

Saint Mary's College of California

## Saint Mary's Digital Commons

---

MATL Action Research Projects

---

Spring 2023

### Tapping into Calm and Clarity

Caroline Macarah

Follow this and additional works at: <https://digitalcommons.stmarys-ca.edu/matl-action-research>



Part of the [Educational Leadership Commons](#), and the [Teacher Education and Professional Development Commons](#)



This work is licensed under a [Creative Commons Attribution-Noncommercial-Share Alike 4.0 License](#).

Tapping into Calmness and Clarity:  
Supporting Students' Self-Regulation Using EFT Tapping and Aromatherapy

An Action Research Project

Presented to

The Faculty of the Kalmanovitz School of Education

Saint Mary's College of California

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts in Teaching Leadership

By

Caroline Macarah

Spring 2023

Copyright © 2023 by Caroline Macarah

All Rights Reserved

This action research project, written under the direction of the candidate's master's project advisory committee and approved by members of the committee, has been presented to and accepted by the faculty of the Kalmanovitz School of Education, in partial fulfillment of the requirements for the Master of Arts in Teaching Leadership degree.

---

Candidate: Caroline Macarah

---

Date

Master's Project Advisory Committee:

---

Research Advisor: Ani Moughamian, Ph.D.

---

Date

---

Faculty Advisor: Heidimarie Rambo, Ph.D.

---

Date

---

Program Director: Heidimarie Rambo, Ph.D.

---

Date

---

Dean: Carol Ann Gittens, Ph.D.

---

Date

## **Abstract**

Tapping into Calmness and Clarity:  
Supporting Students' Self-Regulation Using EFT Tapping and Aromatherapy

By

Caroline Macarah

Master of Arts in Teaching Leadership  
Saint Mary's College of California, 2023  
Ani Moughamian, Ph.D., Research Advisor

Research shows that mental health challenges in youth have steadily increased in children in the United States over the past ten years. During the COVID-19 pandemic, mental and behavioral challenges in children escalated to unprecedented levels, particularly impacting vulnerable populations. Additionally, research demonstrates that poor mental health in students is associated with academic problems at school as well as linked with decreased access to educational and employment opportunities, increased risk for chronic physical and mental health conditions and early death. The goal of this action research project was to investigate the effects of introducing EFT Tapping and aromatherapy on high school special education participants' ability to manage feelings of stress and anxiety, work towards academic goals, and support the development of self-efficacy. Participants experienced lessons about the positive and negative impacts of stress, engaged in self-monitoring of mood states, set daily goals, and participated in lessons introducing EFT tapping and aromatherapy as tools to support self-regulation. Students were empowered with information about how too much stress over time can adversely impact their ability to be present in the classroom, provided with opportunities to self-monitor levels of regulation and try new tools to support self-regulation..

## **Dedication**

This action research project is dedicated to all my students: past, present, and future who continually inspire me with their resilience, humor, and creativity

## Acknowledgements

This action research project would not have been possible without the support of many people. First, I would like to thank my cohort class of the MATL Program at St. Mary's College of California for supporting one another through the COVID-19 pandemic and making this experience so meaningful and transformative for me as a teacher and human being. Next, I would like to acknowledge and thank all my professors who held and led my cohort through this uncertain time with warmth, reassurance, good humor, skill, and compassion. Each professor offered unique talents and expertise that supported and encouraged my growth and transformation in this program. Third, I would like to express gratitude towards my faculty advisor, Dr. Rambo, for her extraordinary support throughout the development of my research project. I would also like to acknowledge and appreciate my research advisor, Dr. Moughamian for her support, guidance, and encouragement. Fourth, I would like to thank my high school students for participating in this project as well as my colleagues and school community for supporting this project.

Additionally, I would like to acknowledge and express gratitude to *The Tapping Solution and Tapping in the Classroom* for supporting teachers with materials to support introducing tapping into the classroom. I would also like to appreciate Tiffany Carole for sharing the beautiful visual to identify the aroma acupoint location on the ear.

Finally, I would like to acknowledge my family and friends for providing unwavering support throughout this project. A special note of gratitude to my husband and daughter for sparing me for the many days of class and extra hours of writing and research. Without their support, this project would not have been possible.

## Table of Contents

	<b>Page</b>
List of Figures .....	ix
Chapter	
I. Introduction .....	1
Statement of the Problem.....	3
Purpose of the Research.....	5
Action Research Question.....	6
Limitations .....	6
Positionality of the Researcher .....	7
Definitions of Terms .....	8
Implications.....	9
II. Literature Review .....	11
Overview of Literature Review .....	11
Theoretical Rationale .....	12
Review of Related Research .....	16
Conclusions.....	27
III. Method .....	29
Setting .....	32
Demographics of the Classroom.....	33
Participants.....	33
Data Collection Strategies.....	34
Procedures.....	35
Plan for Data Analysis .....	38
Summary .....	39
IV. Findings .....	41
Overview of Methods and Data Collection .....	41
Demographics of the Participants .....	44
Analysis of Perceived Stress Scale .....	45
Analysis of General Self Efficacy Inventory .....	47
Analysis of Goal Setting Questionnaires .....	51
Summary .....	53



V. Conclusions and Next Steps.....	55
Summary of Findings.....	57
Interpretation of Findings .....	59
Reflection on Limitations .....	65
Summary .....	65
Plan for Future Action .....	67
References.....	69
Appendices.....	73
A. Perceived Stress Scale Questions .....	74
B. New General Self Efficacy Inventory .....	75
C. Goal Setting Questionnaire .....	77
D. Bergamot on Ear Shenmen Visual .....	78
E. All About Stress Student Worksheet.....	80
F. EFT Tapping Point Visual.....	82

## List of Figures

### Figure

1. Analysis of Changes in Student Perceived Stress Scale .....46
2. Analysis of Changes in Individual Student Scores on Student Perceived Stress Scale (PSS) .....48
3. Analysis of Changes in Participant Scores on New General Self-Efficacy Inventory during Interventions with Aromatherapy and Tapping .....49
4. Analysis of Changes in Individual Student Scores on General Self-Efficacy Inventory ...51
5. Analysis of Changes in the Ability of Students to Meet Goals .....52

## **Chapter I**

### **Introduction**

Over the past 10 years, mental health challenges have steadily increased in children in the United States (Whiteny & Peterson, 2019). Additionally, children diagnosed with anxiety and depression have steadily risen over the course of the past 10 years (Centers for Disease Control and Prevention [CDC], 2021). During the COVID-19 pandemic, mental and behavioral health challenges in children escalated to unprecedented levels. For example, youth ages 11-17 were more likely than any other age group to report moderate to severe symptoms of anxiety or depression during the COVID-19 Pandemic (Substance Abuse and Mental Health Services Administration [SAMHSA], 2020). Moreover, more than half of the age group (11-17) reported experiencing suicidal ideation or self-harm ideation during the pandemic, reflecting, for the first time, higher rates of suicidal ideation in youth than adults. The sharpest increases in the rates of suicidal ideation were highest in youth in the following groups: LGBTQIA+, BIPOC, Native American, and multiracial (Substance Abuse and Mental Health Services Administration [SAMHSA], 2020). High school educators in United States surveyed before the start of the 2021/22 school year reported that their biggest concerns for students' adjustment to the new school year were learning deficits and anxiety about returning to in person classes (Osgood & Kimball, 2021). Teenagers in the United States surveyed prior to the start of the 2021/22 school year reported their biggest worries were falling academically behind and experiencing social anxiety (Osgood & Kimball, 2021).

As a result of the pandemic, increased numbers of students are returning to school unable to engage in learning due to struggles with emotional and behavioral health issues such as PTSD, ADHD, anxiety, depression, and negative mood states. As a mild/moderate resource teacher in

an urban high school, I noticed a sharp increase in students needing specialized academic support and instruction due to mental health and behavioral challenges in high school. Many students suffered from debilitating anxiety, difficulty starting tasks and sustaining focus with academic tasks, coping with stress, an inability to plan, execute, and organize daily activities, and managing negative emotions. Despite access to engaged and differentiated lessons, students were unable to access learning in the classroom due to struggles with self-regulation, the ability to modulate one's emotional reactions or states to enable one to engage effectively with the classroom learning environment (CAST, Self- Regulation, 9.2). Moreover, vulnerable student populations were at an increased risk of developing mental health challenges from exposure to trauma and were at greater risk for poor academic performance. In addition, research showed that students with special needs were at an increased risk for developing or worsening symptoms from pre-existing conditions during COVID-19 pandemic (de Miranda et al., 2020)

What tools do educators have to support self-regulation in the classroom? The purpose of this study was to introduce aromatherapy with essential oils and the use of EFT tapping (Emotional Freedom Technique) in the classroom to give students access to self-regulation tools. Studies suggest that EFT tapping may be an effective tool for reducing anxiety, stress, and other emotional issues in both students and teachers (Gaesser, 2020 & Lambert, 2020). Furthermore, research suggests that EFT tapping in the classroom increases positive emotions, self- esteem, and self-resilience in students (Stapleton et al., 2017). Additionally, research demonstrates that aromatherapy with bergamot and lavender essential oil can lower stress and anxiety responses in the school setting for both teachers and students (Bakhsha et al., 2011; Seo, 2000; Solomons, 2005)

## **Statement of the Problem**

The need for youth mental health services has steadily increased over the past 10 years. Although 10% of children in the United States are diagnosed with anxiety and/or depressive disorder, there is a significant shortage of mental health professionals to address the need for pediatric mental health services (Racine et al., 2020). Less than half of students in need of mental health care will receive adequate services. Furthermore, the average lag time in receiving care between the onset of symptoms and accessing mental health services is 8-10 years (On Our Sleeves, 2021).

Poor mental health in students is associated with academic problems at school. Furthermore, studies have shown that access to school based mental health programs positively impacts student success and GPA. Conversely, disparities in access to mental health services for minority children, students of color, and children with an exposure to traumatic life experiences are linked to poor academic performance at school, decreased access to educational and employment opportunities, increased risk for chronic physical and mental health conditions and early death (Larson, Chapman et al, 2017). Youth ages 11-17 reported the greatest increase in rates of depression, anxiety and PTSD during the COVID-19 pandemic. Students from disadvantaged socio-economic backgrounds and students with pre-existing challenges were especially vulnerable. The COVID-19 pandemic exacerbated symptoms of adolescents with disorders such as PTSD, eating disorders, ADHD, and autism. Additionally, surveys showed that adolescent girls were more likely to show symptoms of anxiety and depression during the COVID-19 pandemic. (de Miranda et al, 2020)

Recent court rulings in California, as well as the signed Every Student Succeeds Act (2015) acknowledged the importance of integrating evidenced based trauma informed

educational practices in schools. Furthermore, recent court rulings in California recognized that complex trauma affects student learning and should qualify as an impairment for students to receive services at school (Tuner, 2015). Substance Abuse and Mental Health Services Administration (SAMSHA) (2014) defined the trauma informed approach in schools as the ability to recognize symptoms of trauma, understand the impact of trauma, and respond by integrating practices and policies into the school that support students. Additionally, six key concepts need to be addressed in the trauma informed approach: safety, trust, peer support, collaboration, empowerment, cultural, historical, and gender issues (Substance Abuse and Mental Health Services Administration [SAMSHA], 2014). Tier 1 intervention systems focus on implementing social-emotional components into the curriculum, teaching students coping skills, and providing engaging lessons in the classroom. Tier 2 Interventions focus on providing psychoeducation about trauma, strengthening social support systems for students, and teaching self-regulation skills. Lastly, Tier 3 interventions provide targeted intensive support to struggling students with interventions such as cognitive behavior therapy, wrap around supports, and other community-based supports (Phifer and Hull, 2016).

Universal Design for Learning (UDL) recognizes the importance of providing multiple means of engagement for learners in the classroom setting. The affective networks in the brain need to be appropriately stimulated for learning. Teachers need to effectively recruit the interest of students by providing elements of choice and individual autonomy in the lesson, providing options to support students with sustaining effort and persistence throughout the lesson, and finally providing students options for self-regulation. CAST (UDL, guideline 9) defines *self-regulation* as “the ability to self-regulate- to strategically modulate one’s emotional reactions or states in order to be more effective at coping and engaging with the environment.”

I taught as a mild-moderate special education teacher in a high school in a middle- upper class residential urban area in Northern California. The high school had a diverse racial, ethnic, and cultural population, composed of approximately 35% White, 29% Asian/Pacific Islander, 6.5% Hispanic/Latino, and 14% multi-ethnic and 3% African American. The school had 5.6% English Learners and 28% fluent-English proficient students. At least 21.7% of students qualified for the Free/Reduced Price Lunch Program. The graduation rate was 93%. As a mild-moderate resource specialist, I supported a diverse group of students with mild-moderate learning differences. I noticed a steady increase in students with mental health and behavioral challenges during the COVID-19 Pandemic. In response to this growing need for self-management tools, I introduced EFT (Emotional Freedom Technique), also known as Tapping and Aromatherapy to support teachers and students in the classroom. Research suggests that EFT (Emotional Freedom Technique) is an effective tool for reducing anxiety, stress and other emotional issues in both teachers and students (Gaesser, 2020 and Lambert, 2020). Furthermore, studies show that EFT increases positive emotions, self- esteem, and self-resilience in schools (Gaesser, 2020 and Lambert, 2020). Additionally, research demonstrates that aromatherapy with essential oil was able to lower stress and anxiety responses in the school setting for both teachers and students (Bakhsha et al., 2016; Chang & Shen, 2011; Seo, 2009; Solomons, 2005)

### **Purpose of Research**

The purpose of this research was to investigate how the use of EFT tapping (EFT- Emotional Freedom Techniques) and aromatherapy affected the ability of high school students to self-regulate negative emotions, stress, anxiety, as well as to improve levels of academic resiliency in the classroom setting. According to Universal Design for Learning, brain -based research showed that dysregulated learners are not able to access even the most effectively

designed and differentiated lessons (CAST, 2018). This study investigated strategies and tools that could support students to self-regulate feelings of anxiety, stress, and overwhelm that prevented them from engaging in educational content in the classroom. Furthermore, according to the Neuro Sequential Model of Education, a trauma informed classroom requires implementation of methods to increase student engagement through supporting self-regulation (Perry, 2020).

### **Action Research Question**

This action research project investigated the following question: *How does the incorporation of two self-regulation tools in the classroom, Emotional Freedom Technique (EFT) tapping and the use of aromatherapy and aroma acupoint therapy, impact the ability of special education high school students to set and work towards academic goals, manage feelings of stress and anxiety, and support the development of self-efficacy skills?*

In response to the research question, the following hypotheses were posed:

**Hypothesis #1:** EFT tapping combined with aromatherapy and aroma acupoint therapy will improve the ability of students to independently set, work towards and meet academic goals each class period as evidenced in daily self-reflective goal setting charts completed by each student at the beginning and end of each class.

**Hypothesis #2:** EFT tapping combined with aromatherapy and aroma acupoint therapy will decrease feelings of student perceived stress and anxiety as measured by pre and post test of The Perceived Stress Scale (PSS) (Cohen, 1983).

**Hypothesis #3:** EFT tapping combined with aromatherapy and aroma point therapy will support the development of self-efficacy skills in students by empowering them to self-regulate in the classroom with a choice of self-management tools as evidenced by pre and post tests on New General Self-Efficacy Scale (Chen et al., 2001).

### **Limitations**

Limitations of this study included sample size, duration of the intervention, and the bias inherent in the student- teacher relationship. I taught in an urban high school located in the Bay



Area of Northern California. Participants in this study were diverse learners with specialized education needs supported in the resource support program. The sample size was limited to students with specialized learning needs attending this high school and receiving support through the Resource Support Class and Resource Algebra Class. Additionally, the duration of the study was limited to a period of eight weeks due to the natural time constraints of the academic cycle in the graduate degree program I was enrolled in. The time limitations of the study prevented monitoring longer term outcomes. Finally, my position as teacher- researcher may have biased the results of the study. I have cultivated teacher-student relationships with many of the students over the years that I have both taught and case-managed. Additionally, there is an inherent imbalance in power in the student-teacher dynamic.

### **Positionality of the Researcher**

I am a cis gender Caucasian female teacher. I have taught in the same district for 10 years at various levels- elementary, middle and high school in the position of a resource specialist. This is my fourth year working at the high school as a resource teacher, and some of my students have known me since elementary school. Additionally, I have case managed most of my students for one or more years in high school. Some resource students were supported by paraprofessionals throughout the day in general education classrooms as well as in resource support labs and resource subject area classes. As a resource specialist, I also worked with our mental health team, school psychologist, speech and language pathologist, occupational therapist, paraprofessionals and general education teachers to coordinate IEP (Individualized Education Plan) support services and accommodations for our students. Over the course of the COVID-19 pandemic, I have been aware of the increasing amounts of stress and anxiety that students, families, and staff have experienced. Specifically, in response to the unpredictability of

school site closures, dramatic shifts in the delivery of education during distance learning, and a myriad of stressful challenges that accompanied the transition back into the classroom from the remote learning platform due to the ongoing COVID-19 pandemic.

While the staff and administration at our high school have emphasized the need for integrating social-emotional learning classroom lessons, teachers have varying levels of knowledge and comfort with new perspectives and integrating new methods in the classroom. Some paraprofessionals and teachers may be more receptive to integrating new techniques than others. My students come from a variety of linguistic, cultural, and socioeconomic backgrounds; some may feel more comfortable with using these self-regulation tools than others.

### **Definitions of Terms**

#### ***Aroma Acupoint Therapy or AAT***

AAT is a gentle, completely safe and profoundly effective treatment modality that utilizes the energetic treatment potential of pure essential oils and acupoints combined. Treatment involves placing oils on specific acupuncture points on the body to trigger energetic changes in the individual that will bring the client back to the state of balance (Fischer et al., 2020)

#### ***Tapping (EFT- Emotional Freedom Technique)***

EFT tapping is commonly referred to as “psychological acupuncture”. The technique is like acupuncture in stimulating acupressure points, however, without the use of needles. Instead, acupressure points on the face and body are stimulated by tapping with two fingers along with a cognitive statement. EFT tapping has been researched by over 60 investigators in more than 10 countries resulting in more than 100 studies appearing in 20 peer reviewed journals (Stapelton, 2017).

### ***Neuro-Sequential Model of Education***

The Neurosequential Model of Education (NME) is based upon principles in Neurosequential Model in Therapeutics (a neurodevelopmentally-informed, biologically respectful perspective on human development and functioning) and is designed to support educators in understanding student behavior and performance in the school setting. The NME is designed to provide educators knowledge about the neuro-sequential learning process to inform teaching practice to support all learners, especially learners with adverse childhood experiences. NME is not a specific educational technique or curriculum to implement, rather NME supplies knowledge to educators about how brain development and the developmental impact that adverse childhood experiences have on the learning process and to inform teaching practices that support students in the school setting. (Neuro Sequential Network Website, 2021)

### ***Universal Design for Learning (UDL)***

“Universal Design for Learning (UDL) is a framework to improve and optimize teaching and learning for all people based on scientific insights into how humans learn (CAST, <https://www.cast.org/impact/universal-design-for-learning-udl>).”

### ***Self- Regulation***

“The ability to self-regulate—to strategically modulate one’s emotional reactions or states to be more effective at coping and engaging with the environment (CAST, Self-Regulation, 9.2).”

### **Implications**

Given the unprecedented circumstances in schools with the COVID-19 pandemic, the addition of simple, cost-effective self-management tools to support teachers and students is very important. Mental health services on school sites are severely taxed, teachers need interventions

that can be implemented in the classroom setting that address the significant social-emotional needs of students necessary to support student learning. Furthermore, providing access to EFT tapping and aromatherapy may support students in the classroom by helping students to cope with feelings of anxiety, negativity, and stress necessary to ensure all students equal access to academic content. Moreover, implementing these tools in the classroom will target specific populations of at-risk students suffering from stress responses due to the COVID-19 pandemic, more specifically, special education students with preexisting conditions such as ADHD or autism. Additionally, these tools are valuable learning supports to other vulnerable learners experiencing trauma and stress outside of school. While my high school has generally focused on infusing social-emotional principles into the classroom, the hope was to specifically target self-regulatory tools that would allow the students the ability to fully engage in the academic curriculum.

## **Chapter II**

### **Literature Review**

The purpose of this action research project was to introduce aromatherapy with essential oils and the use of Emotional Freedom Technique (EFT) tapping in the classroom to empower students to self-regulate. Research has suggested that EFT tapping may be an effective tool for reducing stress in both students and teachers (Gaesser, 2020; Lambert, 2020). Furthermore, research has suggested that EFT tapping in the classroom may increase positive emotions, self-esteem, and self-resilience in students. Additionally, studies have shown that aromatherapy with bergamot and lavender essential oils lowers stress and anxiety responses in the school setting for both teachers and students (Bakhsha et al., 2016; Liu, 2013; Seo, 2009; Solomons, 2005).

#### **Overview of Literature Review**

This literature review begins with the theoretical rationale, which establishes the basis for my action research study. Universal Design for Learning, a well-known model to inform curriculum design, seeks to integrate advances in neuroscience to support learning in the classroom. Additionally, the Neurosequential Model of Education specifically incorporates research about the impact of developmental trauma on the functioning of traumatized students in the classroom.

Secondly, the review of related research focuses on three essential categories of research that includes the importance of addressing the mental health needs of students in the classroom, use of aromatherapy and aroma point therapy in schools as a stress reduction strategy to support self-regulation, and use of EFT tapping to support student self-regulation in the classroom.

Firstly, the review of related research focuses on understanding the relationship between mental health and student school performance, particularly for students experiencing trauma and

populations with special needs. Secondly, my research focuses on the use of two promising self-regulatory tools - aromatherapy and EFT tapping in school settings. The pertinent research articles in this study were gathered from a thorough research investigation from the following academic databases: ProQuest, Google Scholar, and Dissertations and Theses. The research for this literature review was conducted using the following terms: *EFT Tapping*, *aromatherapy*, *aroma acupoint therapy (AAT)*, *Covid-19*, *mental health for students*, and *Neurosequential Educational Model (NME)*, *ADHD*, *Universal Design for Learning*

### **Theoretical Rationale**

The work of two educational theories, Universal Design for Learning (UDL) and Neurosequential Model of Education (NME), were used to connect this research study's goal of increasing students' awareness of self-regulation in the classroom and empowering learners to self-regulate in the classroom through the introduction of two novel tools, aromatherapy and EFT tapping.

#### ***Universal Design for Learning (UDL)***

UDL is a brain-based approach to classroom and curriculum instruction designed to remove barriers and maximize learning outcomes for all types of learners in the classroom. UDL integrates concepts from advances in neuroscience research and recognizes that the brain uses the following three broad networks in the learning process: representation (the “what” of learning), action and expression (the “how” of learning), and engagement (the “why” of learning). UDL emphasizes the need for thoughtful design of lessons that takes into consideration all aspects of neurodiversity in the classroom to enable greater access and engagement for all types of learners. The goal of the framework has been to facilitate inclusive

and rigorous learning environments that empower all learners to meaningfully engage in the learning process ([cast.org/impact/universal-design-for-learning-ud](http://cast.org/impact/universal-design-for-learning-ud)).

My action research focused on the engagement aspect of the learning process. UDL outlines three areas to support student engagement in learning: supplying opportunities for recruiting interest, supplying support to increase effort and persistence, and supplying options for self-regulation (CAST, 2018). Self-regulation is “the ability to self-regulate - to strategically modulate one’s emotional reactions or states to be more effective at coping and engaging with the environment (CAST, Self-regulation, 2018).” As students returned to the classroom from the COVID-19 pandemic struggling to self-regulate, students needed scaffolded instruction on how to reflect, monitor, and manage affective states. Moreover, I wanted to implement an intervention to support students that could be generalized throughout the day across various settings to facilitate affective self-regulation (CAST, Sign Post 9.3). Cook et al. (2017) examined the application of self-monitoring tools using UDL principles to support students with emotional-behavioral disorders and learning disabilities (Cook & Rao, 2018) in the general education classroom. The use of individualized self-monitoring tools to monitor progress towards behavioral and academic goals has been shown to be an effective strategy that can be implemented across all settings. With the use of a scaffolded self-monitoring tools, students could choose from a variety of self-regulation tools, including EFT tapping and aromatherapy to directly support self-regulation by engaging the stress response systems in the brain. Ultimately, the aim of the self-monitoring tool was to empower the student to reflect on affective states, be aware of multiple regulatory activities, and engage in preferred regulating activities.

### *Neurosequential Model of Education (NME)*

NME has developed as an approach that brings certain core concepts about the way the brain works to inform teaching practice. While the approach was developed to meet the needs of students with a history of trauma, the fundamentals are universal and applicable to all learners. Dr. Perry (2020), a child psychiatrist and neuroscientist, explained to educators, the fundamental principle in the NME is to recognize that the brain is involved in the learning process, learning occurs in a sequential manner, and adherence to following the inherent rules of biological organization of the brain is necessary for the learning process. In this model, the sequence of engagement for learners needs to happen sequentially and is directly tied to a specific region of the brain: REGULATE (Brainstem), RELATE (Diencephalon/ limbic) and REASON (Cortex).

The NME developed from research on the organization and development of the human brain to inform educational interventions that identify and address the dysregulation in the brain that negatively impact students in the classroom. In an interview with MacKinnon (2012), Dr. Perry shared that he developed a representational model of the human brain broken into four major anatomical and developmental structures: the brainstem, diencephalon, limbic and cortical. These structures in the brain are correlated to the development of critical capacities such as self-regulation, sensory integration, relational and cognitive skills of the individual. The model recognized the impact that early trauma has on the organization of the neural networks during the formative years of childhood. Specifically, individuals with developmental trauma are far more likely to experience dysregulation in the stress response system that originates in the brainstem and diencephalon. Some form of patterned, repetitive, rhythmic, somatosensory activity is needed for the individual to develop neural networks that support a regulated stress response. Many cultural practices in dance, song, and drumming stimulate the body's self-regulation



capacity (MacKinnon, 2012). The use of EFT tapping in the classroom is used to stimulate the inherent capacity of the individual to reorganize neural networks to support the development of a more organized self-regulation system. Additionally, aromatherapy with bergamot and lavender essential oils has been shown to have a calming and balancing effect on the stress response system in the brain.

An Australian study, *Empowering Youth to Thrive*, utilized the NME to approach employment, education and training for at-risk youth, ages 15-24 years of age. The study acknowledged current research that demonstrates the adverse impact that chronic stress from adverse childhood experiences (ACES) may have on the developing brains of children. Prolonged stress during childhood development impacts the developing neural circuitry of the brain and can adversely impact higher order thinking skills by impeding communication between parts of the brain. The *Empowering Youth to Thrive* training program integrated sensory activities aligned with the NME, such as sensory exploration, music, rhythm, movement, creativity, mindfulness, and positive attachment throughout the day to provide opportunities to increase student resilience and brain plasticity. Morning routines included activities that supported lower brain activity such as making sure participants had access to nutritious meals, adequate sleep followed by physical activity to increase engagement in mid-brain systems. Higher level thinking skills activities were planned in the afternoon after the completion of activities to support lower and mid brain engagement. Overall, results from the program indicated that the integration of NME ideas into the curriculum produced numerous benefits for youth participating in the job training program as well as positively impacted the success of youth in gaining further training and/or employment opportunities. (Keegan et al, 2020)

EFT tapping and aromatherapy are mindfulness and sensory activities that align with overall principles of the NME. Integrating activities that support the limbic system prior to engagement in academic content may support the brain in accessing higher level cortical thinking skills. Stress response mechanisms in the brain prevent smooth communication among parts of the brain and prevent access to higher level thinking skills necessary for engaging in classroom learning activities. Studies suggest that both aromatherapy and EFT tapping can directly impact the stress response system in the brain.

### **Review of Related Research**

The review of related research is organized into three sections: escalating mental health needs of students in the classroom during COVID-19, use of aromatherapy to reduce stress, and EFT tapping to support student regulation in the classroom. Each of these sections includes a summary of relevant literature and a discussion of the relevancy of the research to the present study.

#### ***Escalating Mental Health Needs of Students during COVID-19***

A systematic review of literature by de Miranda et al (2020) sought to answer how the COVID-19 pandemic impacted the mental health of children and adolescents. Researchers conducted a comprehensive and non-systemic search in four databases (PubMed, Scopus, SciELO, and Google Scholar) to understand the global impact of COVID 19 on the mental health of children and adolescents. Researchers hypothesized an increase in posttraumatic, anxiety, and depression disorders in children and adolescents given the traumatic nature of the worldwide COVID-19 pandemic that caused abrupt worldwide school closures and/or delivery of school classes delivered in a remote format. Additionally, researchers hypothesized an increase in adolescent problems such as worsening school performance, increased agitation, aggression, and

regression due to feelings of frustration with events that delayed or deprived them of important life experiences. Researchers reviewed 77 articles and selected 51 studies for inclusion. Articles presented data from surveys, cross-sectional and longitudinal studies, editorials, research letters and original papers. Many of the articles reviewed were from China; however, articles from the United States, Europe, and South America were also included.

The de Miranda and colleagues' (2020) review found that children and adolescents reported an overall decline in mental health in general due to social isolation, loneliness, and income reduction during the COVID-19 pandemic. The demand for mental health services increased; however, a simultaneous lack of mental health services during the pandemic was reported. School closures heightened the lack of access to mental health services for children and adolescents who rely on school based mental health services in the United States. Children from all developmental age ranges had high rates of depression, anxiety, and post-traumatic symptoms as expected in the wake of any disaster. Older adolescents and college students exhibited more depressive symptoms than younger children. College students reported more symptoms of depression, anxiety, and somatic issues than primary school students. Studies showed that adolescent girls were more likely to present symptoms of anxiety and depression. Children and adolescents with pre-existing mental health conditions were found to be more vulnerable to developing new mental health conditions during the pandemic. Adolescents from families with more significant financial hardship were more likely to exhibit increased depressive symptoms and lower belongingness. Finally, the meta-analysis found that the pandemic exacerbated mental health outcomes in populations with disorders such as PTSD, eating disorders, Attention -Deficit -Hyperactivity -Disorder, and Autism. One study reported that ADHD symptoms were exacerbated during the COVID-19 outbreak, children showed increased irritability and more

challenging behaviors. Children with ADHD and Autism struggled with the abrupt change in routine and lack of access to the structure of the classroom and school schedule.

Data collected from the Child Mind Institute (Osgood et al., 2021) demonstrated that the negative impacts of the COVID-19 pandemic were concentrated in uniquely vulnerable populations that included poor kids, BIPOC kids, LGBTQ+ kids, those with health conditions such as anxiety, depression, ADHD, especially those without access to support services. Additionally, kids with autism and learning disabilities were disproportionately negatively impacted by the COVID-19 pandemic. Moreover, studies have found that approximately half of the estimated 7.7 million children in the United States who had a treatable mental health disorder in 2016 did not receive adequate treatment (Whitney & Peterson, 2019).

A study by Larson et al. (2017) reviewed multiple studies conducted between 2003-2013 that examined the relationship between US School Based Mental Health (SBMH) programs and childhood trauma's effect, mental health care disparities, or SBMH impact on school achievement. Seven of the studies revealed profound disparities in access to pediatric mental health services in the United States that most significantly impacted BIPOC students and socio-economically disadvantaged students. Even though approximately 80% of US children and adolescents have experienced trauma in the form of victimization, up to 70% of children and adolescents with mental health disorders will not receive mental health treatment. Furthermore, exposure to childhood trauma is associated with academic difficulties in school, risky sexual behavior, and substance abuse (Holt et al., 2007).

These studies highlight the escalating mental health needs in children and adolescents, the disparity of services relative to the degree of need and the inequity in the availability of mental health services to different populations. Moreover, these studies highlight the benefits of

addressing mental health needs of students in the school setting and the tragic long-term consequences of not addressing these needs.

### *Use of Aromatherapy to Reduce Stress*

The beneficial effects of aromas from essential oils such as lavender and bergamont have been investigated in several different studies across various settings. The aromas from essential oils have been shown to be an effective tool for stress reduction and to positively influence mood states. A study at a Korean high school (Seo, 2009) investigated the effect of aromatherapy upon stress and stress response in teenagers. A two-group cross-over design was used for this study. The experimental treatment was lavender aroma essential oil inhalation, and the placebo treatment was carrier oil inhalation using a necklace. The sample included 36 female high school students. Fisher's exact test, t-test, and a paired t- test using the SPSS/WIM program were used to analyze the data. Analysis of the data showed that stress responses were significantly less in participants receiving the aroma inhalation. The study showed that the use of aroma inhalation with teenagers may be an effective stress management technique. Another study in Korea (Won and Choi, 2017) investigated the use of aroma inhalation with 49 middle school students using a randomized control group with a pre and posttest design. Students complete a pre and post inventory to measure academic self-efficacy, academic stress, suicidal ideation. Student saliva samples were collected to measure changes in cortisol levels. Results from the study suggest that aromatherapy using an aroma stick is an effective stress management tool to support students in reducing academic stress and increasing self-efficacy in middle school students. However, the use of essential oil blends to reduce stress symptoms did not impact suicidal ideation in middle school students. Future lines of investigation include further comparative studies with other

essential oils that are known to be stress reducing and differing modes of application of essential oil.

A recent study in China (Ma, 2022) investigated the effect of ambient aroma in a middle school classroom using three parallel classrooms with pre and posttest measuring academic emotions. The study included 109 middle school students placed in three different classrooms: one with aroma of wild orange diffused daily, one with wild orange diffused into the classroom every other day, and a classroom with only water diffused into the classroom. Students were administered a pre-test and post-test after eight weeks using the Adolescent Academic Emotion Questionnaire. Results showed that students in classrooms with ambient aroma of wild orange had significantly higher scores for joy, hope, positive high-arousal academic emotion and relaxation as well as significantly lower scores in anger and negative high-arousal academic emotion as compared with students in classroom where only water was diffused.

A double-blind clinical trial at a medical sciences university (Bhakhsha et al., 2016) compared the effects of lavender and citrus aromatherapy on test anxiety in 81 enrolled female students. The study found that after inhaling the smell of both plant aromas, lavender and citrus, participants showed a decrease heart rates as well as a decreased level of anxiety as measured by the Sarason Anxiety Test. The study suggests that student test anxiety may be positively impacted with the use of aromatherapy with both lavender and citrus essential oils.

Another qualitative research study conducted by Godfrey (2009) with adolescent male students aged 11-14 at a school in England also found the use of essential oils to support symptoms of ADHD promising. Godfrey introduced the students to essential oils known to support emotional regulation to support learning for these students struggling with emotional and behavioral regulation. Students, parents, and teachers were educated about the use of essential

oils and participants were able to use them in both home and school settings to support emotional and behavioral regulation. Godfrey conducted six semi-structured interviews with the parents of the boys supported by special education at school. Godfrey provided qualitative data derived from interviews with parents that essential oils may provide a positive support in the management of the symptoms of ADHD. The study was hopeful that the qualitative evidence gathered would inspire future investigations regarding the use of essential oils to support learning for students struggling with emotional and behavioral regulation. The study also highlighted favorable experiences of the use of the intervention across settings in both the home and at school as well as the importance of giving students an active choice in the essential oil of choice to use.

Research (Solomons, 2005) conducted in England investigated the use of aromatherapy massage to increase shared attention behaviors in children with autistic spectrum disorders and severe learning difficulties. Four children, three boys and one girl, aged 5-6 years old participated in this study. All four of the children were diagnosed with both autism and specific learning disability and attended the same school for children with severe and complex learning difficulties. The study followed a case study approach to understanding specific behavior (shared attention) in the context of aromatherapy massage. Pre- and post-observations of students, interviews with school staff (one teacher and two nursery nurses) and parents were conducted to ascertain the nature of shared attention behaviors the child displayed at home and at school. This study found that the use of aromatherapy and touch delivered in a therapeutic learning environment positively impacted shared attention behavior in pre-school/ kindergarten students with autism and specific learning disabilities. Given that the research was carried out over a 10-month period and no follow-up assessment was possible, future investigation into

longer term effects of the therapy would be insightful. Additionally, research comparing the effectiveness of aromatherapy massage with comparable therapeutic educational modalities would be helpful.

Multiple recent studies of aromatherapy with bergamot essential oil have been conducted across varying settings and have demonstrated the effectiveness of the essential oil to calm and regulate the stress response in the nervous system.

For example, research (Chang & Shen, 2011) conducted in an elementary school in Taiwan found that teachers were able to find stress relief using aromatherapy with bergamot. In this study, 54 elementary school teachers participated to evaluate the effectiveness of bergamot essential oil in relieving work-related stress in the classroom. Researchers monitored changes in teachers' blood pressure and autonomic system parameters that were recorded five minutes before and five minutes after teachers were given bergamot aromatherapy in a spray form for 10 minutes. All parameters measured were significantly impacted for most subgroups of teachers indicating that the parasympathetic nervous system was activated after aromatherapy. The results of this study suggest that the use of aromatherapy with bergamot can help to ameliorate the effects of work-related stress in teachers in the classroom.

Additional research in Taiwan focused on the physical effects of aromatherapy in alleviating work-related stress on elementary teachers in Taiwan (Liu et al., 2013). The study had 29 participating teachers divided into two double blind groups. The first group received natural bergamot essential oils extracted from plants and the second group received a chemically synthesized essential oil as a placebo. The team analyzed the stress relieving effects of aromatherapy on teachers with various workloads by examining heart rate variability to evaluate the autonomic nervous system activity. The study showed that only aromatherapy with the



natural plant derived bergamot essential oil was effective in relieving work-related stress in most subgroups of teachers. Moreover, the study found that the aromatherapy was not as effective in the subgroups of teachers with an abnormal body mass index or teachers having a heavy workload. This study showed the importance of using a pure plant derived extract of bergamot essential oil to ensure stress relieving effects of aromatherapy.

A study (Watanabe et al., 2015) evaluated the effectiveness of aromatherapy with bergamot essential oil on mood states, parasympathetic nervous activity, and salivary cortisol changes in 41 healthy women. Participants were exposed to three experimental set-ups (rest only, rest with water vapor only, and rest with bergamot infused water vapor) for 15 min exposure intervals. After each interval, participants completed surveys to examine changes in mood, anxiety and fatigue. Additionally salivary samples and changes in heart rates were recorded. The study demonstrated that bergamot infused with water vapor positively impacted the physiological and psychological states of participants in a relatively short amount of time.

Another study (Han et al., 2017) looked at the effect of diffusing bergamot essential oil in a mental health waiting room in Utah. Fifty-seven participants were included in the study, including 50 women aged 23-70 years. Changes in participants perceived sense of well-being after 15 min of exposure to a diffusion of bergamot in the waiting room area were measured from the Positive and Negative Affect Scale that participants completed. The study found that the inhalation of bergamot in the waiting area increased participants' sense of well-being by 18%. The study suggests that aromatherapy may positively impact mood and be a useful adjunct tool to improve mental well-being.

Additionally, for doctoral research, Daniels (2020) investigated the use of aromatherapy with bergamot as a supplemental tool to alleviate symptoms of PTSD in first- responders

suffering from symptoms of PTSD over a two-week period. Results of the research suggest that integrating aromatherapy with bergamot as a supplementary tool may support individuals struggling with PTSD symptoms. Data collected from interviews with participants showed that bergamot essential oil produced a calming effect, improved sleep, reduced anxiety, increased positive mood, enhanced concentration, and reduced avoidance behaviors.

Research (Fischer et al., 2020) at school-based health centers in New York City Schools looked at the efficacy of offering aroma acupoint therapy for symptom management in adolescents. Fifteen students with non-specific complaints such as headache, nausea, dizziness etc were offered treatments with aroma acupoint therapy in school-based health centers. Pain scores were recorded in eight out of 15 participants. Pain scores indicated a decrease in pain and staff noticed that most participants had a decrease in pain. The study found that both students and staff were receptive to integrating aroma point therapy and has the potential to be a safe and inexpensive alternative modality to alleviate symptoms of pain and discomfort in adolescents. The use of aroma acupoint therapy expands the understanding of the energetic qualities of essential oils in relationship to the meridian system in Chinese acupuncture.

### ***EFT Tapping to Support Student Self-Regulation in the Classroom***

Multiple studies using EFT Tapping in high schools have been conducted to assess possible use to reduce anxiety, promote positive emotions, and support achievement of goals. Additionally, research has focused on specific sub-populations of high school students such as gifted students, students struggling with math and students struggling with anxiety. Research (Stapelton et al., 2017) conducted in two Australian high schools investigated the use of EFT tapping to support student well-being. Study participants included 204 students enrolled in academically advanced classes in two different high schools. In this controlled clinical trial, 80

students were assigned to EFT tapping intervention group from the first school and 124 participants from the second school acted as a waitlist control. The average age of the participants was 14.8 years and more than 50% of the participants were female. The EFT tapping interventions took place at school during school hours in the form of five weekly sessions for 75 minutes each and an additional follow-up session one year later. Participants completed psychological measures at the start of the program and at 6- and 12-month follow-up sessions. EFT tapping interventions and student surveys were administered by a registered clinical psychologist and psychotherapist with EFT training. Results showed areas of greatest impact over time in the areas of fear of failure and difficulties. The study found that the largest statistical change over a 12-month period occurred in fear of failure. Additionally, 59% of participants rated the skills and information learned as useful and 68% rated the EFT information as very easy or quite easy to understand. The results of this study suggest that some students may receive improvement in functioning at school by integrating lessons with EFT tapping information.

Additional work by an American researcher team (Sezgin et al., 2009) conducted a randomized blind control study to examine the effects of two psychophysiological techniques (Progressive Muscular Relaxation and Emotional Freedom Technique) on test anxiety in high school students. Participants included 312 high school students, 70 of whom were identified as having high levels of test anxiety. Participants in the study were randomly assigned to either a control group who received progressive muscle relaxation techniques or EFT treatment. While both groups reported a significant decrease in test anxiety, a greater decrease was observed for students who received EFT.

Furthermore, a 2014 study (Aremu & Taiwo, 2014) investigated the effects of numerical cognition and EFT on mathematics anxiety among 120 secondary students in three public secondary schools in Ibadan, Nigeria. Participants had histories of consistently low achievement in mathematics. A pseudo-dyscalculia scale was used to identify those participants with a mathematics phobia. Participants also completed a Mathematics Anxiety Scale, Mathematics Efficacy Scale, and Mathematics Achievement Test. Participants were allocated to one of three groups: Numerical Cognition, EFT or a control group. Numerical Cognition proposes students are more likely to find a solution to a problem when they concentrate on their successes rather than their failures. The trial occurred over 10 weeks during the school term. Results of the study demonstrated that the EFT intervention was more effective than the Numerical Cognition approach as demonstrated by the reduction in students' mathematics anxiety at post-test, especially among students with high mathematics efficacy.

Moreover, research conducted by Gaesser and Karan (2017) examined the efficacy of EFT Tapping as a tool for gifted students to manage anxiety in school. Research suggests that gifted children may experience additional stressors due to their unique characteristics, and they may suffer from higher levels of stress due to perfectionistic tendencies, heightened sensitivity, social challenges, and additional external pressures. This study took place in 10 schools (eight public/two private; four high schools/six middle schools) in two north-eastern states in America. There were 63 high-ability students (aged 10-18 years) who were identified as anxious. There were 18 males and 45 females, and all were within the top 15%–20% of their peer groups academically. All participants completed the Revised Children's Manifest Anxiety Scale-2, and all scored at moderate to high anxiety levels. Students were randomly allocated to an EFT group, a cognitive behavior therapy (CBT) group, or a waitlist control group (all groups had 21

students). Those students in the CBT or EFT treatment groups received three individual sessions of treatment. Sessions occurred over a 5-month period, with most occurring not less than one week or more than two weeks apart. The EFT group showed significant reductions in their anxiety levels compared with the waitlist control group; and while the CBT students showed a reduction in anxiety too, they did not differ significantly from the EFT students. Research findings suggest that interventions with EFT to reduce anxiety in high performing teenagers is an effective intervention on par with the current gold standard intervention of cognitive-behavioral therapy.

An additional case study on the efficacy of EFT tapping for dyslexia was reported by a London therapist (McCallion, 2012). The study detailed the use of EFT tapping to support a young woman in her 20s suffering from symptoms of dyslexia. Over three sessions with EFT tapping, the woman was able to explore past distressing memories at school related to learning. By the end of the third EFT session, the woman was able to read easily and fluently with comprehension. Given the positive outcome EFT tapping had to relieve symptoms of dyslexia, further study using this intervention with a larger number of participants would be of interest to understand potential benefits of EFT tapping to support students with learning differences.

## **Summary**

Theoretical research compiled in the Universal Design for Learning and the Neuro Sequential Model of Education provided the theoretical foundation for this study. Reviewed research explored how COVID-19 exacerbated the mental health needs of children and adolescents, the benefits of using aromatherapy to support the nervous system in regulating the stress response, and the benefits students may receive from EFT tapping to support regulate feelings of anxiety and stress. The intention of this action research project is to investigate the

impact of aromatherapy with bergamont essential oil combined with EFT tapping to support students with learning differences in reducing stress, increasing self- efficacy and attaining goals at school.

The next chapter describes the methodology used to implement the study. Three different measures were used to determine the impact that EFT tapping and aromatherapy had on the ability of special education high school students to set and work towards academic goals, manage feelings of stress and anxiety, and support the development of self-efficacy skills. Participants completed the Perceived Stress Scale and New General Self-Efficacy Inventory as well as completed individual goal setting inventories.

## **Chapter III**

### **Methods**

At my high school, administration and staff have focused for the past year on integrating social-emotional learning into classroom lessons and routines to support all high school students during this transition back to in person instruction from COVID-19 school closures. In October 2021, student leadership on campus reported that students were struggling with stress management during this transition back to in-person classes from distance learning due to the COVID-19 Pandemic. Additionally, the need among special education students to address transitional stress remains a significant concern in the classroom. During the COVID-19 pandemic, mental and behavioral health challenges in children have escalated to unprecedented levels. For example, youth ages 11-17 are more likely than any other age group to report moderate to severe symptoms of anxiety or depression during the COVID-19 pandemic (SAMHSA, 2020). Moreover, more than half of the age group (11-17) reported experiencing suicidal ideation or self-harm ideation during the pandemic, reflecting, for the first time, higher rates of suicidal ideation in youth than adults. The sharpest increases in the rates of suicidal ideation are highest in youth in the following groups: LGBTQIA+, Black, Native American, and multiracial individuals (SAMHSA, 2020).

Poor mental health in students is associated with academic problems at school. Furthermore, studies have shown that access to school based mental health programs positively affected student success and GPA. Conversely, disparities in access to mental health services for BIPOC students and children with an exposure to traumatic life experiences are linked to poor academic performance at school, decreased access to educational and employment opportunities,

increased risk for chronic physical and mental health conditions and early death. (Larson et al., 2017)

Youth ages 11-17 have reported the greatest increase in rates of depression, anxiety and PTSD during the COVID-19 pandemic. Students from disadvantaged socio-economic backgrounds and students with pre-existing challenges are especially vulnerable as the pandemic has exemplified symptoms of adolescents with disorders such as PTSD, eating disorders, ADHD, and Autism. Additionally, studies have shown that adolescent girls were more likely to show symptoms of anxiety and depression during the pandemic. (de Miranda et al., 2020) Moreover, recent court rulings in California recognized that complex trauma affects learning and is a qualifying impairment for students to receive services at school (Turner, 2015). SAMSHA (2014) defined the trauma informed approach in schools as the ability to recognize symptoms of trauma, understand the impact of trauma, and respond by integrating practices and policies into the school that support students.

In response to this growing need for self-management tools, I chose to investigate the use of EFT tapping and aromatherapy to support teachers and students in the classroom. Studies suggested that EFT tapping may be an effective tool for reducing anxiety, stress and other emotional issues in both teachers and students (Gaesser, 2020; Lambert, 2020). Additionally, studies where EFT tapping have been implemented have resulted in increases in positive emotions, self-esteem, and self-resilience in students in the school setting (Gaesser, 2020; Lambert, 2020). Aromatherapy with essential oil has been shown to lower stress and anxiety responses in the school setting for both teachers and students. (Bakhsha et al., 2016; Chang & Shen, 2011; Seo, 2009; Solomons, 2005)



The purpose of my action research project was to incorporate two self-regulation tools in the classroom: EFT tapping and use of aromatherapy/aroma acupoint therapy, with the intention of supporting the ability of special education high school students to set and work towards academic goals, manage feelings of stress and anxiety, and support the development of self-efficacy skills. Students benefited from exposure to self-regulatory tools that they may not otherwise have had access to trying. Students were empowered through the process of discovering new self-regulatory tools and assessing which tools may or may not work for them in different situations.

My action research question was: *How does the incorporation of two self-regulation tools in the classroom: EFT tapping and use of aromatherapy and aroma acupoint therapy, impact the ability of special education high school students to set and work towards academic goals, manage feelings of stress and anxiety, and support the development of self-efficacy skills?*

Firstly, I hypothesized that EFT tapping combined with aromatherapy and aroma acupoint therapy would improve the ability of students to independently set and work towards academic goals each class period as evidenced in daily self-reflective goal setting charts completed by each student at the beginning and end of each class. Secondly, I hypothesized that EFT tapping combined with aromatherapy and aroma acupoint therapy would decrease feelings of student perceived stress and anxiety as measured by pre and posttest of The Perceived Stress Scale (PSS) (Cohen, 1983). Finally, my last hypothesis was EFT tapping combined with aromatherapy and aroma acupoint therapy would support the development of self-efficacy skills in students by empowering them to self-regulate in the classroom with a choice of self-management tools as evidenced by pre and post tests on New General Self-Efficacy Scale (Chen et al., 2001).

## Setting

I am a mild-moderate special education teacher in a high school in an urban residential area of approximately one square mile, located in the San Francisco/ East Bay Area. The area has a diverse population, 32% of residents are foreign born, and 73% have completed a bachelor's or graduate degree. Many families are attracted to the area because of its strong support for education. At the time of this inquiry, the student population of the high school was roughly 1100 students composed of approximately 35% White, 29% Asian/Pacific Islander, 6.5% Hispanic/Latino, 14% multi-ethnic, and 3% African American learners. The school was composed of roughly 5.6% English learners and 28% fluent-English proficient students. At least 15% of students qualified for the free/reduced price lunch program. Additionally, the graduation rate was around 93%. The teaching faculty included over 60 classroom teachers (50 full time and 14 part-time), at least 40 of whom hold graduate degrees. The pupil-teacher ratio is 20 to 1. There are three administrators and five guidance counselors, 2 of whom work part time.

As a mild-moderate resource specialist, I support a diverse group of students with mild-moderate learning differences that qualify for special education services primarily under the categories of Specific Learning Disability, Autism, Emotional Disturbance and Other Health impairment. I have noticed a steady increase in students with mental health and behavioral challenges during the COVID-19 pandemic. Many students struggle with symptoms of anxiety, depression, inability to start tasks, sustain focus, and regulate emotions in the school setting. This is consistent with the prediction that during COVID-19 pandemic symptoms of post-traumatic stress, anxiety, and depression will increase in adolescent students and will manifest in the classrooms as feelings of frustration, worsening school performance, agitation, aggression, and overall regression (de Miranda et al, 2020).

## **Demographics of the Classroom**

During the time of this study, I taught three resource support classes ranging in size from 5-14 students as well as a resource support math class that was approximately 14 students. Learners in resource support labs and resource support math class, ranged in age from 15-18 years of age. All learners in resource support classes were identified as special education students with mild -moderate learning differences that required specialized instruction as outlined in Individualized Educational Learning Plans (IEPs). Learners qualified for special education services in the following primary categories: Specific Learning Disability (61%), Autism (11.5%), Other Health Impairment (11.5%), and Emotional Disturbance (11.5%). All students in my resource support lab and math class were invited to participate in my project. I introduced the project to my students in class with a script that was read aloud in small groups to ensure that all learners had the opportunity to hear and ask clarifying questions (See Appendix). Students were also provided with a letter of introduction about my project with a student google consent form that was posted on google classroom for review (See Appendix). A separate letter and Google consent form was provided for students aged 18 years old (See Appendix). Simultaneously, a letter of introduction about the project was electronically sent home to all parents with a Google form for consent.

## **Participants**

Consent was received for 19 students. Two students declined to be participants in the project and elected not to participate in the classroom activities. Nineteen participants from across all four classes took part in the research study; however, only 10 participants completed all three surveys (baseline, aromatherapy, tapping) that were a part of the study. Thus, the data for only those 10 students was included in the analysis. These 10 participants included two girls

(20%) and eight boys (80%). All participants attended my resource support skills lab or resource algebra lab class. The 10 participants included in the post-intervention data analysis qualified for special education services in the following primary categories: five (50%) students with a classification of Specific Learning Disability, three (30%) students with a classification of Autism, and two (20%) students with a classification of Other Health Impairment.

### **Data Collection Strategies**

Three different measures were used to determine the impact that EFT tapping, and aromatherapy had on the ability of special education high school students to set and work towards academic goals, manage feelings of stress and anxiety, and support the development of self-efficacy skills.

#### ***Perceived Stress Scale (PSS)***

Firstly, the PSS, a short 10 question inventory (Appendix A), was administered to learners at three different intervals in the project to determine any changes in perceived level of stress in students. The PSS, developed by Cohen and colleagues (1994) is a widely used psychological instrument used to measure the perception of stress. The 10-item measure is a Likert-like rating scale that aims to measure the perception of stress through a series of 10 questions designed to ascertain how unpredictable, uncontrollable, and overloaded the respondent finds themselves in life.

#### ***New General Self-Efficacy Inventory***

Secondly, the New General Self-Efficacy Inventory (Appendix B), a brief eight question inventory (Chen et al., 2001) was used at three different intervals in the project to determine any changes in the learners' level of self-efficacy. The New General Self-Efficacy Scale was created by Chen, an organizational psychologist, and was designed to assess how much respondents

believe they can achieve goals despite challenges. Bandura and colleagues (1996) found that high self-efficacy predicts academic success in students.

### ***Goal Setting Questionnaire***

Finally, students completed a goal setting questionnaire (Appendix C) at the start of each class period and reflected on progress at the end of the class period. Students were asked to reflect on their level of regulation at the start of class, choose a self-regulation tool, and then set academic goals to work towards for the duration of the class. Students reflected on progress towards goals in the last five minutes of each class period.

### **Procedures**

The study took place over 10 weeks from late February 2022 to early May 2022 and consisted of three intervals: pre-intervention (one week), the intervention (nine weeks), and the post-intervention. The intervention was divided into two phases: phase one (five weeks) and phase two (four weeks). During the pre-intervention phase, students and parents were introduced to the project and invited to participate. The intervention consisted of two phases that introduced two novel self-regulatory tools: aromatherapy and EFT tapping. Participating students completed questionnaires at regular intervals to track changes in perceived stress and self-efficacy. Students also completed a daily goal setting sheet to evaluate the level of alertness and set goals for the class period. Data for the surveys was collected on surveys with google forms and students used paper copies of daily goal setting sheets in the classroom.

### ***Pre-Intervention Phase***

During the pre-intervention phase, students were given a verbal scripted introduction to the project in class, provided with a written invitation to participate in my research project in class. A script was read aloud to students in small groups in class to allow time for clarifying

questions as well as to ensure the students could hear the teacher speaking. Due to COVID-19, multiple air purifiers were running inside the classroom and hallway, all windows were open, and teachers and students were fully masked. These conditions made communication challenging, delivering the script to small groups enabled better communication in terms of voice projection and allowing students to interject if needed during the script. Additionally, students ages 14-17 received an introductory letter with a consent form that was posted to Google classroom. Students aged 18 received an introductory letter with another consent form. All parents, regardless of student age, received an introductory letter as well as a Google consent form via email.

### ***Intervention***

**Phase One.** The Intervention was broken into two phases. In Phase One (duration 5 weeks), students viewed the short video, “What is Stress?” produced by Strong Minds, Strong Kids, Psychology Canada (2013) about stress: positive aspects of stress, signs of an overstressed system, and potential tools to support rebalancing the nervous system. Students completed a worksheet to support comprehension (Appendix E) in the first week. Learners were then asked to complete the PSS, a short 10 question inventory (Cohen, 1983) as well as the New General Self-Efficacy Scale, a brief eight question inventory (Chen et al., 2001). Both surveys were posted to Google classroom in a Google form format for participants to complete. Finally, students completed a paper copy of a Daily Goal Setting Questionnaire to set tangible work goals to work on for the remainder of the class period.

During the second week, aromatherapy and aroma acupoint therapy was introduced to students by the teacher. The teacher introduced two therapeutic grade essential oils (lavender bergamot) that are commonly used to relieve stress. In week 2, learners were given an

opportunity to sample each essential oil, as well as, provided with safety tips for use of essential oils such as proper dilution of essential oil, photosensitivity of certain oils, and patch test on skin with drop of diluted essential oil to check for any reaction/irritation. Due to COVID-19 and masking mandates, student sampling was done with masks in place throughout the duration of any activity. A small drop of the diluted essential oil was placed on the tip of a Q-tip so that students could easily slip under the side of the mask and place under their nostril in a comfortable position. Students were allowed to choose an essential oil for a stick/roll on for use as needed. Learners were given a visual handout to locate the acupressure point Shen Men (Appendix D) on the ear to support acupoint therapy with bergamot. Students continued to complete a daily Goal Setting Questionnaire at the start and end of each class period to monitor progress with completion of academic tasks. Phase One lasted for a period of five consecutive weeks (2/28/22- 4/1/22). At the end of the five-week period, students again completed the PSS, a short 10 question inventory (Cohen, 1983) as well as the New General Self-Efficacy Scale, a brief 8 question inventory (Chen et al., 2001).

**Phase Two.** This phase lasted for a duration of four weeks. Students were given an introductory lesson to the second self-management tool, EFT tapping, to use in addition to aromatherapy. Students were given a brief introductory lesson on video, How to Tap with Jessica Ortner (Tapping Solution, 2007) about tapping. A short instructional video showing the tapping sequence was posted to Google classroom to allow students easy access to review. Learners were given a visual guide provided in *Tapping in the Classroom Teacher's Manual* (Stapleton, 2017) to support recognition of tapping acupressure points (Appendix F). Students were also given a sentence stem for cognitive statements to use while tapping. Students continued to have access to aromatherapy tools throughout phase 2 and continued to complete a

Goal Setting Questionnaire at the start and end of each class period. A visual chart with EFT tapping sequence and respective sentence stem was placed in a visible location in the classroom for easy student reference throughout the four-week duration of phase 2, learners continued to complete a daily Goal Setting Questionnaire at start and end of each class period to monitor progress with completion of academic tasks. At the end of the four-week tapping intervention, students again completed the PSS, a short 10 question inventory (Cohen, 1983) as well as the New General Self-Efficacy Scale, a brief 8 question inventory (Chen et al., 2001).

### ***Post-Intervention***

Quantitative data gathered from the Perceived Stress Scale (PSS), a short 10 question inventory administered to learners at three different intervals in the project was analyzed to look for changes in the mean, median, and mode classroom values. Quantitative data gathered from New General Self-Efficacy Scale, a brief eight question inventory (Chen et al., 2001) administered at three different intervals in the project to determine any changes in the learners' level of self-efficacy was analyzed to look for changes in the mean, median, and mode classroom values. Finally, qualitative analysis was conducted on the Goal Setting Sheets to look for trends in student goal setting activity, and perceived changes in self-regulation states before and after engaging in aromatherapy and/ or tapping.

### **Data Analysis**

I analyzed data gathered from three different measures administered at regular intervals over the course of the intervention. Quantitative data gathered from the PSS, a short 10 question inventory administered to learners at three different intervals in the project was analyzed to look for changes in the mean, median, and mode values. A baseline value for this was established at the start of the intervention in Phase 1. The survey was administered to learners after five weeks



of aromatherapy intervention. A comparison between the baseline value and value after the intervention was made to look for any changes in perceived stress in participants. In phase two of the intervention, the PSS was administered at the end of a five-week interval that incorporated tapping with aromatherapy. The data was again analyzed to look for changes in student perceived stress level during phase 2 of the intervention.

Quantitative data gathered from New General Self-Efficacy Scale, a brief eight question inventory (Chen et al., 2001) administered at three different intervals in the project to determine any changes in the learners' level of self-efficacy was analyzed to look for changes in the mean, median, and mode classroom values. A baseline value for this was established at the start of the intervention in Phase 1. The survey was administered to learners after five weeks of the aromatherapy intervention. A comparison between the baseline value and value after the intervention was made to look for any changes in student self-efficacy.

Finally, qualitative analysis was conducted on the Goal Setting Questionnaires to look for trends in student goal setting activity, and perceived changes in self-regulation states before and after engaging in tapping and aromatherapy.

## **Summary**

In summary, the purpose of my action research project was to incorporate two self-regulation tools in the classroom: EFT tapping and use of aromatherapy/aroma acupoint therapy, with the intention of supporting the ability of special education high school students to set and work towards academic goals, manage feelings of stress and anxiety, and support the development of self-efficacy skills. Chapter III explored the implementation of my action research project in three phases: pre-intervention, intervention, and post-intervention. In the pre-intervention stage of my project, students and parents were introduced to the project and invited

to participate. Letters of invitation and consent forms were emailed to students and parents. In Phase Two of the intervention, two self-regulatory tools, aromatherapy and tapping, were introduced to students. In the post- intervention phase, quantitative data was gathered from the PSS and the New General Self- Efficacy Scale. Qualitative data was gathered from Goal Setting Questionnaires that learners completed during class periods.

This chapter includes information about the setting of my project, student participants, triangulation of data sources and instruments that were used to measure responses from study participants, procedures used to implement the project, and methods that were used to gather and analyze data. The next chapter will provide a discussion and analysis of the data gathered.

## Chapter IV

### Findings

In response to a growing need for self-management tools in the classroom, I chose to investigate the use of EFT tapping and aromatherapy/aroma acupoint therapy to support teachers and students in the classroom. Studies suggest that EFT tapping may be an effective tool for reducing anxiety, stress and other emotional issues in both teachers and students (Gaesser, 2020; Lambert 2020). Additionally, studies have shown that EFT tapping resulted in increased positive emotions, self-esteem, and self-resilience in students in the school setting (Gaesser, 2020; Lambert, 2020). Studies suggest that aromatherapy with essential oil may lower stress and anxiety responses in the school setting for both teachers and students (Bakhsha et al., 2016; Chang & Shen, 2011; Seo, 2009; Solomons, 2005).

The purpose of my action research project was to incorporate two self-regulation tools in the classroom: EFT tapping and use of aromatherapy/aroma acupoint therapy, with the intention of supporting the ability of special education high school students to manage feelings of stress and anxiety, support the development of self-efficacy skills, and their ability to set and achieve academic goals. My action research question was: *How does the incorporation of two self-regulation tools in the classroom: EFT tapping and use of aromatherapy/ aroma acupoint therapy, impact the ability of special education high school students to set and work towards academic goals, manage feelings of stress and anxiety, and support the development of self-efficacy skills?*

### Overview of Methods and Data Collection

The purpose of my action research project was to incorporate two self-regulation tools in the classroom: EFT tapping and use of aromatherapy/aroma acupoint therapy, with the intention

of supporting the ability of special education high school students to set and work towards academic goals, manage feelings of stress and anxiety, and support the development of self-efficacy skills. Overall, the students in this study benefited from exposure to self-regulatory tools that they may not otherwise have had access to trying. They also were empowered through the process of discovering new self-regulatory tools and assessing which tools may or may not work for them in different situations.

Three different measures were used to assess the impacts that EFT tapping, and aromatherapy/aroma acupoint therapy had on the ability of special education high school students to manage feelings of stress and anxiety, support the development of self-efficacy skills, and set and work towards academic goals. Firstly, the Perceived Stress Scale (PSS), a short 10 question inventory, was administered to students at three different intervals during the intervention stage of the study to determine any changes in students' perceived level of stress after the introduction of novel self-regulations tools (aromatherapy and tapping). Participants completed the first PSS the first week of the study before the introduction of the first self-regulation tool, aromatherapy, to establish a baseline score. Participants completed a second PSS at the end of phase one (week four) to assess any changes after the introduction of aromatherapy. Next, participants were introduced to tapping beginning in week six of the intervention phase. At the end of the nine-week interval, participants completed the third and final PSS. The PSS, developed by Cohen and colleagues (1994) is a widely used psychological instrument which measures the perception of stress. The 10 item Likert- like rating scale measures the perception of stress through a series of 10 questions designed to ascertain how unpredictable, uncontrollable, and overloaded the respondent perceives themselves in life. Individual scores for the PSS are obtained by tallying the points for each of the 10 responses. Individual scores on

the PSS ranged from 0-40. Scores ranging from 0-13 are considered low stress range, scores ranging from 14-26 are in the moderate stress range and scores in the range of 27-40 are high perceived stress range. (Appendix A)

Secondly, the New General Self-Efficacy Scale, a brief eight question inventory (Chen et al., 2001), was administered at three different intervals during the study to determine changes in the level of self-efficacy in participants. The New General Self-Efficacy Scale was created by Chen, an organizational psychologist, and is used to assess to what degree respondents believe they could achieve goals despite challenges. Bandura and colleagues (1996) found that high self-efficacy predicted academic success in students. Scores on the New General Self-Efficacy range from 0-40, and the higher the score, the greater the individual's generalized self-efficacy belief. Participants completed the first New General Self-Efficacy Inventory in the first week of the study before the introduction of the first self-regulation tool, aromatherapy, to establish the baseline level. Participants completed a second New General Self-Efficacy Inventory at the end of week four to assess any changes after the introduction of aromatherapy. Participants were introduced to tapping for a duration of four-weeks beginning in week five of the project. At the end of the four-week tapping intervention, participants completed a third and final New General Self-Efficacy Inventory (Appendix B).

Thirdly, students completed a Goal Setting Questionnaire at the start of each class period and reflected on their progress at the end of the class period (Appendix C) Students reflected on their level of self-regulation at the start of class, chose a self-regulation tool, and then set academic goals to work towards for the duration of the class period. Students reflected on progress made towards their goals in the last five minutes of each class period and notated goal(s) met or not met on the goal setting sheet. Students submitted goal setting sheets to the

teacher at the end of class. Data from the completed goal setting sheets were used to establish goal completion rates of each participant. Participants' progress towards meeting goals was quantified for analysis as the percentage of times a goal was recorded as met or not met in a particular four-week time interval during both interventions with aromatherapy and tapping. A reliable baseline was not able to be established for a four-week interval prior to the start of the intervention phase of the study for the goal setting sheets.

### **Demographics of the Participants**

I taught three resource support classes ranging in size from 6 to 14 students as well as a resource support math class that included 14 to 18 students due to fluctuation in student schedules. Learners in resource support labs and resource support math class ranged in age from 15-18. All learners in resource classes were identified as special education students with mild - moderate learning differences that required specialized instruction as outlined in Individualized Educational Plans (IEPs). All students in my resource support lab and resource algebra lab were invited to participate in the study, however, participation in classroom activities was voluntary.

Nineteen participants from across all four classes took part in the research study; however, only 10 participants completed all three surveys (baseline, aromatherapy, tapping) that were a part of the study. Thus, the data for only those 10 students was included in the analysis. These 10 participants included two girls (20%) and eight boys (80%). All participants attended my resource support skills lab or resource algebra lab class. The 10 participants included in the post-intervention data analysis qualified for special education services in the following primary categories: five (50%) students with a classification of Specific Learning Disability, three (30%) students with a classification of Autism, and two (20%) students with a classification of Other Health Impairment.

## **Analysis of the Perceived Stress Scale**

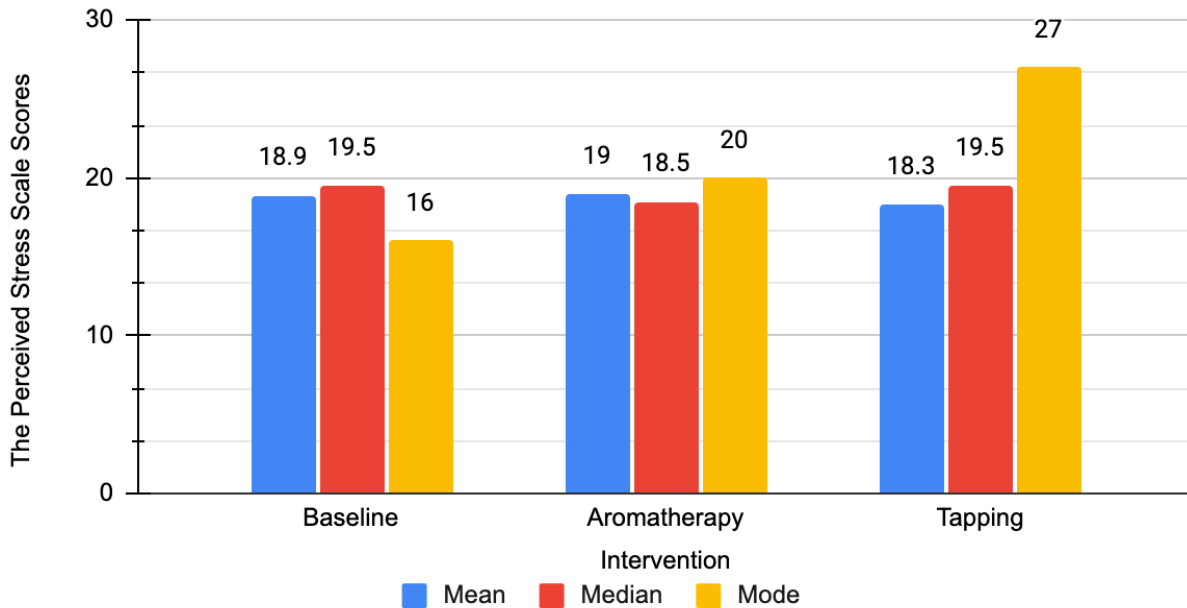
Figure 1 displays data demonstrating changes in student scores on PSS over the course of the intervention phase. During the intervention phase of the study, participants completed the baseline inventory prior to the introduction of the first self-regulatory tool of aromatherapy. Participants' scores were analyzed by calculating the mean, median, and mode from PSS at three intervals during the intervention phase (baseline at the start, after a four-week interval of aromatherapy, and after a four-week interval of aromatherapy/ tapping) to measure changes in student scores. The baseline mean value of participants' scores on the PSS at the start of the study was represented by a baseline mean value of 18.9 and fell into the moderate range of stress. The baseline median value of scores on the PSS was 19.5 and fell into the moderate range of stress. The baseline mode value of scores on the PSS was 16 and fell into the moderate stress range. Thus, at the baseline, all students' PSS scores were in the range of moderate stress. Thus, as baseline, all students' PSS scores were in the moderate stress range.

During the first part of the intervention, participants were introduced to aromatherapy with bergamot and given an aromatherapy stick to use for an interval of four weeks before completing a second PSS to evaluate any changes in stress level. The mean value of participants' score on the PSS after the first four weeks of aromatherapy intervention was 19 and fell into the moderate stress range. However, the median value of student PSS scores after the four-week tapping intervention fell by one point to 18.5 as compared to the aromatherapy median baseline value of 19.5 and indicated a reduction in the amount of student perceived stress, though both scores remained in the moderate stress range. The mode value for participants' PSS score after the first intervention with aromatherapy was 20 and fell into the moderate stress range. The

mode value rose by 4 points after the aromatherapy intervention when compared with the baseline mode value of 20 after the aromatherapy intervention.

**Figure 1**

*Analysis of Changes in Student Perceived Stress Scale*



*Note.* Nineteen participants started the study, however, due to highly fluctuating attendance during the Covid-19 pandemic, 10 participants completed all required inventories needed for post-intervention data analysis. During the intervention phase of the study, participants completed the PSS at three intervals: baseline at the start of study, Aromatherapy after a 4-week interval, and Tapping after another four-week interval.

During the second part of the intervention phase, participants were introduced to tapping as a self-regulatory tool before completing the final PSS to monitor changes in student perceived stress. The mean value of participants' PSS after four weeks of the tapping intervention was 18.3 and fell in the moderate stress range. The mean score decreased by 0.7 when compared with the mean value of 19.0 recorded after the four-week aromatherapy intervention. However, the median value of student PSS scores after the four-week tapping intervention rose by one point to 18.5, though remaining in the moderate stress range. The mode value for participants' scores after the second intervention with tapping was 27, in the high stress range. The mode



value rose by 7 points when compared with the aromatherapy mode value of 20 in phase 2 of the intervention.

Overall, a reduction of 0.6 points in the mean score of student perceived stress was evidenced when the baseline mean value was compared with the mean score of student perceived stress at the end of both the aromatherapy and tapping interventions. A comparison of the median baseline value with the median score of perceived stress at the conclusion of both interventions remained a score of 19.5. A comparison of mode values in perceived stress inventory scores increased by 11 points.

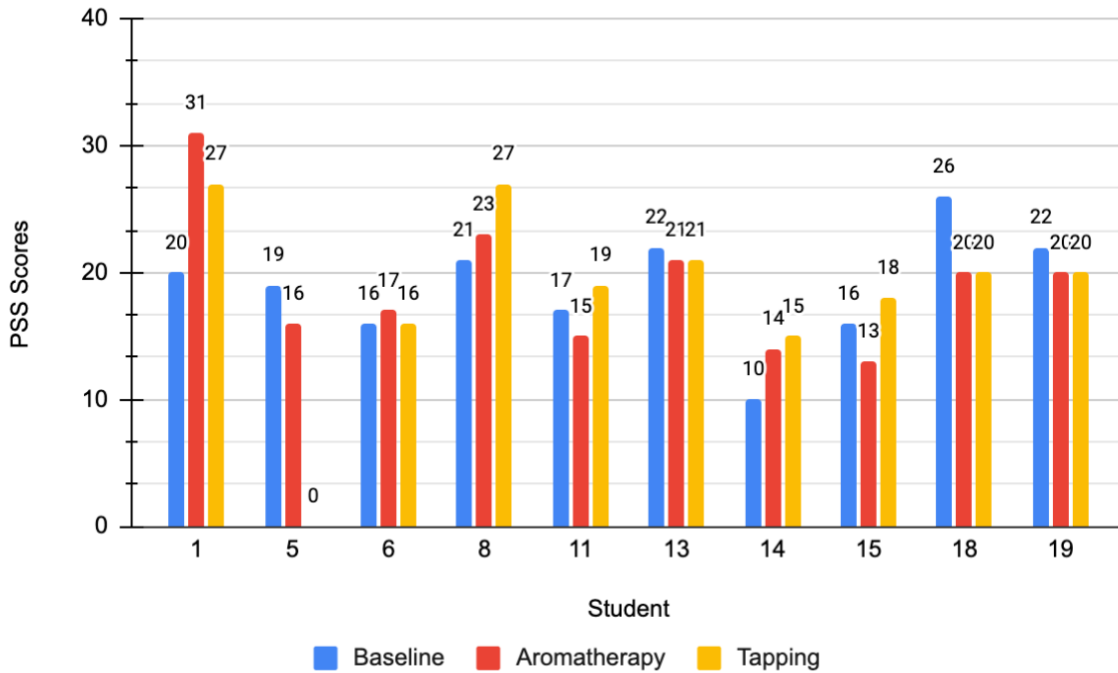
Since the mean and median scores were so similar between baseline and the interventions (aromatherapy and tapping), it was helpful to look at each student's changes in PSS scores individually. Figure 2 provides each student's individual baseline, aromatherapy, and tapping perceived stress scores. Reviewing changes in individual scores across the intervention highlights considerable variation in scores. For example, five of the students showed a reduction in perceived stress over the course of the intervention. Furthermore, three of the five students rated a 2 point or greater reduction in perceived stress (see Figure 2).

### **Analysis of the General Self-Efficacy Inventory**

Figure 3 displays a bar graph representing changes in the calculated mean, median and mode of the participants' scores on the *New General Self-Efficacy Inventory* administered over the course of the intervention. During the intervention phase of the study, participants completed the New General Self- Efficacy Inventory to gain a baseline score prior to the introduction of the first intervention tool of aromatherapy, again after a four-week trial of aromatherapy, and at the end of the four-week tapping intervention. During the post intervention phase of the study,

**Figure 2**

*Analysis of Changes in Individual Student Scores on Student Perceived Stress Scale (PSS)*



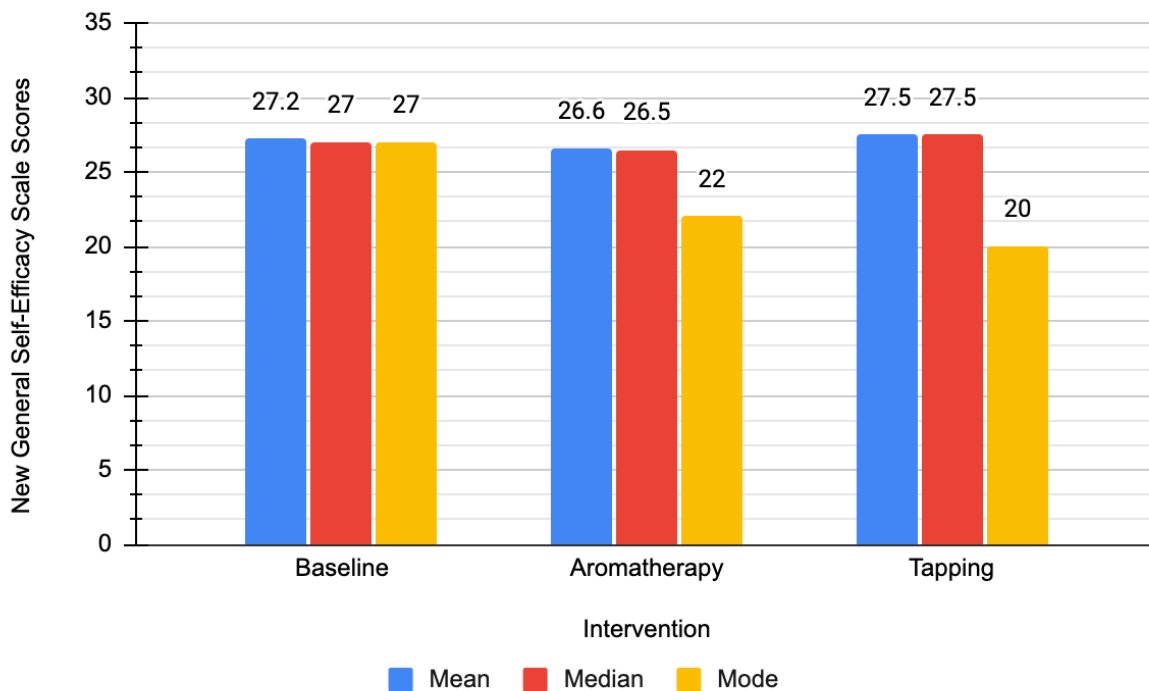
*Note.* Nineteen participants started the study, however, due to highly fluctuating attendance during the Covid-19 pandemic, only 10 participants completed surveys. Individual scores above represent the 10 participants that completed all three surveys.

(baseline at the start, aromatherapy after a four-week interval, and tapping after a four-week interval) to measure changes in student scores on the New Self- Efficacy Inventory. participant scores were analyzed by calculating the mean, median, and mode from the New General Self- Efficacy Inventory administered at three intervals during the intervention phase (week interval) to measure changes in student scores on the New Self- Efficacy Inventory. Using a scale from 0-40, higher scores on the New General Self- Efficacy Inventory represent an increasing student sense of generalized self-efficacy. The mean value of the baseline score was 27.2 on the New General Self- Efficacy Inventory at the start of the study. The baseline median value of student scores on New General Self-Efficacy Inventory was 27. The baseline mode value of scores on the New General Self-Efficacy Inventory was 27.

During the first part of the intervention phase of the study, participants were introduced to aromatherapy with bergamot and given an aromatherapy stick to use for an interval of four weeks before completing a second New General Self-Efficacy Inventory to evaluate any changes. The mean value of participants' scores on the New General Self-Efficacy Inventory after four weeks of the aromatherapy intervention was 26.6 and represented a 0.6 decrease in the baseline mean value for self-efficacy, meaning student generalized feeling of self-efficacy dropped slightly. The median value of student New General Self-Efficacy Inventory scores after the four-week aromatherapy intervention fell by 0.5 to 26.5 as compared to the baseline median value of 27. The mode value for participants' scores on the New General Self-Efficacy Inventory scores fell by 5 points from the baseline score of 27 to 22.

**Figure 3**

*Analysis of Changes in Participant Scores on New General Self-Efficacy Inventory during Interventions with Aromatherapy and Tapping*



*Note:* Analysis of Changes in the mean, median and mode scores of New General Self-Efficacy Inventory Score based on 10 participants that completed three inventories at prescribed intervals. Nineteen participants started the study, however, due to highly fluctuating attendance due to Covid-19, only 10 of the 19 participants completed all three surveys during the intervention.

During the second part of the intervention phase, participants were introduced to EFT tapping as a self-regulatory tool for an interval of four weeks before completing the final New General Self- Efficacy Inventory to monitor changes in student self-efficacy. The mean value of participants' score on New General Self- Efficacy increased by 0.9 after four weeks of tapping interventions to 27.5 as compared to the mean value of 26.6 after four weeks of aromatherapy. Similarly, the median value of students' scores on the New General Self-Efficacy after the four-week tapping intervention rose by one point to 27.5 from the median value of 26.5 after aromatherapy indicating an increased felt sense of self-efficacy in participants. However, the mode value for participants' scores on the New General Self- Efficacy after the second intervention with tapping fell by two points from 22 to 20.

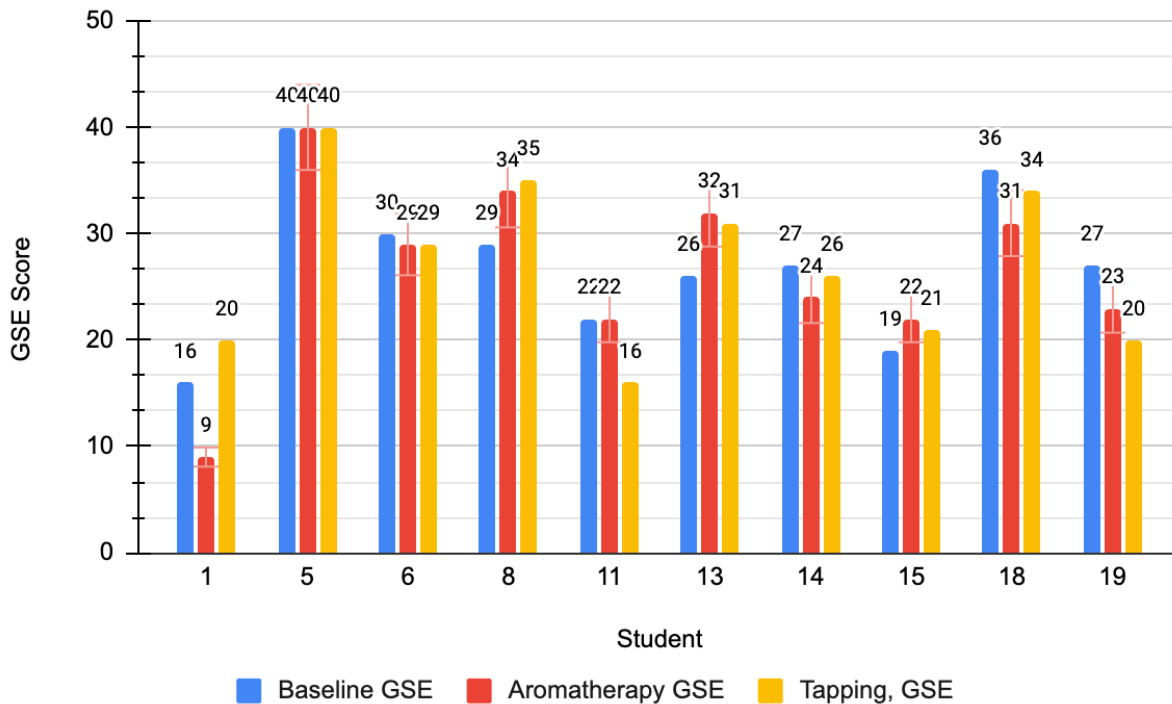
Overall, an increase of 0.2 points in the mean on participants' scores on the New General Self- Efficacy Inventory indicated a slight rise in participants generalized sense of self- efficacy. A comparison of the median baseline value with the median score on the New General Self- Efficacy Inventory at the conclusion of both interventions rose by 0.5 points and indicated a slight increase in generalized feeling of self-efficacy among participants. A comparison of mode values in participants' scores on the New General Self-Efficacy Inventory fell 7 points.

Since the mean scores were so similar between baseline and the interventions (aromatherapy and tapping), it was helpful to look at each student's changes in New General Self-Efficacy Scale scores individually. Figure 4 provides each student's individual baseline, aromatherapy, and tapping self- efficacy scores. The 10 students in Figure 4 completed all three surveys throughout the intervention. Reviewing changes in individual scores across the intervention highlights considerable variation in scores. For example, 4 of the 10 of the students showed an increased level in general self-efficacy over the course of the intervention. All four

students reported a gain of 2 or more points in generalized self-efficacy. Moreover, 3 of the 4 reported gains of four or more points in generalized self-efficacy.

**Figure 4**

*Analysis of Changes in Individual Student Scores on General Self-Efficacy Inventory*



*Note.* Nineteen participants started the study, however, due to highly fluctuating attendance during the Covid-19 pandemic, only 10 participants completed surveys. The data above represents the scores of the 10 individual students that completed all three surveys.

**Analysis of Goal Setting Questionnaires**

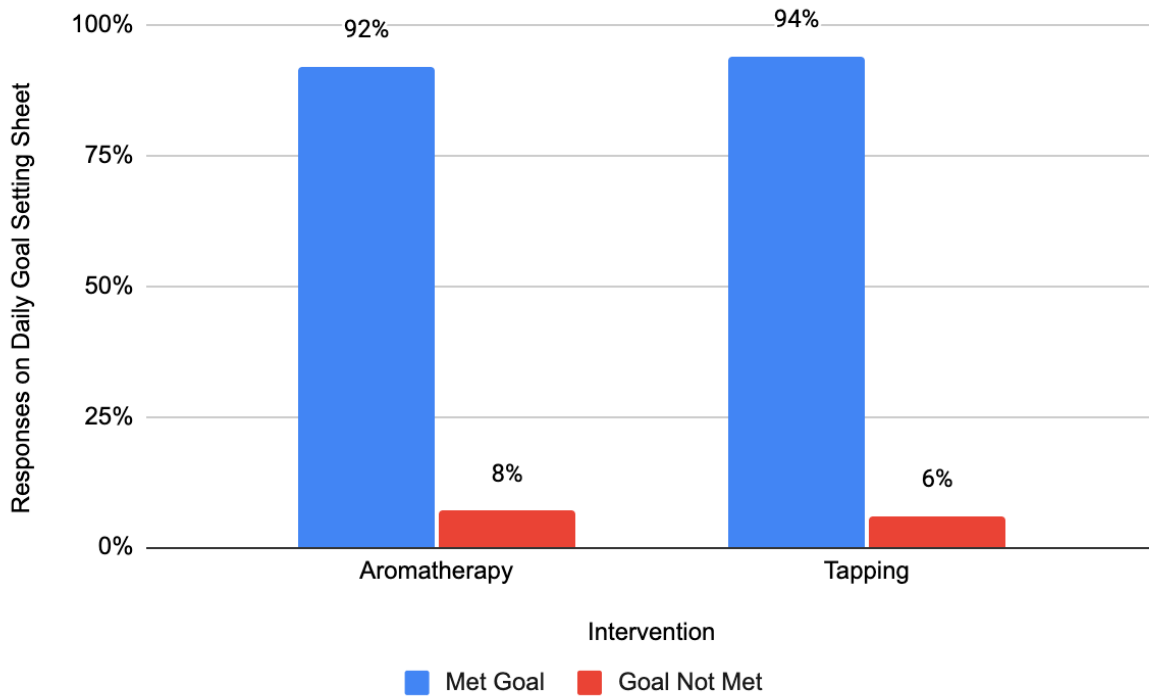
An analysis of changes in the ability of students to meet goals is represented in Figure 5. A baseline was not established with the completion of goal setting sheets for a four-week interval prior to the start of the intervention phase because they were not uniformly used across all classroom settings prior to the start of the intervention. However, participants recorded daily responses on a Goal Setting Questionnaire throughout the intervention phase of the study. Participants reported meeting daily goals on completed goal setting sheets 92% of the time

throughout the duration of the aromatherapy four-week interval. This percentage was calculated based on the responses from 10 participants on all goal setting sheets completed during the four-week interval with the aromatherapy intervention. Participants reported meeting goals on daily goal setting sheet 94% of the time during the duration of the tapping four-week interval.

This indicated that participants reported meeting goals on completed daily goal setting sheets with an increased percentage of 2%. Overall, the data may suggest that participants were able to meet goals during a class period with the interventions of aromatherapy and tapping increased by 2%.

**Figure 5**

*Analysis of Changes in the Ability of Students to Meet Goals*



*Note:* A valid baseline was not established with the completion of goal setting sheets for a four-week interval prior to the start of the intervention phase. Nineteen participants started the study, however, due to highly fluctuating attendance due to Covid-19, only 10 of the 19 participants completed the study.

## Summary

In conclusion, data showed a slight decrease in the mean value scores on the PSS following the eight-week intervention with aromatherapy and EFT tapping interventions, indicating a generalized decrease in student perceived stress levels. However, median scores of the PSS remained the same. An increase of 11 points in the mode value of the scores occurred that suggests variability in the perceived stress response of some participants. This led to analysis of individual student changes over the course of the study which indicates that some students benefited more from the intervention than others.

Additionally, the data showed an increase of 0.2 points and 0.5 in the mean and median value of participants' scores respectively on the New General Self-Efficacy Inventory. Thus, the calculated mean and median scores indicated a slight increase in generalized feeling of self-efficacy among participants after the interventions of aromatherapy and tapping. However, the mode values fell seven points suggesting high variability in the general self-efficacy of some participants. Similarly, to the scores on the PSS, it appears that some students benefited more from the intervention than others given the variability in the individual scores.

Finally, data showed that participants reported a two-percentage point increase on meeting goals on daily goal setting sheets after the four-week intervention with EFT tapping. The post-intervention data analysis of calculated mean scores suggests that the intervention had a slightly positive impact on the ability of participants to meet daily goals in the classroom. However, analysis of trends in individual student scores reveals high variability among students indicating that some individuals received more benefit than other students. Possible explanations for variations will be explored in chapter 5. The next chapter will explore circumstances during

the intervention phase due to COVID-19 and how these circumstances may have impacted the results.



## **Chapter V**

### **Conclusions and Next Steps**

Over the past 10 years, mental health challenges have steadily increased in children in the United States (Whiteny & Peterson, 2019). Additionally, the number of children diagnosed with anxiety and depression has steadily risen over the course of the past 10 years (Centers for Disease Control and Prevention [CDC], 2021). During the COVID-19 pandemic, mental and behavioral health challenges in children escalated to unprecedented levels. For example, youth ages 11-17 were more likely than any other age group to report moderate to severe symptoms of anxiety or depression during the COVID-19 Pandemic (Substance Abuse and Mental Health Services Administration [SAMHSA], 2020). High school educators in United States surveyed before the start of the 2021/22 school year reported that their biggest concerns for students' adjustment to the new school year were learning deficits and anxiety about returning to in person classes (Osgood & Kimball, 2021). Teenagers in the United States surveyed prior to the start of the 2021/22 school year reported their biggest worries were falling academically behind and experiencing social anxiety (Osgood & Kimball, 2021). Moreover, results from the survey showed that non-white students, students from families experiencing economic challenges, students with Autism and pre-existing behavioral and mental health issues were disproportionately negatively impacted (Osgood & Kimball, 2021).

As a mild/moderate resource teacher in a residential urban high school, I noticed a sharp increase in students needing specialized academic support and instruction due to mental health and behavioral challenges in high school during the pandemic. Increased numbers of students returned to school unable to engage in learning due to struggles with emotional and behavioral health issues such as PTSD, ADHD, anxiety, depression, and negative mood states. Many

students suffered from debilitating anxiety, difficulty starting tasks and sustaining focus with academic tasks, coping with stress, an inability to plan, execute, and organize daily activities, and managing negative emotions. Despite access to engaged and differentiated lessons, students were unable to access learning in the classroom due to struggles with self-regulation.

In this action research study, I chose to implement aromatherapy with essential oils and the use of EFT tapping (Emotional Freedom Technique) in the classroom as an intervention strategy to give students access to self-regulation tools. Studies suggest that EFT tapping may be an effective tool for reducing anxiety, stress, and other emotional issues in both students and teachers (Gaesser, 2020; Lambert, 2020). Furthermore, research suggests that EFT tapping in the classroom results in increases positive emotions, self-esteem, and self-resilience in students. Additionally, research demonstrates that aromatherapy with bergamot and lavender essential oils can lower stress and anxiety responses in the school setting for both teachers and students (Bakhsha et al., 2011; Seo, 2000; Solomons, 2005). Therefore, the action research question investigated in this study was: *How does the incorporation of two self-regulation tools in the classroom: EFT tapping (Emotional Freedom Technique) and the use of aromatherapy and aroma acupoint therapy, impact the ability of special education high school students to set and work towards academic goals, manage feelings of stress and anxiety, and support the development of self-efficacy skills?*

Chapter IV presented the findings from the triangulation of data collected during the action research study. The data showed that while the interventions of aromatherapy and EFT tapping did not significantly impact mean and median indicator scores measuring students' perceived stress, self-efficacy and ability to achieve academic goals significantly, analysis of individual student changes indicates some students benefited more than others. Chapter 5 is

organized into the following sections: summary of findings, interpretation of findings, limitations, summary, and plan for future action. The first section, summary of findings, focuses on data from the three measured sources: the Perceived Stress Scale (PSS) (Appendix A), the New General Self-Efficacy Inventory (Appendix B), and student ratings on daily Goal Setting Questionnaires (Appendix C). The second section provides an interpretation of the findings. The third section explains possible limitations to this action research study and the fourth section gives a summary of the entire action research project. Finally, the fifth section discusses possible future actions I will pursue in response to this action research project.

### **Summary of Findings**

Multiple indicators were used to examine the impact of EFT tapping and aromatherapy with students supported in the special education resource program at an urban high school. Nineteen students enrolled in my Resource Support Labs and Resource Algebra Lab participated in the study, however, only 10 students completed all surveys and inventories over the full course of the action research project. Three different measures were used to assess the impacts that EFT tapping and aromatherapy had on the ability of high school students supported by special education services to manage feelings of stress and anxiety, support the development of self-efficacy skills, and set and work towards academic goals. Firstly, the PSS, a short 10 question inventory, was administered to students at three different intervals during the intervention stage of the study to determine any changes in students' perceived level of stress after the introduction of novel self-regulations tools (aromatherapy and EFT tapping). Secondly, the New General Self-Efficacy Inventory, a brief eight question inventory (Chen et al., 2001) was used at three different intervals in the project to determine any changes in the learners' level of self-efficacy. Finally, students completed a goal setting questionnaire at the start of each class

period and reflected on progress at the end of the class period. Students were asked to reflect on their level of regulation at the start of class, choose a self-regulation tool, and then set academic goals to work towards for the duration of the class.

### ***Findings from the Perceived Stress Scale***

Analysis of the data gathered from the PSS inventories showed a slight decrease in the mean value scores on the PSS following the eight-week intervention with aromatherapy and EFT tapping interventions, indicating a slight generalized decrease in student perceived stress levels. However, median scores of the PSS remained the same. An increase of 11 points in the mode value of the scores occurred that suggests variability in the perceived stress response of some participants. This led to analysis of individual student changes over the course of the study which indicates that some students benefited more from the intervention than others. Reviewing changes in individual scores across the intervention highlights considerable variation in scores. For example, five of the 10 students showed a reduction in perceived stress over the course of the intervention. Furthermore, three of the five students rated a 2 point or greater reduction in perceived stress. Individual analysis of scores revealed that some individuals received more benefit than other students.

### ***Findings from the New General Self-Efficacy Inventory***

Analysis of data from the New General Self-Efficacy Inventory showed an increase of 0.2 points and 0.5 in the mean and median value of participants' scores respectively on the New General Self-Efficacy Inventory. Thus, the calculated mean and median scores indicated a slight increased generalized feeling of self-efficacy among participants after the interventions of aromatherapy and EFT tapping. However, the mode values fell seven points suggesting high variability in the general self-efficacy of some participants. Similarly, to the scores on the PSS, it

appears that some students benefited more from the intervention than others given the variability in the individual scores. Since the mean scores were so similar between baseline and the interventions (aromatherapy and EFT tapping), it was helpful to look at each student's changes in New General Self-Efficacy Scale scores individually. Reviewing changes in individual scores across the intervention highlights considerable variation in scores. For example, four of the 10 of the students showed an increased level in general self-efficacy over the course of the intervention. All four students reported a gain of 2 or more points in generalized self-efficacy. Moreover, three of the four students reported gains of four or more points in generalized self-efficacy.

### *Findings from the Goal Setting Questionnaires*

Analysis of data gathered from goal setting questionnaires showed that participants reported a mean of two-percentage point increase on meeting goals on daily goal setting sheets after the four-week intervention with tapping. The post-intervention data analysis of calculated mean scores suggests that the intervention had a slightly positive impact on the ability of participants as a group to meet daily goals in the classroom. However, analysis of trends in individual student scores reveals high variability among students. This chapter will explore circumstances during the intervention phase due to COVID-19 and how these circumstances may have impacted the results.

### **Interpretation of Findings**

Based on a thorough analysis of both quantitative and qualitative data gathered from the interventions used during this action research project, I was able to draw the following conclusions: data showed a slight decrease in the mean value scores on the PSS following the eight-week intervention with aromatherapy and EFT tapping interventions, indicating a slight

generalized decrease in student perceived stress levels. Additionally, the calculated mean and median scores on the New General Self-Efficacy Scale indicated a slight increase in generalized feeling of self-efficacy among participants after the interventions of aromatherapy and EFT tapping. The post-intervention data analysis of calculated mean scores on students' ability to meet goals set on daily goal setting sheets suggest that the intervention had a slightly positive impact on the ability of participants to meet daily goals in the classroom. However, analysis of trends in individual student scores reveals high variability among students indicating that some individuals received more benefit than other students.

### ***Student Levels of Perceived Stress***

What is most striking about the results of the students' perceived stress is the high degree of individual variability on the PSS scores. Conducting the project during the COVID-19 pandemic produced several unusual factors in the classroom environment throughout the duration of the research project which likely played a role in this variability. For example, many students were absent from class for multiple days during the study due to illness and thus did not participate regularly in the aromatherapy/ aroma acupoint/ EFT tapping intervention. Additionally, due to ventilation requirements for COVID-19, all classroom windows remained open, multiple air purifiers ran in the classroom and an industrial air circulator operated just outside the classroom open door in the hall. Group facilitation and instruction in the classroom was challenged due to the excessively high background noise generated by the fans and open windows as well as difficulty projecting voices while wearing masks. Due to the N-95 masking mandate for all students and teachers throughout the duration of the study, aromatherapy was adapted to the circumstances by allowing students the use of slipping a Q-tip with a diluted EO under the mask to allow for inhalation of the fragrance and utilizing application of bergamot

dilution to the acupoint Shen Men on the ear. However, the most preferred application method for inhalation of bergamot was applying the dilution directly on the face mask as needed throughout the day.

All students introduced to the fragrance of bergamot enjoyed it, and many of the students had no prior experience with essential oils. This finding is consistent with research (Solomon, 2005; Godfrey, 2009; Fischer et al., 2020) that found students positively responded to the introduction of aromatherapy/ aroma acupoint therapy. Participants in this study were given the choice of using the bergamot throughout the duration of class, directions for use were posted on a bulletin board near the doorway, and students could step into the hallway if needed to adjust masks. Multiple participants shared that they enjoyed applying the bergamot dilutions into masks prior to entering the school building or throughout the day as needed before stressful events like tests/ quizzes. A paraprofessional reported that students applied the bergamot before taking math tests. A couple of students asked for replacement rollers after they had lost them. One student, struggling with anxiety that prevented them from coming to school, shared that using the bergamot upon waking in the morning supported them to get out of bed and come to school. Another student was able to use inhalation of bergamot to calm themselves during an anxiety attack at school.

Unlike other research studies (Bhakhsha, 2016; Chang & Shen, 2011; Han et al., 2017; Liu et al., 2013; Ma, 2022; Watanabe, 2015) that diffused essential oil aroma into a classroom/ waiting room area to investigate reduction in stress levels, this study relied upon the participants' application of essential oil at appropriate times given masking constraints. The high variability in frequency and mode of application among participants as well as masking constraints due to COVID –19, impacted the results of this study.

Due to COVID- 19 masking in the classroom, the EFT tapping module was introduced using a demonstration video as multiple tapping points were not accessible due to masking. The short video was posted to Google classroom for students to engage outside of class in environments without masking mandates. Masking negatively impacted the ability of students to effectively use this tool in the classroom. Additionally, many students did not attend school on multiple occasions and did not receive the introduction to the practice in class. Therefore, this study was not able to replicate previous research studies (Aremu & Taiwo, 2014; Gaesser & Karan, 2017; Sezin et al. 2009, Stapelton et al, 2017) that conducted group EFT tapping sessions or individual sessions unimpeded by masking and background noise during instruction.

### ***Student Levels of Self-Efficacy***

What is most striking about the results of students' self-efficacy scores is the high degree of individual variability on the General Self- Efficacy scores. While the mean and median changed only slightly, the high degree of variability in the mode value suggests that some students benefited more than other students. Individual analysis of scores reveals that some students benefited more than others. Conducting the project during the Covid-19 pandemic produced several unusual factors in the classroom environment throughout the duration of the research project. The same environmental factors that played a role in implementation of the intervention and perceived stress levels likely played a role in students' self-efficacy outcomes.

Overall, students stated that they enjoyed engaging in the introductory lesson on stress through reflecting on the positive qualities of stress response and maladaptive responses of prolonged stress. Participants were able to develop connections about their efficacy to regulate their own learning process and actively choose regulation strategies that moved them closer to desired learning goals. This study allowed students to engage in the process of self- efficacy as



defined by research (Bandura, 1996), where students recognize their capacity to execute behaviors that are necessary to move them closer to a desire performance attainment.

Participants explored multiple tools to support self-regulation and relieve stress including sleep, mindfulness, music, exercise, laughter, plan, and ask for help.

Throughout the duration of the study, students were encouraged to explore strategies and choose a tool that worked for them to encourage the development of self-efficacy skills. Participation using aromatherapy and EFT tapping was completely voluntary, however, students were prompted every class period to reflect first on their mental preparedness for class. Students developed self-efficacy skills and reported exploring EFT tapping at home as EFT tapping points were accessible without the required masks in the classroom setting. The most widely used self-regulation tools used by students were listening to music and taking motor breaks outside the classroom/ outside. Due to social distancing and masking requirements in place for Covid-19, many students found listening to music and motor breaks to be the most practical self-regulation tools available to them at school. However, participants reported using the tools either at home and/or during breaks at school according to individual preference. Some students continued to use the tools at the start of each class after the study ended. Other students who participated in the study reported using the tool as a need arose after the conclusion of the study.

### ***Student Ability to Work Towards Goals***

While the data from the study shows that mean and median value of students' ability to meet goals increased from 92% to 94% over the course of the intervention, the most striking part of the data is revealed qualitatively when reviewing individual goals setting sheets. Students chose to engage tools to support self-regulation in the classroom. The goal setting sheet allowed students to reflect upon their "mental preparedness for class" and rate on a scale of 1 to 10.

Students were invited to try either EFT tapping/ or aromatherapy with bergamot and then reflect on changes in mental awareness/ mood state before and after the intervention. Many students choose not to engage aromatherapy or EFT tapping in classroom at the time, due to masking constraints, peer pressures, variability in comfort level with intervention in group setting, or simply choosing another tool that was available (walking, motor break, listening to calming music, seeking out a supportive peer or adult). I noticed that my smaller classes, with greater access to one: one check ins with me, those classes with supportive peers open to trying EFT tapping and aromatherapy/ aroma point therapy were more likely to choose to engage in EFT tapping and aroma point therapy both inside and of the outside the classroom. Also, I noticed on the goal setting sheets, that students who choose to engage in EFT tapping or aromatherapy/ aroma point therapy indicated positive shifts in mental alertness/ mood on rating their rating scales, often increasing two to 5 points.

In conclusion, data from my action research project demonstrated that introducing EFT Tapping and aromatherapy to special education students slightly decreased students' perceived stress and slightly increased students' level of self-efficacy and ability to meet goals. However, a number of environmental factors related to COVID-19 impacted the action research project. Moreover, considerable variability in individual scores indicated and was substantiated by observational data that some students benefited more from the intervention than other students. All students were empowered with increased knowledge about how toxic stress can impact their ability to engage meaningfully in the classroom and presented with multiple self- regulatory options to try. Students were provided with structured goals setting sheets and self-reflective charts to monitor mood states in the classroom thus building capacity to build self- efficacy skills.

## **Reflection on Limitations**

This action research study took place over a nine-week period, making the limitation of time constraint since classes met only three times per week due to the block schedule of the high school. The ongoing COVID-19 Pandemic throughout the duration of the study impacted the classroom environment and circumstances. Teaching in the physical classroom environment was profoundly impacted by the increased requirements for air ventilation with open windows, multiple air purifiers in the classroom, and an industrial grade air circulator outside the classroom door. Additionally, both students and teachers were masked with N 95 masks, and this made communication and connection difficult in the classroom. While a short EFT tapping video was viewed in class and provided for the students to access on google classroom, we were not able to complete the full sequence as a group due to masking. Poor attendance also impacted on this study as only 10 of the 19 participants completed all surveys in the study thus limiting the sample size of this study. Moreover, in addition to challenges with the physical classroom environment, there was variability in student openness to try the interventions. Student participation was voluntary in the program, and students had access to multiple self-regulation tools in place prior to the study. Some students were very open to the intervention and shared that they were able to integrate into daily morning routines. Additionally, I assumed the roles of both teacher and researcher, which could have affected students' responses and engagement with using EFT tapping and aromatherapy as self-regulatory tools.

## **Summary**

Over the past 10 years, mental health challenges have steadily increased in children in the United States (Whiteny & Peterson, 2019). During the COVID-19 pandemic, mental and behavioral health challenges in children escalated to unprecedented levels. As a mild/moderate

resource teacher in a residential urban high school, I noticed a sharp increase in students needing specialized academic support and instruction due to mental health and behavioral challenges in high school. Aromatherapy with essential oils and the use of EFT tapping (Emotional Freedom Technique) in the classroom was chosen as an intervention strategy to give students access to self-regulation tools. Therefore, the action research question investigated was: *How does the incorporation of two self-regulation tools in the classroom: EFT tapping (Emotional Freedom Technique) and the use of aromatherapy and aroma acupoint therapy, impact the ability of special education high school students to set and work towards academic goals, manage feelings of stress and anxiety, and support the development of self-efficacy skills?*

Studies suggest that EFT tapping may be an effective tool for reducing anxiety, stress, and other emotional issues in both students and teachers (Gaesser, 2020 and Lambert, 2020). Furthermore, research suggests that EFT tapping in the classroom increases positive emotions, self-esteem, and self-resilience in students. Additionally, research demonstrates that aromatherapy with bergamot and lavender essential oils can lower stress and anxiety responses in the school setting for both teachers and students (Bakhsha et al., 2011; Seo, 2000 and Solomons, 2005).

I am a mild-moderate special education teacher in a high school in an urban residential area of approximately one square mile, located in the San Francisco/ East Bay Area. The setting for this study was three resource support classes ranging in size from 5-14 students as well as a resource support math class that was approximately 14 students. Learners in resource support labs and resource support math class, ranged in age from 15-18 years of age. All learners in resource support classes were identified as special education students with mild -moderate

learning differences that required specialized instruction as outlined in Individualized Educational Learning Plans (IEPs).

Analysis of the data gathered from the PSS inventories showed a slight decrease in the mean value scores on the PSS following the eight-week intervention with aromatherapy and EFT tapping Interventions, indicating a slight generalized decrease in student perceived stress levels. Analysis of data from the New General Self-Efficacy Inventory showed an increase of 0.2 points and 0.5 in the mean and median value of participants' scores respectively on the New General Self-Efficacy Inventory. Thus, the calculated mean and median scores indicated a slight increased generalized feeling of self-efficacy among participants after the interventions of aromatherapy and tapping. Analysis of data gathered from goal sheet findings showed that participants reported a mean of two-percentage point increase on meeting goals on daily goal setting sheets after the four-week intervention with tapping. An analysis of individual data reveals significant variability suggesting that some participants benefited from the intervention more than others.

### **Plan for Future Action**

In the future, I plan to implement targeted small group interventions on specific topics of goals that the group can work towards. Ideally, students would choose a targeted goal area such as reducing anxiety around testing, math anxiety, overcoming fear around giving an oral presentation in class, or procrastination. Allowing students more autonomy to seek out a specific group and work in a small group setting over a period time towards a specific goal would be advantageous in allowing students to connect with one another and overcome any insecurity about tapping in front one another. Additionally, setting the intention of the group at the start of intervention would allow greater clarity in the end goal and more targeted tapping on a specific

topic of interest. Moreover, students would benefit from small group work with trusted peers or one: one attention on a specific issue. My intention is also to educate parents about the benefits and use of EFT tapping as a resource and to encourage communication between students and parents about the importance of acquiring tools that will support resilience in the student, family, and broader school community.

Furthermore, I was encouraged by the supportive response of my colleagues who also started using the bergamot and EFT tapping to alleviate stress. In the future, I plan to share the strategies with other teachers and service providers such as paraprofessionals, mental health counselors, Occupational Therapists and Speech Therapists to support stress reduction as well as enrich our shared pool of resources to support our students and greater school community.

I am optimistic that my work in sharing the results of this study will prompt other educators in my school, district, and beyond to investigate these promising self- regulation tools to support the social and emotional needs of our school community. More than ever, students and educators are faced with an unprecedented rise in mental health crisis in students and burn out in teachers. EFT and aromatherapy are cost effective and easily implemented self-regulatory tools that support the individual and collective community to literally tap into our resilient powers of calmness and clarity so that we can creatively transform our personal and collective challenges so all members, especially our most vulnerable, to grow and heal together.

## References

- Aremu, A. O., & Taiwo, A. K. (2014). Reducing mathematics anxiety among students with pseudo-dyscalculia in Ibadan through numerical cognition and emotional freedom techniques: Moderating effect of mathematics efficacy. *African Journal for the Psychological Studies of Social Issues*, 17(1), 113–129.
- Boath, E., Stewart, A., & Carryer, A. (2013). Tapping for success: A pilot study to explore if Emotional Freedom Techniques (EFT) can reduce anxiety and enhance academic performance in university students. *Innovative Practice in Higher Education*, 1.
- Bakhsha, F., Yousefi, Z., Aryaee, M., Jafari, S. Y., & Derakhshanpoor, F. (2016). Comparison effect of Lavender and Citrus aurantium aroma on anxiety in female students at Golestan University of Medical Sciences. *J Bas Res med Sci*, 3(4), 4-11.
- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Multifaceted impact of self-efficacy beliefs on academic functioning. *Child Development*, 67(3), 1206-1222.
- Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the Brief COPE. *International Journal of Behavioral Medicine*, 4, 92-100.
- CAST. (2018). UDL Guidelines: Self- Regulation. CAST (2018). Universal Design for Learning Guidelines version 2.2. Retrieved from <http://udlguidelines.cast.org>
- CAST (2018). Universal Design for Learning Guidelines Version 2.2. CAST. <http://udlguidelines.cast.org>
- Center for Disease Control. (n.d). Data and Statistics of Children's Mental Health. <https://www.cdc.gov/childrensmentalhealth/data.html>
- Chang, K. M., & Shen, C. W. (2011). Aromatherapy benefits autonomic nervous system regulation for elementary school faculty in Taiwan. *Evidence-Based Complementary and Alternative Medicine*.
- Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. *Organizational Research Methods*, 4(1), 62-83.
- Cohen, S., Kamarck, T., and Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 386-396.
- Cook, S. C., Rao, K., & Collins, L. (2017). Self-monitoring interventions for students with EBD: Applying UDL to a research-based practice. *Beyond Behavior*, 26(1), 19-27.
- Cook, S.C., & Rao, K. (2018). Systemically applying UDL to effective practices for students with learning disabilities. *Learning Disability Quarterly*, 41(3), 179-191.

- Daniel, D. (2020). *Understanding the effects of aromatherapy on individuals with symptoms of posttraumatic stress disorder* (Order No. 29397816). Available from ProQuest Dissertations & Theses Global. (2726961769).
- de Miranda, D. M., da Silva Athanasio, B., de Sena Oliveira, A. C., & Silva, A. C. S. (2020). How is COVID-19 pandemic impacting mental health of children and adolescents? *International Journal of Disaster Risk Reduction*, 101845.
- Every Student Succeeds Act. (2015). S. 1177, 114<sup>th</sup> Congress.
- Fischer, A. M., Holmes, P., Bahar, Y. Z., Vacca, S., Goldberg, S., & Gold, M. A. (2020). Aroma acupoint therapy for symptom management with adolescent patients: Early experiences from school-based health centers. *Medical Acupuncture*, 32(5), 287-292. doi: 10.1089/acu.2020.1447.
- Gaesser, A. H. (2020). Emotional freedom techniques: Stress and anxiety management for students and staff in school settings. In C. Maykel & M. A. Bray (Eds.), *Applying psychology in schools. Promoting mind–body health in schools: Interventions for mental health professionals* (p. 283–297). American Psychological Association.
- Gaesser, A & Karan, Orv. (2017). A randomized controlled comparison of emotional freedom technique and cognitive behavioral therapy to reduce adolescent anxiety: A pilot study. *J Altern Complement Med.* 23(2):102-108.
- Keegan, L., Cartmel, J., & Harris, P. (2020). I've changed, I'm smarter: Empowering youth to thrive neurosequential approach to employment, education, and training outcomes for youth. *Children and Teenagers*, 3(1), 16-32.
- Godfrey, H. (2009) Essential oils: Complementary treatment for attention deficit hyperactive disorder (ADHD). *International Journal of Clinical Aromatherapy*, 6(1).
- Han, X., Gibson, J., Eggett, D. L., & Parker, T. L. (2017). Bergamot (*Citrus bergamia*) essential oil inhalation improves positive feelings in the waiting room of a mental health treatment center: A pilot study. *Phytotherapy research*, 31(5), 812-816.
- Holt MK, Finkelhor D, Kantor GK. (2007). Multiple victimization experiences of urban elementary school students: associations with psychosocial functioning and academic performance. *Child Abuse Negl.*, 31(5), 503-515.
- Lambert, M. T. (2020). *The tapping project: Introducing emotional freedom techniques (EFT) to reduce anxiety and improve wellbeing in primary school students* (Doctoral dissertation, Charles Darwin University).
- Larson, S., Chapman, S., Spetz, J., & Brindis, C. D. (2017). Chronic childhood trauma, mental health, academic achievement, and school-based health center mental health services. *Journal of School Health*, 87(9), 675-686.



- Liu, S. H., Lin, T. H., & Chang, K. M. (2013). The physical effects of aromatherapy in alleviating work-related stress on elementary school teachers in Taiwan. *Evidence-Based Complementary and Alternative Medicine*.
- Ma, Y. (2022). The influence of ambient aroma on middle school students' academic emotions. *International Journal of Psychology*, 57(3), 387-392. <https://doi-org.stmarys-ca.idm.oclc.org/10.1002/ijop.12827>
- McKim, M., & Sternberg, M. (June 2021 ). Mental health challenges for children and youth during the COVID-19 pandemic: An occupational therapy perspective. *American Occupational Therapy Assoc.* [https://www.aota.org/-/media/Corporate/Files/Publications/CE-Articles/CEA\\_June\\_2021.pdf](https://www.aota.org/-/media/Corporate/Files/Publications/CE-Articles/CEA_June_2021.pdf)
- McCallion, F. (2012). Emotional freedom techniques for dyslexia: A case study. *Energy Psychology: Theory, Research, & Treatment*, 4(2). doi: 10.9769/EPJ.2012.4.2.FM
- MacKinnon, L. (2012). The neurosequential model of therapeutics: An interview with Bruce Perry. *Australian and New Zealand Journal of Family Therapy*, 33(3), 210-218.
- Neurosequential Network, <https://www.neurosequential.com/nme>
- On Our Sleeves. (n.d). Pediatric mental health research. <https://www.onoursleeves.org/research>
- Perry, D. [Neurosequential Model Network]. (Interview, August 25,2020). The neurosequential model: Stress, trauma, and the brain, neurosequential model network [Insights for Educators, Episode 1]. YouTube. [https://www.youtube.com/watch?v=3is\\_3XHKKs](https://www.youtube.com/watch?v=3is_3XHKKs)
- Ortner, J. [The Tapping Solution]. (2007, August 3). How to tap with Jessica Ortner [video]. Youtube. <https://www.youtube.com/watch?v=BPqGjcxoPS8&t=29s>
- Osgood, K., Sheldon-Dean, H., & Kimball, H. (2021). Children's mental health report: What we know about the COVID-19 pandemic's impact on children's mental health —and what we don't know. Child Mind Institute.
- Phifer, L. W., & Hull, R. (2016). Helping students heal: Observations of trauma-informed practices in the schools. *School Mental Health*, 8(1), 201-205.
- Racine, N., Cooke, J. E., Eirich, R., Korczak, D. J., McArthur, B., & Madigan, S. (2020). Child and adolescent mental illness during COVID-19: A rapid review. *Psychiatry research*, 292, 113307.
- Reynolds, A. E. (2010). *Effect of the emotional freedom technique (EFT) on teacher burnout*. ProQuest.
- Seo JY. (2009). The effects of aromatherapy on stress and stress responses in adolescents. *Journal of Korean Academy of Nursing*, 39(3), 357-365.

- Solomons, S. (2005). Using aromatherapy massage to increase shared attention behaviors in children with autistic spectrum disorders and severe learning difficulties. *British Journal of Special Education*, 32(3), 127-137.
- Stapelton, P. (2017). *Tapping in the classroom: Teacher manual*.
- Stapleton, P.B., Murphy, D., Pidgeon, A.M., Porter, B., Thibault, S., & Sheldon, T. (2017). The Efficacy of emotional freedom techniques for improving student wellbeing: A controlled clinical trial. *Adolescent Psychiatry*, 7(2), 112-126.
- Strong Minds, Strong Kids, Psychology Canada (2013, February 8). What is stress? [video], Youtube. <https://www.youtube.com/watch?v=gnrqG4BBsOA&t=75s>
- Substance Abuse and Mental Health Administration Services. (2014). SAMHSA's concept of trauma and guidance for a trauma-informed approach. HHS Publication No. (SMA) 14-4884. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Substance Abuse and Mental Health Administration Services. (2020). Treatment for Suicidal ideation, self-harm, and suicide attempts by youth. SAMHSA Publication No. PEP20-06-01-002. National Mental Health and Substance Use Policy Laboratory.
- Thakur, A. (2020). Mental health in high school students at the time of COVID-19: A student's perspective. *Journal of the American Academy of Child and Adolescent Psychiatry*, 59(12), 1309.
- Turner, C. (2015). Ruling in Compton school case: Trauma could cause disability. Retrieved from <https://www.npr.org/sections/ed/2015/10/01/445001579/ruling-in-compton-schools-case-trauma-could-cause-disability>.
- Watanabe, E., Kuchta, K., Kimura, M., Rauwald, H. W., Kamei, T., & Imanishi, J. (2015). Effects of bergamot (Citrus bergamia (Risso) Wright & Arn.) essential oil aromatherapy on mood states, parasympathetic nervous system activity, and salivary cortisol levels in 41 healthy females. *Complementary Medicine Research*, 22(1), 43-49.
- Whitney, D. G., & Peterson, M. D. (2019). US national and state-level prevalence of mental health disorders and disparities of mental health care use in children. *JAMA Pediatrics*, 173(4), 389-391.
- Witter, L. S. (2020). *Effects of aromatherapy on academic success, perceived stress, and coping skills of graduate students* (Doctoral dissertation, Minnesota State University, Mankato).
- Won, S. J., & Choi, Y. S. (2017). The effect of aromatherapy upon salivary cortisol, academic stress, academic self-efficacy and suicidal ideation in middle school students. *Biomedical Research*, 28(16), 7005-701.
- Ye, J. (2020). Pediatric mental and behavioral health in the period of quarantine and social distancing COVID-19. *JMIR Pediatrics and Parenting*, 3(2), e19867.

## Appendices

**Appendix A**

**Perceived Stress Scale Questions**

**Name** \_\_\_\_\_ **Date** \_\_\_\_\_

**0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often 4 = Very Often**

1. In the last month, how often have you been upset because of something that happened unexpectedly?..... **0 1 2 3 4**
  
2. In the last month, how often have you felt that you were unable to control the important things in your life? ..... **0 1 2 3 4**
  
3. In the last month, how often have you felt nervous and “stressed”? ..... **0 1 2 3 4**
  
4. In the last month, how often have you felt confident about your ability to handle your personal problems? ..... **0 1 2 3 4**
  
5. In the last month, how often have you felt that things were going your way?..... **0 1 2 3 4**
  
6. In the last month, how often have you found that you could not cope with all the things that you had to do? ..... **0 1 2 3 4**
  
7. In the last month, how often have you been able to control irritations in your life?..... **0 1 2 3 4**
  
8. In the last month, how often have you felt that you were on top of things?.. **0 1 2 3 4**
  
9. In the last month, how often have you been angered because of things that were outside of your control?..... **0 1 2 3 4**
  
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? ..... **0 1 2 3 4**

## Appendix B

### General Self-Efficacy Inventory

**Instructions:** Please circle your answer below.

1. I will be able to achieve most of the goals that I set for myself.

Strongly  
disagree

Disagree

Neither agree  
nor disagree

Agree

Strongly agree

2. When facing difficult tasks, I am certain that I will accomplish them.

Strongly  
disagree

Disagree

Neither agree  
nor disagree

Agree

Strongly agree

3. In general, I think that I can obtain outcomes that are important to me.

Strongly  
disagree

Disagree

Neither agree  
nor disagree

Agree

Strongly agree

4. I believe I can succeed at most any endeavor to which I set my mind.

Strongly  
disagree

Disagree

Neither agree  
nor disagree

Agree

Strongly agree

5. I will be able to successfully overcome many challenges.

Strongly  
disagree

Disagree

Neither agree  
nor disagree

Agree

Strongly agree

6. I am confident that I can perform effectively on many different tasks.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
-------------------	----------	----------------------------	-------	----------------

7. Compared to other people, I can do most tasks very well.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
-------------------	----------	----------------------------	-------	----------------

8. Even when things are tough, I can perform quite well.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
-------------------	----------	----------------------------	-------	----------------

## Appendix C

### Goal Setting Questionnaire

**Week #** \_\_\_\_\_

**Date** \_\_\_\_\_

Student Name: \_\_\_\_\_

Circle your Class Period: 0 2 4 5 7

Step 1: On a Scale of 1 to 10, how would you rate your mental preparedness for class today? (0= I am struggling,I am not able to focus at all right now on work or interacting with my peers and teacher to 10= I am mentally focused with no distractions and eager to begin work and engage with peers and teacher)

Student Response( circle number):

1    2    3    4    5    6    7    8    9    10

(not ready to work) (focus and ready to work)

Step 2: Choose a tool(s) to help regulate: Circle Tools you plan to use

\* Aromatherapy Stick      \* Aroma Acupoint (Ear Acupoint with Bergmont)      \*Tapping

Step 3: Rate yourself after you've used your tools:

Student Response( circle number):

1    2    3    4    5    6    7    8    9    10

(not ready to work) (focus and ready to work)

Step 4: Set your goal for the class period

	Goals	Support Needed
<input type="checkbox"/>	1)	
<input type="checkbox"/>	2)	

Exit Reflection: Did you meet your goal (circle): yes    no

## **Appendix D**

### **Bergamot on Ear Shenmen Visual**

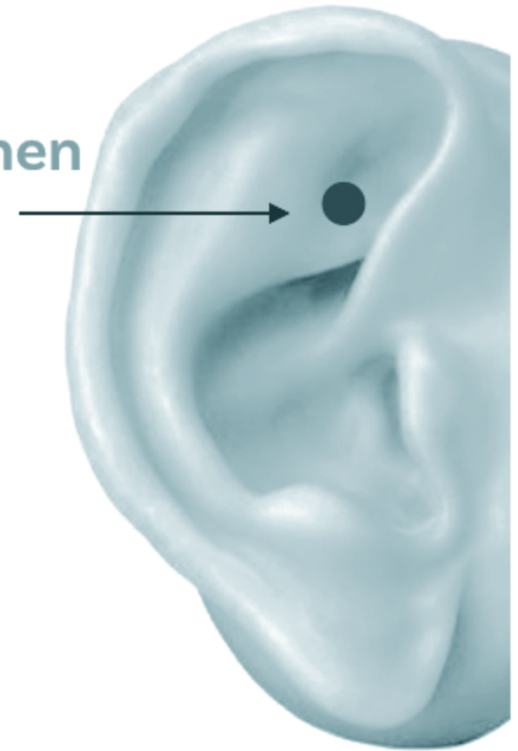


## Ear - Shenmen

*In triangular fossa of ear,  
near posterior angle of fossa*

Relaxing  
Calming  
Balancing

**Shenmen**  
(Ear)



## Appendix E

### All About Stress Student Worksheet

Name \_\_\_\_\_

Period \_\_\_\_\_

Date \_\_\_\_\_

### What is Stress? (5 min video)

Produced by Strong Minds Strong Kids, Psychology Canada

Guiding Questions: Read before you watch the video

- T/ F** All stress is bad.
- T/ F** Stress makes you less alert.
- T/ F** Stress manifests itself in the body as sensations such as butterflies in the stomach or headache.
- T/ F** Everyone needs a little stress in their lives to perform.
- T/ F** Stress impacts the entire body.
- T/ F** Adrenaline and Cortisol are hormones that are released in the bloodstream during the stress response.
- T/ F** Stress response can support you in the moment and accomplish challenging tasks.
- T/ F** Asking for help from a supportive peer or trusted adult can help manage stress in your life.
- T/ F** It is possible to manage stress with different activities.
- T/ F** The body is always naturally able to reset and regulate after a stress response.
- T/ F** There are activities that help the body manage stress.
- T/ F** We have control over stress and can use tools to manage stress and take advantage of the positive effects that stress can have.

<p><b>TOOLS FOR SELF-MANAGEMENT</b></p>	<ul style="list-style-type: none"> <li>* SLEEP</li> <li>* RELAXATION EXERCISES</li> <li>* LISTENING/PLAYING MUSIC</li> <li>* PHYSICAL EXERCISE</li> <li>*LAUGH</li> <li>* PROACTIVE PLANNING</li> <li>* ASKING FOR HELP</li> </ul>
<p><b>Which of the following tools do you use?</b></p>	
<p><b>What is your favorite tool to use at school?</b></p>	
<p><b>What is your favorite tool to use at home?</b></p>	
<p><b>What tools do you want to add to the list ?</b></p>	

## **Appendix F**

### **EFT Tapping Point Visual**

# Quick Tapping Tips for Goal Setting

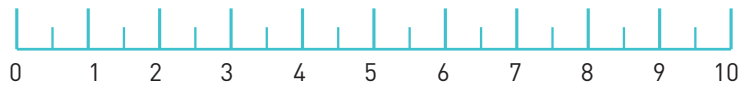
Dr Peta Stapleton

## Tapping – The 5 Steps

1. Acknowledge there is something to change and rate distress/discomfort out of 10

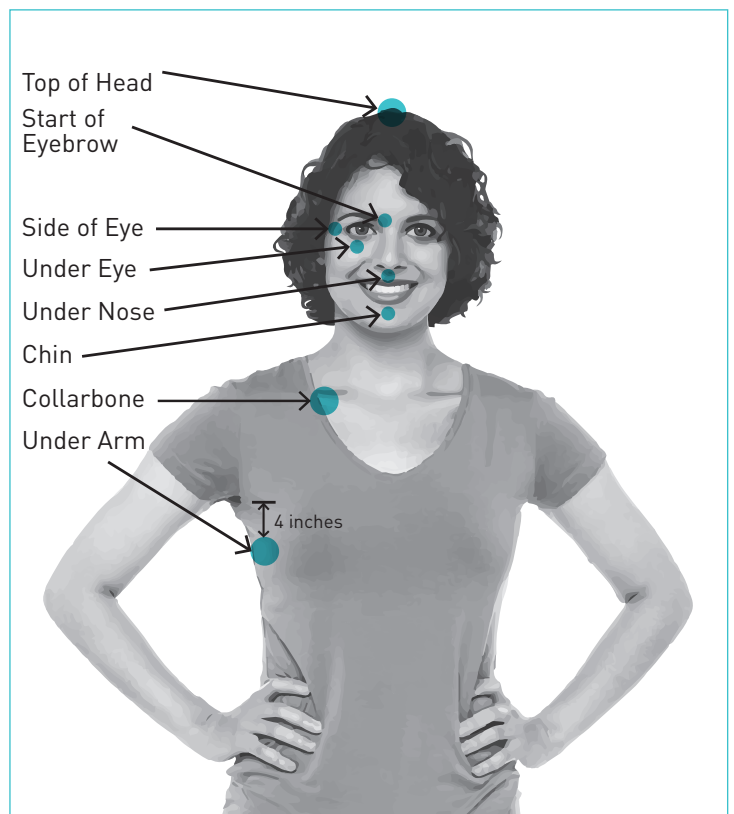
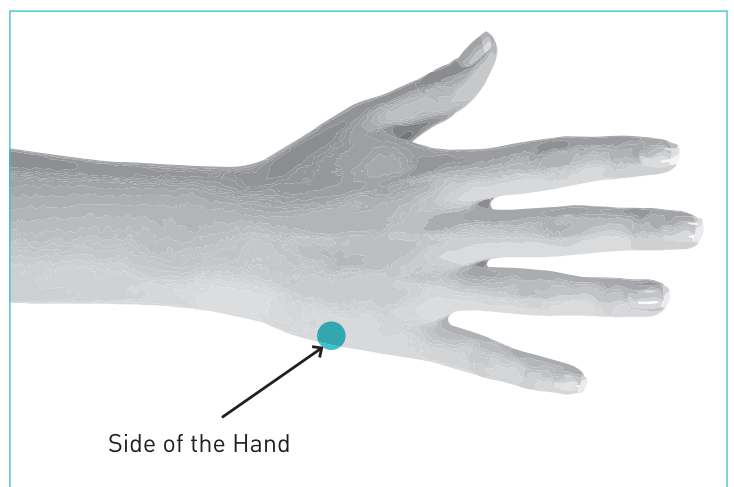
Your ratings are subjective – you can guess the number out of 10, or you just may feel a difference after tapping. The aim is to tap until you feel calmer, the number is 0–1 or you have achieved the shift you want for that tapping time.

2. State problem in setup statement while tapping on side of hand point (3 times).
3. Tap through all 8 EFT points **while saying a short reminder phrase, which is usually the main feeling or body sensation, or thought. This is to stay engaged and not drift off in your thoughts.**
4. Take a breath and re-rate your distress out of 10.
5. Tap again from the eyebrow point until rating is 0. You only need to start again with the setup statement if you want to change the topic you are tapping on.



(10 = most distress, 0 = no distress).

## Tapping Points



## Quick Tips for Tapping on Achieving Your Goals

*Always remember to be specific to your own physical sensation, words to describe your situation or feelings/ thoughts. Tapping works best when you are VERY SPECIFIC.*

Tapping works well for goal success and for ensuring your dreams can come true.

It addresses the 'tail enders' or doubts inside us that prevent a goal succeeding.

It is all about tapping on 2 things:

1. Your BELIEF that a goal can and will come true.
2. The doubt inside your head/body that it can't/won't.

Write a goal using this formula now so you can see what comes up – think about anything you would like to achieve/have come true and write it like this:

It is ..... (insert a date) and I have/am ..... (insert the description of how you will know the goal has come true).

- Here's an example – *It is now the 3rd May 2019, and I am standing on the beach in Hawaii enjoying a perfect vacation.*

---

---

---

---

Read your own goal out loud now and listen for any doubts inside your mind/body. You can also tap one round of tapping actually saying your goal and see what your mind starts to say back.

We call these doubts "Tail Enders". They might be like this:

- *It is now the 3rd May 2019, and I am standing on the beach in Hawaii enjoying a perfect vacation. BUT I DON'T HAVE THE MONEY FOR THIS*
- *It is now the 3rd May 2019, and I am standing on the beach in Hawaii enjoying a perfect vacation. AS IF – YOU WILL NEVER GO OVERSEAS*
- *It is now the 3rd May 2019, and I am standing on the beach in Hawaii enjoying a perfect vacation. HOW WILL I EVER BE ABLE TO DO THIS?*

Tail enders are basically the doubts expressed by the little voice inside your head.

It's the voice that says "yeah, right" when you decide to be or do something different to improve your life.

You can also rate the level of doubt out of 10 (10 = most doubt), and 0=no doubt at all).

Let's tap now with the tail ender (not the goal itself) – the idea is to deal with the tail ender so it doesn't get in the way of the goal coming true. You may have numerous negative tail enders in relation to your goal. Tap on each negative feeling or statement until they no longer feel true (e.g. you rate them as a 0 or 1).

On the side of the hand say –

Even though I don't believe I will succeed because of. I choose to let that go now and accept myself anyway

Even though there is no way that goal will come true because ....., I accept I feel this way right now

Even though I was told ... and that's why my goals never come true ....., I accept myself anyway

Reminder Phrases:

- My doubt
- This negative belief
- The reasons this won't come true
- My overwhelming doubt
- I always sabotage my goals
- I need to stay the same
- It's unsafe to change
- I don't deserve this

Once you have reduced the negative belief or feeling to a 0 or 1 say your goal out loud again. Re-rate your doubt in that goal or positive affirmation. It should be going down in number as your belief in it increases because you are ridding yourself of the negatives – it is called a VOC (Validity of Cognition).

## 2 Ways to use Tapping for Goals

1. You can tap on the level of doubt only – e.g. your doubt is 8/10 so just tap with your doubt and see what shifts. If you get any ideas or memories that come to mind, move to step 2.
2. Use tapping to explore WHY you this goal won't come true with your tail enders. Do the tail enders represent someone else's voice from your childhood (e.g. a parent told you, you couldn't do certain things). Do you have memories of times when things didn't work out for you – or they might have and other people were jealous/angry. Even positive childhood memories of achieving can lead to self sabotage later in life because you don't want to upset people. You can tap on memories with the Movie Technique in EFT or Matrix Reimprinting.

Always seek the support of a professional and skilled EFT practitioner if you need support with this.

# My Tapping Notes

Date: \_\_\_\_\_

Issue/Feeling or Problem I need to work on:

---

---

My Setup statement

---

---

My Reminder Phrases:

---

---

Intensity rating 0 to 10 where 10 is worst I can imagine and 0 is none:

Round 1 –

---

Round 2 –

---

Round 3 –

---

Round 4 –

---

Round 5 –

---

If you get stuck at any particular intensity rating for several rounds then ask yourself whether something else has come up, or another aspect has become more important that you may need to focus on first. If so start again with a setup statement for this issue.

Other things I became aware of during this tapping –

---

---

---

---



# My Tapping Notes

Date: \_\_\_\_\_

Issue/Feeling or Problem I need to work on:

---

---

My Setup statement

---

---

My Reminder Phrases:

---

---

Intensity rating 0 to 10 where 10 is worst I can imagine and 0 is none:

Round 1 –

---

Round 2 –

---

Round 3 –

---

Round 4 –

---

Round 5 –

---

If you get stuck at any particular intensity rating for several rounds then ask yourself whether something else has come up, or another aspect has become more important that you may need to focus on first. If so start again with a setup statement for this issue.

Other things I became aware of during this tapping –

---

---

---

---

# My Tapping Notes

Date: \_\_\_\_\_

Issue/Feeling or Problem I need to work on:

---

---

My Setup statement

---

---

My Reminder Phrases:

---

---

Intensity rating 0 to 10 where 10 is worst I can imagine and 0 is none:

Round 1 –

---

Round 2 –

---

Round 3 –

---

Round 4 –

---

Round 5 –

---

If you get stuck at any particular intensity rating for several rounds then ask yourself whether something else has come up, or another aspect has become more important that you may need to focus on first. If so start again with a setup statement for this issue.

Other things I became aware of during this tapping –

---

---

---

---

## Other Books by Dr Peta Stapleton

*EFT for Teens* –

<https://www.amazon.com/EFT-Teens-Peta-Stapleton-PhD/dp/1604152648>

*EFT for Introverts* –

<https://www.amazon.com/EFT-Introverts-PhD-Peta-Stapleton-ebook/dp/B07FP6D6GQ>

*Your Mind Power: Strategies for Behavior Change* –

<https://www.hybridpublishers.com.au/product/your-mind-power-strategies-for-behaviour-change>

*Attract Money Subconsciously* –

<https://www.amazon.com/Attract-Money-Subconsciously-Peta-Stapleton-ebook/dp/B004JZXQYO>

*“EFT for Weight Loss,” chapter in Clinical EFT Handbook, Vol. 2* –

[https://www.amazon.com/Clinical-EFT-Handbook-Eft-Handbooks-ebook/dp/B00HU3YAEC/ref=sr\\_1\\_2?s=books&ie=UTF8&qid=1469756038&sr=8-2&keywords=clinical+EFT+handbook+vol+2#navbar](https://www.amazon.com/Clinical-EFT-Handbook-Eft-Handbooks-ebook/dp/B00HU3YAEC/ref=sr_1_2?s=books&ie=UTF8&qid=1469756038&sr=8-2&keywords=clinical+EFT+handbook+vol+2#navbar)

*The Science behind Tapping: A Proven Stress Management Technique for the Mind and Body (Hay House)* –

[https://www.amazon.com/Science-behind-Tapping-Management-Technique/dp/1401955738?mc\\_cid=80b2b02aa6&mc\\_eid=%5BUNIQID%5D](https://www.amazon.com/Science-behind-Tapping-Management-Technique/dp/1401955738?mc_cid=80b2b02aa6&mc_eid=%5BUNIQID%5D)

## Important Note

This tapping tip outlines an impressive personal improvement tool. It is not a substitute for training in psychology or psychotherapy. The author does not assume responsibility for how the reader chooses to apply the techniques herein. The ideas, procedures, and suggestions in this book are not intended as a substitute for consultation with your professional health care provider. If you have any questions about whether or not to use EFT, consult your physician or licensed mental health practitioner.

This material is for your general knowledge only and is not a substitute for traditional medical attention, counselling, therapy or advice from a qualified health care professional. The information here is not intended to be used to diagnose, treat, cure or prevent any disease or disorder.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopy, recording, or otherwise, without prior written permission from Dr Peta Stapleton.

## About the Author

Peta Stapleton, PhD, has 25 years of experience as a registered clinical and health psychologist in Queensland, Australia. Peta has also spent the last 15 years in academia and is associate professor in psychology at Bond University. She is a published author, certified practitioner of Neuro-linguistic Programming, Timeline Therapy, and Emotional Freedom Techniques (and an EFT Universe Trainer, Levels 1 to 3). Peta is the Hay House author of *The Science Behind Tapping: A Proven Stress Management Technique for the Mind and Body*, and is Australasia's leading EFT researcher and academic.

Peta specializes in eating disorders and emotional eating, women's health, and adolescent issues, and she is a world leader and researcher in EFT. In 2014, she was awarded the Harvey Baker Research Award for meticulous research in Energy Psychology and also became a Gold Coast Business Events Ambassador for Gold Coast Tourism. In 2015, she received the Global Weight Management Congress Industry Professional Award of Excellence, and was named the Gold Coast Women in Business–Woman for Change Winner. In 2016, she was awarded the greatest contribution to the field of Energy Psychology by the Association of Comprehensive Energy Psychology. In 2018 Peta was named the Gold Coast Women in Business Innovation and technology winner for her online therapy trials and work.

### **Peta is on most social media and would love to connect!**

Website: [www.petastapleton.com](http://www.petastapleton.com)

Training: [www.evidencebasedeft.com](http://www.evidencebasedeft.com)

Email: [admin@evidencebasedeft.com](mailto:admin@evidencebasedeft.com)

Facebook: <https://www.facebook.com/drpetastapleton>

Twitter: <https://twitter.com/PetaStapleton>

LinkedIn: <https://www.linkedin.com/in/petastapleton>

Research publications:

<https://research.bond.edu.au/en/persons/peta-stapleton>

Dr. Stapleton's clinical food craving program based on research trials:

<http://www.weightmanagementpsychology.com.au/onlinecourses/tappingforweightmanagement>

### **Tap into a Better You apps:**

Apple: <https://itunes.apple.com/au/app/tapinto/id991658832?mt=8>

Android: <https://play.google.com/store/apps/details?id=com.petastapleton.tapintoabetteryou>