDIX E: Child and Adolescent Mindfulness Measure (CAMM)

We want to know more about what you think, how you feel, and what you do.

Read each sentence. Then, **highlight** the number that tells **how often** each sentence is true for you.

	Never True	Rarely True	Sometimes True	Often True	Always True
1. I get upset with myself for having feelings that do not make sense.	0	1	2	3	4
2. At school, I walk from class to class without noticing what I am doing.	0	1	2	3	4
3. I keep myself busy, so I do not notice my thoughts or feelings.	0	1	2	3	4
4. I tell myself that I should not feel the way I am feeling.	0	1	2	3	4
5. I push away thoughts that I do not like.	0	1	2	3	4
6. It is hard for me to pay attention to only one thing at a time.	0	1	2	3	4
7. I get upset with myself for having certain thoughts.	0	1	2	3	4
8. I think about things that have happened in the past instead of thinking about things that are happening right now.	0	1	2	3	4
9. I think that some of my feelings are bad and that I should not have them.	0	1	2	3	4
10. I stop myself from having feeling that I do not like.	0	1	2	3	4

APPENDIX F: Class Evaluation

We are interested in knowing what you learned during this six-week program.

Your comments and suggestions will be used by the instructor for improving course structure and teaching. Please **highlight** the answers that fits best with you in honesty.

Please rate the course using the following scale:

5=excellent, 4=very good, 3=Good, 2=Fair, 1=Poor

A. Class Content:

- | |
|---|
| a. Class was well organized. |
| 5 4 3 2 1 |
| b. Class objectives were clearly stated. |
| 5 4 3 2 1 |
| c. Activities were relevant to objectives. |
| 5 4 3 2 1 |
| d. All necessary materials/equipment/resources were provided. |
| 5 4 3 2 1 |

B. Class Instruction:

- | |
|---|
| a. Instructor was well prepared for the workshop. |
| 5 4 3 2 1 |
| b. Instructor was knowledgeable in the subject area. |
| 5 4 3 2 1 |
| c. Manner of presentation of the material was clear. |
| 5 4 3 2 1 |
| d. Instructor employed effective teaching strategies/techniques. |
| 5 4 3 2 1 |
| e. Instructor was objective and equitably interacted with participants. |
| 5 4 3 2 1 |
| f. What else are you suggesting to instructor for improving her teaching? |

C. Class Instruction:

- a. Instructor was well prepared for the workshop.
5 4 3 2 1
- b. Instructor was knowledgeable in the subject area.
5 4 3 2 1
- c. Manner of presentation of the material was clear.
5 4 3 2 1
- d. Instructor employed effective teaching strategies/techniques.
5 4 3 2 1
- e. Instructor was objective and equitably interacted with participants.
5 4 3 2 1
- f. What else are you suggesting to instructor for improving her teaching?

D. How much did you understand the following contents?

- a. Mindfulness: in the present moment, on purpose, being nonjudgmental.
5 4 3 2 1
- b. Investigation: Sending awareness to nourish a specific area.
5 4 3 2 1
- c. Identifying the body sensations.
5 4 3 2 1
- d. Identifying the emotion/feeling (such as worry, stress, anxiety).
5 4 3 2 1
- e. Identifying the thoughts.
5 4 3 2 1
- f. Sending awareness to the body sensation.
5 4 3 2 1
- g. Sending awareness to the emotion/feeling.
5 4 3 2 1
- h. Taking care of yourself so you can take care of others.
5 4 3 2 1
- i. The meaning of cause and effect.
5 4 3 2 1

E. How much benefits did you receive from the following exercises?

a. Hands Clench Exercise	5	4	3	2	1
b. Towel Exercise	5	4	3	2	1
c. Breath practice (with fruit or flower)	5	4	3	2	1
d. Pillow Awareness (when you are in bed)	5	4	3	2	1
e. Hand Washing	5	4	3	2	1
f. Book Touching	5	4	3	2	1

Would you recommend this program to your friends? Yes No

Additional comments:

Date:

APPENDIX G: Scheduling Exit Interview Chart

Thank for your interest in my research and completing the program of study. This chart is inviting you to make an appointment for an exit interview. Please select the most convenient time and sign your name in the column.

Please send it back to: xueweu30@gmail.com

Date	Time	Name

APPENDIX H: Exit Interview Questions

Title of Research Project: “Investigation Practice of Mindfulness Program as a
Balance Intervention to Manage Adolescent Anxiety”

Investigator: Candidate student: Xiaowen Zhang
Supervision: Dr. Jitsujo Gauthier
University: University of the West, Rosemead, California, USA

1. How do you understand the word “mindfulness” before the class and after?
2. How is your experience with the Towel Exercise?
3. Are there any benefits you received from sending awareness?
4. How do you understand the words “cause” and “effect”?
5. Do you have your specific way of dealing with worry or anxiety after learning this program?
6. Which aspect is the most attractive to you in the process?
7. What was hard for you while learning this program?
8. Are you going to introduce this program to you friends? How?
9. Are there other things about the program or your practice that you’d like to tell me about?

APPENDIX I: Curriculum

Session one: Mindfulness/ Here and Now

Primary Goal of Session:

- a. Welcome and orient attendees to the program and build a safe community by setting up the rules.
- b. Briefly introduce the program and identify the purpose this practice.
- c. Understand mindfulness and experience Here and Now

Materials needed: some sheets of paper, a set of colored pens.

Session Model:

1. Check-in ---15 minutes

- a. Welcome the attendees to the class and get to know each other by sharing name, grade, school, favorite color, expectations for this class.
- b. Briefly overview the program and identify the purpose of the study
- c. Emphasize safety and what they can do if they feel discomfort or unsafe

2. Transition Phase --- 3 minutes

Facilitator invites the students take some time to choose a color pen that represents their feelings at the moment. Attendees are welcomed to share their ideas when they ready. This naturally transitions from the check-in move to the present moment and prepares for the next step of theories learning.

3. Psychoeducation --- 15 minutes

- a. Inviting the attendees to draw a picture about mindfulness that comes up in their mind

(inviting them to make their own discoveries and experiences.³⁸¹)

- b. Using PPT to introduce the concept of mindfulness from Jon Kabat-Zinn.

Definition: on purpose, in the present moment, and being nonjudgmental

4. Activity Practice --- 20 minutes

- a. “Clench exercise” (Appendix J, Exercise 1) to guide them to experience Here and

Now and to increase ability to be aware

- b. Group sharing of the experience

5. Closing Mindful Moment --- 10 minutes

- a. Reviewing the primary points of the class

- b. Question time

- c. Daily Self-Design Practice

- 1). Teaching one of your close family members or friends to practice the “clench. exercise” with you, and asking him/her “How does he/she feel?”
- 2). Practicing with yourself.

³⁸¹ Daniel, *The Way of Mindful Education*, 141.

Session Two: Investigation/ Sending Awareness

Primary Goal of Session:

- a. Making sure that the attendees understand the meaning of mindfulness and how it relates to the practice.
- b. Introducing new concept of “Investigation” to explore “cause and effect.”
- c. Practicing sending awareness as sending nutrition to nourish a specific area.

Material needed: a towel.

Session Model:

1. Check-in --- 5 minutes

- a. Reviewing the meaning of mindfulness.
- b. Reporting back: inviting attendees to share how was the daily self-practice.
- c. Rule setting: for students to feel more comfortable with eyes-closed practice.
 - a). Using the music bell to announce the silence practice on their own.
 - b). Turn to face to the side, but on the screen.

2. Transition Phase --- 5 minutes

Short practice with towel exercise to relax the body sensations and reexperience the Here and Now that learned from last week.

3. Psychoeducation --- 10 minutes

- a. Providing PowerPoint to study the definition of “investigation” from the *New Oxford American Dictionary*: “carry out a system of formal inquiry to discover and examine the fact of (an incident, allegation) so as to establish the truth.”
- b. Explaining “investigation” as an additional tool for mindfulness: sending awareness into a specific area by sending nutrition to nourish it and being alert about

how the condition comes and goes, with attention on the “cause and effect” connection of experience.

4. Activity Practice --- 20 minutes

- a. Towel Exercise: (Appendix J, Exercise 2) The advantage of this exercise is producing stronger sensations with most parts of body. When we are moving in action, find the specific area easily. From the arms moving and body sensations, explore and explain cause and effect: when you do this, what will happen; when you do that, what will happen.
- b. Group sharing with the following question:
 - a). What has changed after you send your full attention to this specific area?
 - b). What sensations are going on in the most sensitive part?

5. Closing Moment --- 10 minutes

- a. Reviewing the primary points of the class
- b. Question time
- c. Daily Self-Design Practice
 - 1). Every time you touch the pillow, called “Pillow Awareness” (Appendix J, Exercise 4) use the skill that we learned from this class to relax your head, shoulders, both arms, back, abdomen, hip, thigh, lower part of the leg, until the feet: body scan relaxation.
 - 2). Or you can find a specific area that you feel is the most uncomfortable in. your body, probably tight, painful or something else: just notice and relax and send more awareness to nourish this part: specific area relaxation.

Session Three: Identifying Anxiety

Primary Goal of Session:

- a. Identifying the difference between feelings and emotions.
- b. Utilizing flower or fruit to practice full attention and relaxing, which helps them to understand and experience that breath is a bridge to connect body sensations and feelings.
- c. Recognizing anxiety by other names, such as worry, stress.

Material needs: Flowers and fruits.

Session Model:

1. Check-in --- 5 minutes

- a. Reviewing: meaning of mindfulness and further practice with sending awareness to the most specific area.
- b. Reporting back: inviting students to share how was the daily self-practice, was there any special experience with sending awareness in bed?

2. Transition Phase --- 5 minutes

Inviting attendees to write down a few common feelings and emotions during their daily life from PowerPoint: the first step for them to reflect on their own feelings before moving on.

3. Activity Practice --- 20 minutes

Breath training with Flowers or Fruits: (Appendix J, Exercise 3) there are two purposes for practicing this exercise. Firstly, providing an interesting way for attendees to be aware of their own breath rhythm and experience the breath as a bridge between the physical body and inner feelings. Secondly, it is a way to improve

concentration and relaxation.

a. Practicing with comfortable fragrance

1). Breathe in ---- Put all your attention on what you are smelling.

2). Breathe out ---- relax your body, muscle, nerves, and mind in each step.

b. Practicing with uncomfortable fragrance

1). Breathe in ---- Put all your attention on what you are smelling.

2). Breathe out ---- to feel what you feel

c. Group sharing:

Describing the bodily sensations with comfortable and uncomfortable fragrance respectively.

4. Psychoeducation --- 10 minutes

a. Identifying the difference between feeling and emotion with video.

<https://www.youtube.com/watch?v=3fTRWpf-eH4&t=7s> (For early group)

<https://www.youtube.com/watch?v=2HIIRm5TALA> (For middle group)

b. Recognizing anxiety by other names.

5. Closing Moment --- 10 minutes

a. Reviewing the primary points of the class.

b. Question time.

c. Daily Self-Design Practice.

Practicing the present moment with most frequent feelings from the circle list.

during the transition phase. Whenever it is arising and you notice it, tell yourself:

“I’m NOW”

Session Four: Releasing Anxiety Emotion

Primary Goal of Session:

- a. Understanding the connection between physical body and brain.
- b. Reflecting on anxiety's responses in physical, emotions and thoughts.
- c. Increasing the ability to notice the present body sensation, feeling, and emotions.
- d. Further practicing "cause" and "effect" with emotions.

Material needs: Paper and pen.

Session Model:

1. Check-in --- 5 minutes

- a. Reviewing: briefly summarize the meaning of mindfulness and Investigation and emphasize the difference between feelings and emotions.
- b. Reporting back: inviting students to share how was the daily self-practice, how often do they notice the emotions circled on the paper.

2. Transition Phase --- 5 minutes

Firstly, sharing my complex feelings when facing exam period. Probably, there. was a more relaxed state when I was facing my favorite subject and more stress or anxiety with disliked subjects. Next, asking the student to recall and write down what kinds of emotions do their experience when they were facing better and worse subjects.

3. Psychoeducation --- 10 minutes

A YouTube video called "Dan Siegel's Hand Model of the Brain" shows the structure of the brain: <https://www.youtube.com/watch?v=FTnCMxEnnv8>

This video shows an academic and interesting pattern for attendees to comprehend

the structure of the brain. This speech shows how and why breath is able to inference the brain and why mindfulness can help us to manage feelings and emotions.

4. Activity Practice --- 20 minutes

- a. Anxiety emotion discussion from our own experience
- b. Drawing a picture of their brain when experiencing worry/ anxiety³⁸²

5. Closing Moment --- 10 minutes

- a. Reviewing the primary points of the class
- b. Question time
- c. Daily Self-Design Practice

Body awareness with water/beverage: as you begin to take water or. beverages, bring your full, kind, and curious attention to becoming aware of your body sensations and feelings.

³⁸² Burdick, *Mindfulness Skills for Kids & Teens*, 18.

Session Five: Befriending Surroundings/ Integrating Practice

Primary Goal of Session:

- a. Understanding and recognizing sources of anxiety not only from inside but also from outside because researchers indicate that nurture (your environment) influences how, when, and why anxiety shows up.³⁸³
- b. Based on the previous learning and practicing, integrate both knowledge and experience into three steps, which will make a clear picture for students to follow when practicing by themselves.

Material needs: Paper and pen.

Session Model:

1. Check-in --- 5 minutes

- a. Reviewing: briefly summarizing the meaning of mindfulness and Investigation and emphasizing the difference between feeling and emotion, the relation between brain and physical body.
- b. Reporting back: inviting attendees to share how was the daily self-practice: what did they notice when they drank the water or beverage?

2. Transition Phase --- 5 minutes

By exploring body sensations and feelings during home practice last week, draw forth some other reasons that cause our sensations from outside.

3. Psychoeducation --- 10 minutes

- a. Where does anxiety come from? (PPT) shows the person's relationship with

³⁸³ Regine Galanti, *Anxiety Relief for Teens: Essential CBT Skills and Self-Care Practices to Overcome Anxiety and Stress*, (Zeitgeist, 2020), 6.

environment.

- b. Summarize previous knowledge and practice experience into three steps as self-practice guidance.

4. Activity Practice --- 20 minutes

- a. Awareness practice.
- b. Artistic game play: planting the seeds for future.

5. Closing Moment --- 10 minutes

- a. Reviewing the primary points of the class.
- b. Question time.
- c. Daily Self-Design Practice.

Handwashing practice (Appendix J, Exercise 5) bring your full, kind, and curious attention to what you are feeling when you wash hands. What is the temperature, is it soft, warm, cool?

Session Six: Self-Compassion/ Balancing Inside and Outside

Primary Goal of Session:

- a. Helping attendees to have a clearer picture with three-step practice from “book touching” exercise.
- b. Practicing additional skill of mindful listening and speaking for improving inter-relationships.
- c. How to extend mindfulness in daily life.

Material needs: Paper and pen.

Session Model:

1. Check-in --- 10 minutes

- a. Inviting attendees to write about what is mindfulness from their understanding and learning so far on the chart.
- b. Reporting back: inviting students to share how was daily self-practice.

2. Transition Phase --- 5 minutes

What we have learned about mindfulness practice is a kind of internal selfcare strategy, such as taking breaths, relaxing the body, being aware of feelings and emotions. What else could mindfulness provide for us?

3. Psychoeducation – 10 minutes

- a. Understanding yourself is also a way to understanding our common humanity.³⁸⁴
- b. The importance of mindful listening and speaking, which will create a level of trust and confidence between people that eases anxiety and facilitates

³⁸⁴ Amy Saltzman, *A Still Quiet Place: A Mindfulness Program for Teaching Children and Adolescents to Ease Stress and Difficult Emotions*, (Oakland, CA: New Harbinger Publications, Inc., 2014), 170.

communication.³⁸⁵

4. Group Activity -- 20 minutes

- a. “Book Touching” exercise (Appendix J, Exercise 6)
- b. Giving some examples to explain how to extend what we have learned into daily practice.

5. Closing Moment – 25 minutes

- a. Reviewing the primary points of the class
- b. Question time
- c. Signing up for interviews
- d. Closing goodbyes / Graduation

³⁸⁵ Richard G. Shell, *Bargaining for Advantage: Negotiation Strategies for Reasonable People*, 2nd ed. (New York: Penguin Books, 2006), 58.

APPENDIX J: Exercise

Exercise 1. Clench Exercise

Purpose of Practice:

Clench Exercise guides the participants to experience the present moment by emphasizing the concept of “Here” and “Now” after we have learned the definition of mindfulness.

Concrete Steps:

Left hand: Use the left hand to show each step in detailed guidance.

- Place your left-hand palm outwards
- Open all the fingers as wide as you can
- Extend your palm as much as you can, and try to extend each finger as long as you can (thumb, index finger, middle finger, ring finger, pinky)
- Pay attention to your internal nerves and bones, and notice how they feel. And. then extend all of your fingers as much as you can, for as long as you can.
- Guide the participants to feel like their fingers are in the sand.
- Slowly bend all the fingers and clench into a fist with all your power and then. slowly release.

Right Hand: Make sure everyone can follow the steps, and then practice repeating the instructions from above using both hands, changing the speed step by step after they have followed along.

- Slowly (For a while)

- Fast (For a while)
- Quickly, as quickly as you can (For a while)
- Turn both hands around, making circles with the fists

Extending Practice: Guide them to connect with inner feelings in the present moment.

with eyes closed.

- Put down your hands anywhere in any position that you feel relaxed and comfortable.
- Feel your skin, feel your nerves, and find out which part is the most active, and what sensations are being felt in those parts (For a while)
- Find out which sensations of the skin/nerves that last the longest and try to feel it as deeply as you can (For a while)
- Rub your hands together and hold them over your eyes before you open your eyes (For a while)

Additional Advice:

To keep in mind, the purpose of this practice is to guide the participant to experience within “here and now.” Thus, it is better to repeat the words “here and now” to guide them to stay in the present moment, especially allowing sufficient time for the participant to feel their inner sensations and to guide them to connect with their inner feelings in the present moment.

Exercise 2. Towel Exercise

Purpose of Practice:

The Towel Exercise is to promote the participant's ability to "identify bodily arousal" and is a stratagem to deal with anxiety from CBT. It utilizes bodily movement to recognize signs of immediate physical sensations and also signs of other physical and mental sensations within themselves. The process of "sending awareness" is a method of sending nutrition to nourish a specific area of the body, to bring attention to how conditions come and go, or to notice "cause and effect" in order to connect with personal experiences in the moment.

Concrete Steps:

1. Pre-relaxing --- It's better to close your eyes and be fully alert to what is going on with both hands.

- Breath in (inhale) --- hold your fists as tightly as you can.
- Breath out (exhale) --- release your hands.

2. Sending Awareness --- Sending nutrition to nourish a specific area.

- Holding your towel in both hands, put it over your head, sit with your back straight, and turn a little bit to the right side.
- Feel the sensations running along the side of your arm and the side of your body. when the body is moving. (E.g., pain, tingling, tight, or soreness...)
- Continue to keep your attention focused on one part that most attracts your attention for a while.

- Observe what exactly is happening with this part..... (For a while)
- Try to stay here and mindfully accept it..... (For a while)
- Observe how it arises and ceases..... (For a while)

Extending Practice:

The principle of the practice is flexibility to feel the other sensations between the wrist and elbow, down to the armpits, or another part of the body. Conversely, you can move to the opposite side as well. In brief, no matter which part you are focusing on, just find out the most sensitive parts that attract your attention.

Additional Advice:

Once mindfully calm, the leading words will tend to be inward exploring with the following examples:

- What is going on with this specific area?
- What is the sensation being felt right now?
- How have those things changed?
- How does this condition come and go?
- What do you notice after having a deep observation?

Exercise 3. Flower/Fruit Breath

Purpose of Practice:

Helping participants to learn how to be relaxed in their physical body through breathing in a unique way. This is a preparatory step to developing the further ability to identify the relationship between body, feelings, and emotions.

Concrete Steps:

Comfortable Fragrance:

- Breathe in (inhale) ---- bring all of your attention to what you are smelling
- Breathe out (exhale) ---- relax your body completely
 - relax all of your muscles
 - relax all of your nerves
 - relax your mind
 - stay with your feelings (for a while)

Uncomfortable Fragrance:

- Breathe in (inhale) ---- bring all of your attention to what you are smelling
- Breathe out (exhale) ---- pay attention to what you are feeling now

Extending Practice:

The purpose of this opposing fragrance practice is to guide the participant to identify the faction/effectiveness of breath, which shows that breath is a bridge to connect the body, feelings, and sensations. In addition, I introduce “steady and rapid” breath

exercises for breathing in a quick way, a good choice for participants having difficulty with experiencing breath or needing other effective ways to experience the connection between the physical and the mental.

Additional Advice:

The principle of this practice emphasizes just observing what is going on between the breath and feeling in the present moment, without any kind of effort of changing awareness or judgment.

Exercise 4. Pillow Awareness

Purpose of Practice:

Reinforcing the practice of “sending awareness” into daily life and providing a way for some participants to alleviate insomnia and improve their sleep quality as some participants mentioned during the registration.

Concrete Steps:

1. When you touch the pillow, be aware of the area of your body that touched the bed.
2. Slowly relax your head, shoulders, arms, back, abdomen, hips, thighs, and the lower part of the legs to the feet, and focus your attention on the feet for a while.
3. Sending more awareness and attention to the feet relaxing as much as you can, as if you were lying on a cloud.

Exercise 5. Hand Washing

Purpose of Practice:

Creating a simple and frequent way to remind the participant to be aware of their feelings and gradually cultivate the ability of awareness and be more self-aware daily.

Concrete Steps:

1. Bring your full, kind, and curious attention to the movement of your hands.
2. Notice the sensations in your hands when you touch the water faucet.
3. Pay attention to the temperature, whether warm or cool.
4. Focus on the sensations during the washing process.

Exercise 6. Book Touching

Purpose of Practice:

This exercise is intended to integrate these multiple techniques into three steps in order to consolidate the practice before ending the program. The three steps have been simplified and implementation will become more flexible and adopted.

Concrete Steps:

Pre-relaxing:

1. Take out one of the books to put in front of your table and loosely rest your forearms and hands on the table as well.
2. Make sure your back, neck, and head are aligned and your feet are rooted on the floor.
3. Close your eyes, slowly and mindfully breathe in, then slowly breathe out to relax. your body as much as you can. Sit comfortably with yourself for a while.

Stay in the Present Moment:

1. Be aware of what kind of sounds are in the room right now and just be aware of. your surroundings.
2. Be aware that you are in your room, be here, sitting on the chair - - - bring the. attention back from the past and away from future in order to stay in the present moment.
3. Stay with yourself with your body, feelings and thoughts; you are fully present with. yourself in body, feeling and thought at this moment.
4. Slowly breathe in and breathe out slowly and with focus on your breathing in order. to relax your body as much as you can. Bring all of your attention to your feelings and be

aware of what happening around you.

Sending Awareness and Observing:

1. Touch the book and bring your attention to the fingers. How do the fingers feel. touching the page? Send your awareness to feel what kind of sensation occurs between the fingers and page. Is it smooth, rough, course, soft, uneven?
2. Slowly move your full attention to focus on your middle finger, and you can move. your middle finger back and forth, to explore your middle finger's sensations more carefully, whether smooth, rough, course, soft, or uneven. Continue sending your awareness to the middle finger, keep the attention a little bit longer and stay here for a while.
3. Remain with your eyes closed. Turn the book to another page and feel the sensations between the fingers and the page. (Repeat as before)
4. Stay here with your feeling right now...
5. Relax your body when you breathe out and bring yourself back to this moment. Bring back your awareness with positive energy...
6. Rub your hands together energetically until they are warm and place them on your. eyes.

Additional Advice:

The principles of the three steps can be flexible and incorporated into any other situation, such as drinking a cup of coffee, waiting in line, or practicing some other daily activity.