

**The Effects of Getting Unstressed (GUS™),
a Wholistic Multi-Modal Programme,
on Adolescents' Well-Being**

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DEDICATION

To

Paul Allman

25 April 1947 – 10 August 2001

*Still faithful friend and travel companion,
I feel your presence like a soft veil enfolding me
Though we no longer follow the same path.
Your death opened my heart.*

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The work reported in this thesis is original and carried out by me solely, except for the acknowledged direction and assistance gratefully received from colleagues and mentors.

Martina C. Steiger

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*God, give us
Grace to accept with serenity the things that cannot be changed,
Courage to change the things which should be changed,
And the wisdom to distinguish the one from the other.*

Reinhold Niebuhr, in a sermon in 1943

What honour and privilege to have reached this point in my journey where I can publicly acknowledge the deep gratitude and humility I feel. I am grateful to you, God, the Universe, the One, for steering me so wisely and mysteriously along this sacred path. I thank you for your trust in me and for teaching me.

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Thy Will Be Done

ABSTRACT

The Effects of Getting Unstressed (GUS™), a Wholistic Multi-Modal Programme, on Adolescents' Well-Being

This study examined the effects of a wholistic multi-modal programme on the well-being of adolescents, age thirteen to nineteen. The programme was designed to manage and reduce stress in a self-directed format, with a selection of specific techniques that address the teenagers' self-concept and their experience of anxiety, and provide tools to assist in decision-making. The dependent measures used included the State-Trait Anxiety Inventory (STAI), the Nowicki-Strickland Locus of Control Scale (N-S), and the Self-Description Questionnaire II (SDQ II). The experimental design was a pre-test/post-test with a control group. The independent variable was constructed as a one-day, eight-hour workshop in which all 72 adolescent research subjects participated. The wholistic multi-modal programme intervention yielded statistically significant differences for the treatment group ($p < .05$), lowering state anxieties. Findings also indicate statistically significant improvements ($p < .01$) in the Total Self-Concept scores of the adolescents, as well as in two of the eleven sub-scales. Additionally, the results provide evidence of a shift towards a more internal locus of control ($p < .01$). No statistically significant differences were found for the trait anxiety levels of the treatment group, nor between the treatment and control groups. Anecdotal reports strongly support the quantitative findings. Conclusions and possible implications related to future research are discussed.

Key words: wholistic, holistic, multi-modal programme, self-concept, self-esteem, well-being, adolescents, teenagers, stress-reduction, stress-management, anxiety, self-help, self-directed, personal growth, intuition, inner voice, inner wisdom, holistic education, State-Trait Anxiety Inventory (STAI), Nowicki-Strickland Locus of Control Scale (N-S), Self-Description Questionnaire II (SDQ II)

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CHAPTER 1: LITERATURE REVIEW AND PROBLEM OVERVIEW

*It is as certain as it is strange
that truth and error come from one and the same source;
for that reason one must often not do something
to the detriment of error
since one would do also something detrimental to truth.*

Johann Wolfgang von Goethe (Art and Antiquity)

Introduction and Statement of the Problem

*And now here is my secret,
a very simple secret:
it is only with the heart that one can see right;
what is essential is invisible to the eye.*

Antoine De Saint-Exupery (The Little Prince)

Currently, reports on negative adolescent behaviours, both in the media and in national survey data, appear to be plentiful. There are hundreds of headlines in the newspapers and magazines, stories on television and research articles that focus on the relationship between teens and drugs, teens and violence,¹ teens and crime,² drop-outs, teen parenting, low academic achievement, illiteracy, and more.³ Many government agencies have the mandate to address specific problems and therefore, they track specific negative behaviours.⁴ Generally speaking, teenagers have a bad reputation in society, as a poll conducted by Public Agenda indicated, in which adults refer to adolescents as “rude,” “irresponsible,” and “wild.”⁵ Only ten percent of the population questioned ascribed positive attributes to the teens, such as “helpful” or “smart.”⁶

Most teenagers do not appear grounded through an enriched inner life, which causes the pressures the children and adolescents experience, to appear outside of their locus of control. These pressures express themselves in many different ways, most of which can be categorized as unhealthy adaptations to stress, such as violent behaviours, substance abuse, high levels of anxiety and depression, headaches and migraines,⁷ high percentage of suicide attempts and eating disorders, self-mutilation,⁸ low self-esteem, low academic achievement, just to name a few.⁹

Perhaps the teenage population really mirrors the present condition of our society at large. Thomas Moore's words describe perfectly the current state of affairs not only of the school systems in Canada and the United States but also of North American society:

The great malady of the twentieth century, implicated in all our troubles and affecting us individually and socially, is "loss of the soul." When soul is neglected, it doesn't just go away; it appears symptomatically in obsession, addictions, violence, and loss of meaning.¹⁰

The vast majority of teenagers spend more time at school than in most other environments and schools do exert an enormous and powerful influence on this population.¹¹ So what is that influence? According to Jack Miller, a professor at the Ontario Institute for Studies in Education at the University of Toronto, outcomes-based education is leading to a lack of vitality and energy in the schools.¹² This tendency is caused largely by the system's emphasis on accountability and career education in conjunction with an almost exclusive focus on 'scientific principles,' which form the core of the 'mechanization' in the curriculum. For the last few years, schools have highlighted factual knowledge, accuracy and the bottom line. It is fascinating to read statements made by the Dean and Directors of Admissions for Harvard warning about the ill effects of a lack of balance in students' lives. They share on the admissions' website their

concerns that “the pressures on today’s students seem far more intense than those placed on previous generations.”¹³ Robert Sardello emphasizes the rather detrimental impact of the present education system on the soul:

Education instead has become an institution whose purpose in the modern world is not to make culture, not to serve the living cosmos, but to harness humankind to the dead forces of materialism. Education as we know it, from preschool through graduate school, damages the soul.¹⁴

Two important points that arise out of these opening statements require further investigation. First of all, how does this ‘loss of soul’ manifest itself in concrete terms in the teenage population and what is currently being done about it? For that purpose, the well-being of teenagers is discussed. Adolescent well-being is studied through close scrutiny of four determinants: the stress adolescents experience, the anxiety they feel, their self-concept, and their general perception of their power in the world, i.e. locus of control. The question of what those findings imply in terms of cost to society will be answered next. Secondly, after examining the current conventional approaches to these issues, other options are explored that assist adolescents in coping with stress in a healthy way. Perhaps that could mean “re-connecting the teenagers with their souls in the broadest sense so they can experience an ‘awakening to wholeness,’” an experience that is each human being’s birthright, according to Alex Gerber.¹⁵

Adolescent Well-Being

Health and well-being are two terms commonly used in conjunction with each other, whereby health is usually treated as a subsection of well-being. The World Health

Organization defines health as “a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity.”¹⁶ Although statistical information about the well-being of children and youth has proliferated over the past two decades, well-being still appears to be a rather inconsistently defined term, yet frequently employed in the field of child development.¹⁷ The WHO defines well-being as multifaceted. “*Absence* of distress is a major component, but equally important is the *presence* of positive affective states, such as happiness and excitement. An important *cognitive* aspect of well-being is the overall evaluation of life, that is life-satisfaction.”¹⁸ According to Health Canada, subjective well-being can be measured through the broad concepts of mental and emotional health and the attainment of personal goals.¹⁹ The lack of clarity can perhaps be contributed to scant communication between the research community and the practice community. Even the definition of adolescence remains vague in the literature, often being referred to as the second decade of life.²⁰ For the purposes of this study, adolescence is considered as the period of development from age thirteen through age nineteen.

Generally, child and adolescent well-being is organized into five distinct broad and measurable domains: physical, psychological, cognitive, social, and economic, for which numerous positive and deficit indicators exist.²¹ A review of the literature on child development revealed a huge quantity of research and data, yet did not yield a consistent definition of well-being, nor an instrument appropriate to measure the well-being of children or adolescents.²²

Rather than developing and promoting skills and choices for children and adolescents, history has tended to lean towards prevention of deficits instead. Mainly

negative outcomes have been addressed in the past, which perpetuate public perceptions of the adolescent population, who is often seen as the potential source of problems.²³ It is interesting to note that despite the extensive data available, major holes remain in the overall picture of adolescent well-being, with adolescent mental health representing a rather neglected area of research.²⁴ Measures for mental health are rare for instance, as are positive measures of social development and related behaviours.²⁵ Even more remarkable is the obvious omission of spiritual health as a domain or even sub-category in this field of indicators. Because of the complex multi-dimensional nature of well-being, research is often limited to the discussion of a sole indicator in a single domain, thus eliminating necessary associations with more distal factors.²⁶

For the purposes of this study, adolescent well-being is conceptualized as a phenomenological organization of cognitive, social, emotional, and spiritual experiences. The ideal state of well-being is seen as a balanced state of self in which physical, cognitive, social, emotional and spiritual functions are integrated, leading to positive development, transcendence of challenges, fulfillment of needs, optimal functioning, and attainment of potential. The main indicators used to determine the level of balance cover, yet do not exhaust, all but the physical domain of well-being. This study focuses on developing mechanisms for positive development of youth, such as positive mental health, cognitive, social, emotional and spiritual well-being in a wholistic approach. Successfully dealing with all aspects of life and developing coping strategies for the problems and contextual influences that direct and shape the adolescents' life lead to a deeper sense of well-being.

The choice of the adjective ‘wholistic’ rather than ‘holistic’ reflects the emphasis the GUS™ programme places on the whole person. GUS™ aims at treating the adolescents “as complex organisms whose minds, emotions, relationships, and spiritual selves are as much a part of whatever they are experiencing as their physical bodies are.”²⁷ Thus, the programme’s wholistic approach is meant to encompass the holistic ideas of both education and Energy Medicine, addressing the whole person and emphasizing the oneness with the universe, in other words being whole.

Stress, anxiety, self-concept, and locus of control have been identified in the context of this study as the primary determinants of the perceived level of well-being of adolescents, which is congruent with the literature that will be presented on each topic as it relates to the well-being of adolescents.

Stress

The word stress has become part of the contemporary daily vocabulary of the general population and is present in all the media on a regular basis. Why the seeming popularity of this phenomenon? In 1983, *Time* magazine’s cover story called stress “The Epidemic of the Eighties” and referred to it as “our leading health problem.”²⁸ It appears the situation has progressively worsened since then. Numerous surveys confirm that adult Americans perceive they are under much more stress than a decade or two ago. A National Consumers League survey, released in June 2003, stated that 80% of adults report significant stress in their lives and more than half of those questioned affirmed that

their stress level is higher than they prefer.²⁹ About 60% of respondents with stress in their lives experience physical symptoms and two thirds of all questioned admit that the stress is affecting them in many other areas of their well-being. By contrast, in the 1983 survey only 55% said they felt under great stress.³⁰

Hans Selye is credited with coining the term “stress,” a term he attempted to replace with ‘alarm reaction’ and ‘strain’ on several occasions. However, since the publication of his seminal work, “A Syndrome Produced by Diverse Nocuous Agents,” which was published in 1936, the word ‘stress’ has been adopted by most other languages.³¹ He also created the word ‘stressor’ to distinguish between stimulus and response because people automatically viewed stress as an unpleasant threat.

Physical changes in response to stress have always been and continue to be an essential adaptation for meeting natural threats. The stress response can be an asset for raising levels of performance during critical events such as sports or performance activities, important meetings, or in situations of actual danger or crises. The changes that occur in the structure and chemical composition of the body can be objectively observed and measured:

Some of these changes are merely signs of *damage*; others are manifestations of the body’s *adaptive reactions*, its mechanism of defense against stress. The totality of these changes—the *stress syndrome*—is called the *general adaptation syndrome* (G.A.S.). It develops in three stages: (1) the alarm reaction (2) the stage of resistance (3) the stage of exhaustion.

The *nervous system and the endocrine (or hormonal) system* play particularly important parts in maintaining resistance during stress. They help to keep the structure and function of the body steady, despite exposure to stress-producing or *stressor* agents, such as nervous tension, wounds, infections, poisons. This steady state is known as *homeostasis*.³²

Most of the time, the individual perceives stress as a negative occurrence. B. L. Seaward defined stress as “the inability to cope with a perceived or real (or imagined) threat to one’s mental, physical, emotional, and spiritual well-being which results in a series of physiological responses and adaptations.”³³ Stress seriously affects the physical dimension of health, in particular the immune and cardiovascular systems.³⁴ Stress can and does express itself in the mental, emotional, social, and spiritual domain of health, since unhealthy adaptations to stress can take many forms.³⁵ Studies suggest that the inability to adapt to stress is associated with the onset of depression or anxiety.³⁶ Despite much research on the impact of physical stress on the physical body, only fairly recently have the profound effects of psychological stress on health been acknowledged.³⁷ With the increased interest and research in the field of psychoneuroimmunology, more and more scientists make allowances for the fact that psychological stress can weaken the immune system and therefore may lead to disease. When the body is faced with stress, a process called allostasis is set into motion, which means creating ‘equilibrium through change,’ and is essential for survival. However, if this allostatic load, as Dr. McEwen calls it,³⁸ lasts for extended periods of time, the risk of illness increases. Even worse, the allostatic load is amplified by people’s inability to respond to stress in a healthy way. Stress and anxiety, for example, have immediate effects on the individual’s physical, mental, emotional, and spiritual well-being.³⁹ The stressors can range from illness, injury, and inadequate nutrition to low physical fitness on the physical level. In the emotional and mental domains, the pressure to do well financially or socially for instance, may inflict stress on the individual. Lastly and just as importantly, the “inability to find purpose in life and to understand how individual lives contribute to a

much larger and grander universe” often is perceived as a stressor in the spiritual dimension of the person’s health.⁴⁰ It is interesting to note that this observation has been made in the context of school health where often the spiritual component is suspiciously absent.

Adolescents and stress.

What is specific to the way adolescents react to stress? What impact do stressful negative experiences have on adolescent adjustment? By definition, adolescence is the time of normative developmental stress, dominated by a search for identity.⁴¹ It is by nature a transitional period, marked by perturbations of adaptation, emotional, biological, and behavioural problems; and many adolescents are challenged by additional multiple stressors.⁴² The twenty-first century presents teenagers with a number of environmental risks, stressful life events, such as several moves, parental divorce, minority group status, and single parenthood, just to mention a few. These factors often contribute to low social and/or emotional competence, behaviour problems and psychiatric disorders.⁴³

As Bruce Byrne points out, adolescence certainly is a time for teenagers to develop psychosocial competence, which include strategies for coping, and yet very little is understood at this point on the subject.⁴⁴ Most adolescents attend school and spend a large portion of their lives there. School maladjustment, such as reduced attention span or diminished motivation to succeed academically, is seen as a common unhealthy adaptation to stress, whether the actual stressors derive from the home or the school.⁴⁵ If

a student perceives education as a threat—rather than a challenge, which can produce a sense of competence and an increased capacity to learn—then the negative thoughts and feelings that are evoked (e.g. feelings of powerlessness and a sense of loss) will increase the experience of stress for the individual. Socially maladaptive coping patterns may include verbal and physical aggression towards others, defiance of authority, acting out, and juvenile delinquency, as much of the work by B. E. Compas and others highlights.⁴⁶ Stress may also appear in some teenagers as psycho-physiological symptoms.⁴⁷ Other serious reactions to stress among youth are anxiety, depression and suicidal ideation, with the latter receiving currently more attention from psychologists and the medical community.⁴⁸

Even though overall trends (according to Child Trends DataBank) indicate that teen homicide and suicide rates have steadily dropped over the last seven years, homicides and suicides among young people nationwide in the United States and Canada continue to be the second and third leading causes of death among teens ages 15-19, after accidental death.⁴⁹ The current figures for 2001, more recent statistics are not yet available, are 9.4 homicides per 100,000. Gang violence has been associated with many teen murders; in 1997 nearly three in ten homicides were attributed to gang violence.⁵⁰ The teen suicide rate appears to hold around 7.9 per 100,000 for 2001⁵¹—the global mortality rate is 16 per 100,000—with mood disorders such as depression, dysthymia, and bipolar disorders being major risk factors for suicide among children and adolescents.⁵² Overall, these statistics paint a rather grim and sad picture, particularly in light of the estimate that “there may be from 8 to 25 attempted suicides per every suicide death.”⁵³

Stressful life events and low levels of communication with parents may also be significant risk factors, as well as the teenagers' experience of strong feelings of confusion, self-doubt, pressure to succeed, financial uncertainty, and other fears while growing up.⁵⁴ These fears and seeming lack of control also express themselves in the ever rising number of teens with eating disorders. In 2001, about five percent of all youth in grades 9 through 12 reported vomiting or taking laxatives to control their weight.⁵⁵ Anorexia and bulimia affect nearly 10 million women and 1 million men (primarily teens and young adults) in reported cases in the United States and can be fatal. In fact, anorexia nervosa has the highest premature fatality rate of any mental illness. The average age of sufferers is dropping rapidly (as young as elementary school), with peak onset among girls ages 11-13.⁵⁶ A "particularly worrisome coping mechanism that teens and young adults may use to deal with stress and sadness" is the phenomenon of self-mutilation, which is also linked with anxiety and depression.⁵⁷ Even though very little research has been done on this subject to date, self-mutilation is generally understood "as an effort to communicate psychological distress and is a plea from the adolescent for an ongoing supportive and caring relationship."⁵⁸ Typically, adolescent self-mutilators suffer from stressors within home and school, and exhibit mood swings, from sad, angry, and anxious to self-disappointed and depressed, maintain poor impulse control, and have low self-esteem.⁵⁹ Chronic stress, which often begins in childhood, may even cause changes in the neuroendocrine pathways that can result in both obesity and depression.⁶⁰

Anxiety

Just like stress, everyone experiences anxiety from time to time, which is generally relatively mild and brief, caused by a stressful event, such as an important exam. Anxiety is a normal reaction to stress, with which in general one knows how to cope.⁶¹ Coping means successfully dealing with problems that arise in life. And just as with stress, there is a perceived tendency of people to be more anxious and worried than in the past.⁶² For instance, D. H. Barlow states that more people visit doctors for symptoms of anxiety than for colds.⁶³ Anxiety is linked to a significant number of physical and psychological ailments, which often mirror those of stress. Unlike stress, though, the triggers for anxiety are not necessarily associated with specific stressful or threatening conditions.

Anxiety disorders are serious medical illnesses and affect approximately 19 million American adults.⁶⁴ Anti-anxiety/depressants drug sales increased by 20.2% from 2000 to 2001, totalling 12.5 billion in retail sales.⁶⁵ Anxiety disorders are the most common of all mental health problems and are known as Generalized Anxiety Disorder, Panic Disorder, Phobias, Obsessive-Compulsive Disorder, and Post-Traumatic Stress Disorder.⁶⁶ Not only are anxiety disorders common; a review of two meta-analyses actually show that Americans have shifted toward substantially higher levels of anxiety and neuroticism during recent decades,⁶⁷ thus highlighting the importance of examining changes in anxiety. Charles Spielberger even refers to the twentieth century as the “Age of Anxiety.”⁶⁸ Researchers have connected diminished cognitive performance, drug and alcohol addictions, depression, and suicide ideation to anxiety as a predisposing factor.⁶⁹

Daniel Eastman argues that anxiety, which is ambiguously defined in different psychoanalytic theories, results from “a failure in any aspect of a flight response, whether perceptual, emotional, conceptual or behavioral...Anxiety in this view is qualitatively related to fear...”⁷⁰ Since the 1950s, research has proceeded to examine anxiety as two distinct constructs, namely the state and trait anxiety, which were first introduced by R. B. Cattell and I. H. Scheier.⁷¹ Charles Spielberger, the co-developer of the State-Trait Anxiety Inventory, further elaborated on these concepts. Personality states express themselves in emotional reactions:

An emotional state exists at a given moment in time and at a particular level of intensity. Anxiety states are characterized by subjective feelings of tension, apprehension, nervousness, and worry, and by activation or arousal of the autonomic nervous system.⁷²

Trait anxiety, on the other hand, is generally perceived as those qualities that dispose individuals to a particular perception of the world to which they respond in a “specified manner with predictable regularity.”⁷³ In other words,

Trait anxiety (T-Anxiety) refers to relatively stable individual differences in anxiety-proneness...T-Anxiety may also reflect individual differences in the frequency and intensity with which anxiety states have been manifested in the past and in the probability that S-Anxiety will be experienced in the future.⁷⁴

In summary and for the purposes of this research study, state anxiety is understood as a transient moment in a particular situation, whereas trait anxiety reflects how individuals generally feel about the world in which they live.

Adolescents and anxiety.

Eight to ten out of every one hundred children and adolescents are diagnosed with anxiety disorders, a steadily increasing number.⁷⁵ The findings of Jean Twenge's study show that both college student (adult) and child samples increased almost a full standard deviation in anxiety between 1952 and 1993 (explaining about 20% of the variance in the trait). The average American child in the 1980s reported more anxiety than child psychiatric patients in the 1950s.⁷⁶

As anxiety disorders become more readily diagnosed in adolescents, "the myth that high levels of anxiety and other psychopathology are normal in adolescence is increasingly being recognized as false."⁷⁷ It is interesting and important to note in this context that the American Psychiatric Association made significant changes to its definition of adolescent criteria for overanxious and generalized anxiety disorder, which have merged into one category and are identical with those for adults. It is now a necessary specification for diagnosis of an anxiety disorder that the patient "finds it difficult to control the worry" and there is evidence of "clinically significant distress."⁷⁸ Only three of six, as opposed to the previous six of eighteen, somatic and psychological symptoms are required for diagnosis: a) restlessness or feeling on edge, b) being easily fatigued, c) difficulty concentrating or mind going blank, d) irritability, e) muscle tension, or f) sleep disturbance.⁷⁹ D. Clark and his colleagues present the characteristics, prevalence, and comorbidities of the many anxiety disorders in adolescence in their study very succinctly, with the recommendation to deepen the knowledge in the field of

adolescent research because it “may be critical in determining the etiology of anxiety disorders across the life span.”⁸⁰

Present findings show that “high levels [of anxiety] contribute to a variety of psychosocial problems among adolescents.”⁸¹ That translates into adolescents engaging in more problem behaviours, having a poorer self-concept, being more likely disliked, and having a lower school achievement and aptitude compared to less anxious peers, all of which may have serious long-term implications for the teenagers.⁸²

Since anxiety draws on psychobiological mechanisms (e.g., attachment as a coping strategy), a sense of separation or actual separation, or the anticipation of unavailable external supports are amplified.⁸³ The breakdown in social connectedness becomes apparent in the increased divorce rates and the number of people living alone, for instance, or the decrease in the numbers of people visiting friends or joining community organizations.⁸⁴ Not surprisingly then, correlations with social indices (e.g., divorce rates, crime rates) suggest that decreases in social connectedness and increases in environmental dangers may be responsible for the rise in anxiety.⁸⁵ Another revealing measure through which connectedness can be considered is levels of trust. Only 18.3% of high school seniors in 1992 agreed they could trust people, compared with 34.5% in 1975.⁸⁶ Economic factors, however, seem to play little role.⁸⁷

Higher levels of anxiety also increase the prevalence of other diseases or disorders, affecting the well-being of adolescents in various ways. For instance, “psychosocial consequences of anxiety disorders frequently contribute to the development of depression.”⁸⁸ Additionally, “self-treatment for anxiety with central nervous system (CNS) depressants such as alcohol” is a rather direct cause of depression,

with anxious individuals being twice as likely to abuse substances.⁸⁹ Mood disturbances, which include anxiety and depression, have also been associated with adolescent aggression.⁹⁰ Aggression, which the DSM-IV does not classify as a separate disorder, has nevertheless become a major public health problem.⁹¹ Apart from injuries and deaths that can be outcomes of aggressive behaviours, there are also other serious implications for the physical health of future adult populations, since research demonstrates that anxious people have a higher mortality rate, largely due to their weakened immune system and susceptibility to occurrences of asthma and irritable bowel syndrome, for instance.⁹²

Self-Concept

A plethora of ways exists to think about the self.⁹³ William James was among the first writers to use the term ‘self-esteem,’ which he defined as a feeling that “in this word depends entirely in what we *back* ourselves to be and do.”⁹⁴ W. Strein, who has researched much of the literature on self-concept, maintains that self-concept is one of the most popular ideas in psychological literature and found at least fifteen different ‘self’ terms.⁹⁵ Clear definitions are often lacking, unfortunately, which leads to confusion and misunderstandings. The two most commonly used terms are self-esteem and self-concept. Self-concept generally and traditionally refers to “the totality of a complex, organized, and dynamic system of learned beliefs, attitudes and opinions that each person holds to be true about his or her personal existence.”⁹⁶ In other words, the prevalent view

of self-concept is seen as an overarching, global characteristic of the person and must be understood as the knowledge individuals have of themselves. R. Franken suggests:

There is a great deal of research which shows that the self-concept is, perhaps, the basis for all motivated behavior. It is the self-concept that gives rise to possible selves, and it is possible selves that create the motivation for behavior.⁹⁷

Self-esteem, on the other hand, pertains to how individuals feel about or how they value themselves, i.e. it is one's subjective evaluation of one's value or worth. Because of that subjective evaluation of self-worth, F. Pajares and D. H. Schunk argue, "Self concept is particularly dependent on how a culture or social structure values the attributes on which the individual bases those feelings of self-worth."⁹⁸ Based on A. Bandura's social cognitive theory,⁹⁹ they suggest one need to distinguish between self-concept and self-efficacy beliefs, which they define as "a judgment of the confidence one has in ones' abilities;" and thus these beliefs are not that intricately dependent on cultural considerations.¹⁰⁰ For many researchers and writers, though, self-esteem and self-efficacy remain particular components of self-concept, with conceptual and empirical differences remaining unclear.¹⁰¹ R. Franken expresses the relationship between self-esteem and self-concept as follows: "...people who have good self-esteem have a clearly differentiated self-concept... When people know themselves they can maximize outcomes because they know what they can and cannot do."¹⁰² His description implies that self-concept is not innate but developed through interaction with one's environment and self-reflection.

Self-concept is viewed differently though in this research study. The traditional model of global self-concept is in contrast with the more current conceptualization of self-concept as a set of self-evaluations, which are specific to different domains of

behaviour. Such a multi-faceted view emphasizes specific competencies or attributes, such as academic (e.g. math, verbal), non-academic (physical abilities, parent relations, emotional stability), and global self-concept. The general tendency in most published self-concept measures now tend to support the domain-specific self-concepts, a theory thoroughly studied by R. J. Shavelson, J. J. Hubner, and G. C. Stanton.¹⁰³ H. W. Marsh's Self-Description Questionnaire II (SDQ II), which is used in this study, provides an example of such a multi-faceted and hierarchical view of self-concept.¹⁰⁴ Among most researchers, agreement appears to exist on the subject of the main criteria of self-concept: it is organized, multi-faceted, hierarchical, stable, developmental, evaluative, and differentiable, whereby attention is mainly devoted to its hierarchical and multi-faceted aspects.¹⁰⁵

Self-concept of adolescents.

The phenomenological nature of self-concept itself led Marsh and Shavelson to recognize the importance of general self-perceptions and domain-specific self-perceptions regarding physical, emotional, or academic views of the self, for instance.¹⁰⁶ The hierarchical nature of self-concept allows for a study of increasingly more narrowly defined types of self-concept, which may or may not be related to how individuals perceive themselves in one area of their lives as opposed to another.

H. W. Marsh demonstrates that general academic achievement measures are moderately related to academic success and specific measures of subject-related measures

are highly related to success in that area, as opposed to general self-concept and non-academic aspects of self-concept which are not related to academic work.¹⁰⁷ This is also supported by the following finding:

Level of school success, particularly over many years, predicts level of regard of self and one's own ability... whereas level of self-esteem does not predict level of school achievement...It is the students' history of success and failure that gives them the information with which to assess themselves.¹⁰⁸

Bruce Byrne focused on the relationship between academic self-concept and academic achievement and concluded that academic success was strongly linked to the views students held of themselves.¹⁰⁹ According to several studies, a definite correlation between low self-esteem and low academic achievement exists, especially among younger adolescents.¹¹⁰ As the students get older, this correlation appears to shift because students will employ certain mechanisms in order to protect their personal sense of self, by investing into areas such as romantic appeal, for instance.¹¹¹

Causal relationships between global self-worth and academic performance is the topic of a study by Wiest, Wong, and Kreil, in which they explored the relation between measures of perceived control, competence, and autonomy on the one hand, and academic performance and self-worth on the other hand.¹¹² Numerous studies exist that relate crime and violence to low self-esteem.¹¹³ Some of them also demonstrate that programmes set up to foster self-esteem have proven effective in reducing violence when a positive correlation between enhanced youth self-concept and desirable behaviours has been established.¹¹⁴ Even though their categorical claim must be questioned, it is nevertheless important to mention Steffenhagen's and Burns' notion (based on their examination of the social dynamics of self-esteem) that low self-esteem is the "underlying psychodynamic mechanism underlying all deviant behavior."¹¹⁵ Low self-

esteem and feelings of inferiority have been linked very strongly to the reasons for dropping out of school.¹¹⁶ H. Kite found in his research that of the seven major factors contributing to school dropouts, four of the factors related to a poor self-concept, reinforced consciously or unconsciously by parents and/or teachers.¹¹⁷ Studies also correlate attitudes towards alcohol and drug abuse with the adolescents' view of themselves.¹¹⁸ The relationship between depression and suicide in adolescents and low self-esteem is another subject of research studies.¹¹⁹

It appears that definitive research on self-concept with all its implications remains confusing and difficult to assess due to the variety of definitions and self-concept measures used, and further compounded by the complexity of social and cultural factors that determine and influence the nature of such research. Nevertheless, the preponderance of evidence underscores the significance of self-concept and its relationship to many of the issues and problems the adolescent population is facing. In particular the implications of the dynamic aspect of self-concept truly are deep and far-reaching. If self-concept is learned, organized and dynamic, as W. Purkey and J. Schmidt conclude, then individuals carry within themselves the seemingly limitless potential for developing a positive and realistic self-concept.¹²⁰ After all, "important voices in psychology, philosophy, and education have long argued that the maintenance and enhancement of the perceived self is the primary motive behind behavior."¹²¹ It thus follows to infer that this potential presents itself to be realized by people, places, policies, programmes and processes that are intentionally designed to invite the realization of this potential. A programme such as GUS™ operates precisely on the premise that change

must be intrinsically motivated in order to be effective and lasting. Of course, the development of the Self benefits greatly from other support structures as well.

Locus of Control

*Human beings, by changing the inner attitudes of their minds,
can change the outer aspects of their lives.*

William James

Locus of control, a well-known cognitive-behavioural psychological construct, is used to describe a person's characteristic way of perceiving the world. Typically it is measured on an internal-external continuum, i.e. a person whose locus of control is external will tend to perceive life events generally beyond personal control. A more internal locus of control affords the individual a sense of more control over life events and greater personal responsibility for outcomes.¹²² T. Kelly and S. Stack view the two polarities as a difference between coming from the head and the heart. That means the head is associated with an intellectual understanding that thought and experience are connected, whereas the heart suggests a deep level of thought recognition, i.e. insightful understanding.¹²³ Locus of control theories can also be categorized as a type of expectancy-based theory.¹²⁴

There is ample research with adolescents (one of the areas where adolescent research dominates for once) that illustrates very clear connections between an individual's locus of control and a sense of well-being.¹²⁵ For more than three decades now, sense of control has been recognized as a psychological construct with important

implications for health,¹²⁶ such as heightened physiological stress responsivity, tolerance for pain, and mental health problems.¹²⁷

The consequences of an external locus of control “appear to be detrimental for children and adolescents.”¹²⁸ It is linked to childhood anxiety and poor academic achievement.¹²⁹ Risk-taking behaviours also correlate with locus of control.¹³⁰ A specific example of such risk-taking behaviour is unprotected intercourse. Several studies examined adolescent female pregnancy in this context.¹³¹ T. Young and her colleagues concluded from sampling over 25, 000 U.S. eighth graders in 1,000 schools that “females who later became pregnant had a locus of control score that was more external relative to the score for the comparison group, thus suggesting poor-efficacy and external locus of control as possible antecedents to pregnancy.”¹³² These impressive and rather distressing results from such a longitudinal study suggest a series of long-term implications for adolescents with an external locus of control.

The advantages of an internal locus of control have been thoroughly researched as well.¹³³ Ferrer and Krantz, for instance, concluded that children with an internal locus of control had an increased ability for impulse control, delay of gratification and regulation of attention in classroom settings.¹³⁴ A. Gottfried found that students’ overall motivational orientation was significantly associated with school achievement and self-perceptions.¹³⁵ In particular, students who exhibited higher intrinsic motivation (i.e., locus of control) had significantly higher school achievement, more favourable perceptions of their academic competence, lower academic anxiety, lower extrinsic classroom orientation, and were rated by their teachers as being generally more intrinsically motivated.¹³⁶

To summarize, it seems that locus of control represents one of the causal principles of human psychological functioning that William James predicted. Unfortunately, the awareness of these causal connections does not appear to have prompted a significant improvement in the well-being of adolescents, judging by the literature reviewed on the subject. This can perhaps be attributed to a large degree to the fact that programmes aiming at a shift in locus of control are skills based, often focusing on productive and sequential problem-solving strategies. The GUS™ programme, on the other hand, aims at effecting change through achieving greater self-awareness, which in turn results in a shift towards an internal locus of control.

[Cost of Poor Adolescent Well-Being on Society](#)

Research has demonstrated that adolescents face many factors that place them at risk for poor long-term outcomes.¹³⁷ As A. Kazdin points out, children and adolescents are “underserved populations in relation to mental and physical health needs.”¹³⁸ The National Institute of Mental Health has set as its mandate to “reduce the burden of mental illness and behavioural disorders through research...[in order] to achieve better understanding, treatment, and eventually, prevention of these disabling conditions that affect millions of Americans.”¹³⁹ Given the staggering number provided by the World Health Organization, stating that 450 million people worldwide are affected by mental, neurological and behavioural problems at any given time,¹⁴⁰ the predictions for the future (if the present remains unaltered) are rather grim, further emphasized by what is known so far about the trends in youth.¹⁴¹ The WHO also emphasizes that one in four persons

going to health services has at least one mental, neurological, or behavioural disorder, which is most often neither diagnosed nor treated.¹⁴² C. Murray and A. Lopez provide sombre reminders in their assessment of global health:

The burdens of mental illnesses, such as depression, alcohol dependence and schizophrenia, have been seriously underestimated by traditional approaches that take account only of deaths and not disability. While psychiatric conditions are responsible for little more than one per cent of deaths, they account for almost 11 per cent of disease burden worldwide.¹⁴³

The projections of an increase from 10.5 percent of the total disease burden to almost 15 percent in 2020 in the areas of psychiatric and neurological conditions seem to send serious warning signals to the world regarding unmet, and evidently growing needs, of the population.¹⁴⁴ In terms of Disability Adjusted Life Years (DALYs) alone, which include death and disability, the cost of mental illness measured \$15.3 million in 1990.¹⁴⁵ The economic cost of mental disorders in the United States from both direct (treatment-related) and indirect (social services) expenses may exceed \$150 billion a year with rapid annual increases.¹⁴⁶ The problem is so serious that the Surgeon General acknowledges in the foreword to the mental health report “the inextricably intertwined relationship between our mental health and our physical health and well-being. The report emphasizes that mental health and mental illnesses are important concerns at all ages. Accordingly, we will continue to attend to needs that occur across the life span, from the youngest child to the oldest among us.”¹⁴⁷

Relatively little is understood at the moment about the extremely complex interplay of psychological, biological, social, and environmental aspects of these disorders among adolescents. Even though causal relationships are unclear, it is generally accepted that multiple factors contribute to and shape the behaviour of children

and adolescents over time.¹⁴⁸ Contrary to that notion, the vast majority of research concerns itself with one or two single factors, thereby risking labelling and perhaps mislabelling children and adolescents.

The increasing prevalence of anxiety in children and adolescents must be of particular significance to society at large given data from adult populations that have been collected, which suggest that chronic anxiety disorders have their origin in adolescence.¹⁴⁹ Other studies also highlight a strong correlation between anxious adolescents and anxious adults, a poignant reminder of the long-term costs to society.¹⁵⁰ As the report by the Surgeon General points out, “parental depression also increases the risk of anxiety disorders, conduct disorder, and alcohol dependence,” which provides another reason for addressing ineffective coping strategies early in life.¹⁵¹ Furthermore, nearly twelve million children in the United States under the age of eighteen suffer from learning, behavioural, or developmental diseases. Attention-Deficit-Hyperactivity-Disorder (ADHD) alone affects 3-5% of school-aged children (the most common of the psychiatric disorders that appear in childhood), a condition that is linked to higher rates of injury¹⁵² and shows co-morbidity with depression, anxiety, conduct disorder, drug abuse, and antisocial behaviour.¹⁵³

Health Canada elaborates as well on the complex nature of adolescent well-being. It emphasizes that apart from the minor health problems adolescents experience and serious and chronic illnesses that affect 10 to 30 percent of the adolescent population, “more adolescents are at risk for death and poor health outcomes that are not biomedical in origin.”¹⁵⁴ Two disturbing trends are also noted, both of which have serious implications for society at large. Adolescents display serious health problems at younger

ages; and many teenagers engage simultaneously in several health-threatening behaviours, so-called at risk behaviours,¹⁵⁵ such as smoking and alcohol use, which again have long-term implications for their general well-being.¹⁵⁶

Substantial costs associated with each one of the many manifestations of mal-adaptations to stress, all of which cross over multiple domains. Bullying, for instance, which is becoming an increasingly important public health issue, can occur throughout the lifespan of individuals and involves cost to the school system, the health care system, and the judicial system, at the very least.¹⁵⁷ Therefore, complex problems such as aggressive, antisocial, and violent behaviour, which includes mental health problems and is often associated with childhood and adolescence, generally require multi-faceted interventions. Yet unfortunately, “no controlled studies report on the cost, quality, and mental health outcomes for any of the varieties of mental health systems for children and adolescents.”¹⁵⁸ As a matter of fact, “incidence, prevalence, and changes in clinical dysfunction over the course of childhood and adolescence have only begun to be charted,” even though many of these dysfunctions, such as attention deficit disorder, depression, or antisocial behaviour, can have lifelong consequences.¹⁵⁹ Approximately 5 million of the total of 28 million adolescents in the United States within the age range of twelve to seventeen have “experienced significant impairment due to an emotional or behavioural problem.”¹⁶⁰ The Surgeon General’s Report indicates an even higher number stating that one out of five children has a diagnosable mental, emotional, or behavioural disorder, and one out of ten a serious emotional disturbance.¹⁶¹ A poignant example of such an impact is adolescent depression in conjunction with obesity. E. Goodman and R. C. Whitaker found in their cohort study that depressed adolescents are at increased risk

for the development and persistence of obesity during adolescence, and adolescent obesity, in turn, serves as a strong predictor of adult obesity.¹⁶² A Finnish study concluded that mental health risk factors, particularly high trait anxiety and somatic symptoms, in adolescence served as predictors of mental distress in early adulthood.¹⁶³ The National Institute for Mental Health concludes that “no quick, inexpensive, and fail-safe solution” exists at the moment; and therefore “long-term sustained effects may need to involve long-term intense interventions to target the multiple factors that can lead to negative outcomes such as family conflict, depression, social isolation, school failure, substance abuse, delinquency, and violence.”¹⁶⁴

Every aspect of the human being appears to be affected by the many stressors adolescents are facing each day. This review of the literature makes it apparent that few truly effective coping strategies exist. Most likely these strategies are ineffective and fail because most of them work from the outside in, emphasizing the physical, sometimes the cognitive and behavioural aspects of the individual. That failure results in a huge cost to the individual and society, generally and foremost conceived of in financial terms. It appears that ‘stress’ is a widely used and poorly understood concept that has far reaching implications. Many disciplines need to work together to arrive at providing useful health parameters because each individual responds differently to potentially stressful situations:

Genetic constitution, early life experiences, and adult life experiences all contribute to these individual differences. There is growing evidence that early life experiences, reflecting parental care and early stressful experiences (e.g., childhood abuse and neglect), have a lasting influence by increasing allostatic load through life and predisposing affected individuals to a variety of disorders (hostility, anxiety, depression, suicide, substance abuse, and systemic illnesses).¹⁶⁵

However, the real cost of poor adolescent well-being goes much deeper. Because most of the approaches to well-being exclude the spiritual component of the human

being, a sense of purpose, connection, and commitment in the individual's personal life are missing. Rather than emphasizing integration, further segregation and division continues to be practised, very much in the tradition of the Newtonian worldview. As Thomas Merton explains, "...one of the reasons why [our society] is sick is that it's completely from the top of the head. It's completely cerebral. It has utterly neglected everything to do with the rest of the human being; the whole person is reduced to a very small part of who and what the person is."¹⁶⁶ The human cost of the reductionist approach to the overall well-being T. Merton describes will much outweigh the financial cost in the near future.

Current Conventional Approaches in Support of Adolescent Well-Being

A crust eaten in peace is better than a banquet partaken in anxiety.

Aesop

As stated before, well-being encompasses the multiple layers of the human being and therefore many factors contribute to the state of well-being of each individual. The United Nations General Assembly Special Session on Children, which took place in May 2002, adopted without a vote a global declaration and plan of action to improve the situation of children around the world.¹⁶⁷ Canada just responded with its plan, called *Canada Fit for Children*, in which Health Canada and Social Development Canada outline four central areas of concentration to focus their priorities: families and communities, healthy lives, protecting from harm, and promoting education and learning.¹⁶⁸

The findings reported in the Health Canada document highlight the importance of a supportive environment to the physical and mental health of youth. “Young people who do not have good relationships at home are far more likely to engage in health-risk behaviours, ...to experience adjustment problems at school and to suffer from health problems.”¹⁶⁹ In Canada, one in six children is growing up in poverty, and thus being denied equal life chances.¹⁷⁰ Currently, not much help is available to families since many families feel the pressures of work stress themselves and often do not possess information about effective parenting, healthy eating, and benefits of physical activity, for instance, nor do they have the communication skills that are necessary to develop realistic expectations for achievement.

As Health Canada also notes “school does make a difference to the health of youth. It is the basic arena in which they develop social and life skills.”¹⁷¹ It is theoretically easier, as well as less costly, to change the structure and climate of the school than the home environment. “Unfortunately, because the way most schools...are structured, many children are often unintentionally affected in counterproductive ways.”¹⁷² Even though various models of health promoting schools have been developed in individual countries, states and provinces, very few of them have been implemented on a larger scale, often due to a lack of funding. Most interventions that are specifically targeted at risk behaviours have had little or only short-term success.¹⁷³ Perhaps the assumption is incorrect that prevention and treatment of dysfunction alone suffice in the creation of adolescent well-being. According to A. Kazdin, “a comprehensive model of adolescent mental health requires the promotion of positive adaptive functioning” as well, which is precisely the goal of the GUS™ programme.¹⁷⁴ This programme provides the

teenagers with an awareness through which they gain inner, personal control, and choice and therefore change internally.

There are two main conventional approaches taken to support the well-being of adolescents, which are prevention and treatment. W. A. Lofquist, one of the leading thinkers in the field of prevention, defines prevention as “an idea of actively creating conditions which would preclude the occurrence of the symptoms one wishes to avoid.”¹⁷⁵ Thus the emphasis lies with “promoting the well-being of people through positive action that changes the conditions under which the behaviours to be prevented are most likely to occur.”¹⁷⁶ A. Kazdin focuses on prevention versus treatment in the field of mental health:

Prevention programs, if successful, can avert and minimize maladjustment and clinical dysfunction in adolescence. ... Although efforts toward prevention might be logically prior in the effort to intervene, treatment has received greater attention. Indeed, impetus for prevention research can be traced in part to concerns about the limitations of treatment. Given the scope of mental health problems among adolescents and the magnitude of effort required once the problems have crystallized, prevention is a critical priority.¹⁷⁷

These prevention interventions are characterized by two distinct goals: 1) to reduce the rate of incidences; and 2) to reduce the severity, duration, and manifestation of the problem. Examining these interventions further reveals five different areas of focus: 1) developing pro-social competence or adaptive functioning; 2) reducing onset of dysfunction or preventing a specific problem; 3) running programs which apply universally or to sub-groups; 4) accessing different resources, settings, and funding; 5) using mass media campaigns.¹⁷⁸

Both psychotherapy and psychopharmacology can potentially offer help in attaining these goals for groups and individuals, whereby psychopharmacology usually plays a more prominent role in the treatment rather than the prevention arena.

Psychotherapy

Preventative interventions tend to be psychotherapeutic or psychosocial in nature, although psychotherapy is also widely used for psychiatric treatment.¹⁷⁹ Psychotherapy may involve talking with a psychiatrist, psychologist, social worker, or counsellor, whereby the counsellors often function as the first resource for the school-aged population. These interventions generally address emotional and behavioural problems and are designed to decrease or eliminate symptoms and maladjustment and to improve adaptive and pro-social functioning through interpersonal interactions and counselling. Counselling may include cognitive behavioural therapy, psychoanalysis, and may be client-centred or resort to the family approach. Other interventions encompass a variety of social services, such as home, school, community-based, residential and hospital.

Cognitive Behaviour Therapy (CBT) is “based on the premise that emotions are influenced by thoughts and that many negative thoughts often contain distortions and exaggerations.”¹⁸⁰ In other words, negative self-talk leads to irrational thinking regarding oneself and the world. Cognitive Behaviour Therapy is widely used and considered effective with adolescents.¹⁸¹ It has been shown to achieve significant effects in treating depression, panic disorders, and anxiety.¹⁸² Behavioural therapy alone has also been effective in treating certain types of anxiety disorders, especially phobias.¹⁸³ Cognitive

Behaviour Therapy combined with other techniques, such as relaxation, positive self-talk, peer-or therapist modeling, or family management training has also proven to reduce adolescent anxiety.¹⁸⁴ As Kazdin and Weisz point out, cognitive processes (i.e., problem-solving skills training) often lead to therapeutic change in adolescents with problems, such as aggression and antisocial behaviours.¹⁸⁵

Psychotherapeutic treatments may be conducted in a group, generally lasting about twelve weeks, or individually where the number of treatments may be open-ended.¹⁸⁶ M. Seligman summarizes his conclusions based on the Consumer Reports survey regarding the effectiveness of psychotherapy as follows: 1) Psychotherapy is beneficial; 2) Long-term therapy produced greater improvement than short-term therapy; 3) Psychotherapy versus psychotherapy plus medication does not yield different results; 4) No specific modality of psychotherapy works better than any other; 5) All mental health professionals provide help, with psychologists, psychiatrists, and social worker being more effective than marriage counsellors and family doctors.¹⁸⁷ On the other hand, Weisz and Jensen show evidence to the contrary, stating that traditional psychotherapies are not effective in youth.¹⁸⁸

The psycho-educational approach tends to be applied when dealing with at-risk students for dropping out of school, which can be related to feelings of inferiority and low self-esteem in adolescents.¹⁸⁹ Another technique used is parent management training, which is intended to alter the pattern of interchanges between parent and child.¹⁹⁰ Altogether, A. Kazdin identified over 230 different treatment techniques that are currently in use for children and adolescents, with many of these techniques remaining empirically unproven.¹⁹¹ Generally though, the existing literature supports the use of

psychotherapeutic interventions for adolescent mood, anxiety and behavioural disorders.¹⁹²

Psychopharmacology

Medications for most stress and anxiety related symptoms and disorders are readily available and prescribed although they will only reduce or control symptoms, or prevent a relapse, but will not effect a cure.¹⁹³ There are basically three classes of psychotropic drugs that target specific symptoms of disorders: anti-psychotics for psychotic symptoms; antidepressants for depression; anti-epileptics for epilepsy and anxiolytics for anxiety. Different types again are used for drug-and alcohol related problems.¹⁹⁴ Out of these medications those that target specific behaviours affecting learning and social development have been the most extensively studied form of intervention available to children.¹⁹⁵ These psychotropic drugs may and often do keep the symptoms under control and are frequently combined with some form of psychotherapy. They also may curb the co-morbidity of other disorders when effectively administered.¹⁹⁶

The best evidence for the effectiveness of psychopharmacology in child psychiatry to date supports the use of stimulant medications for attention deficit/hyperactivity disorder¹⁹⁷ and selective serotonin reuptake inhibitors for obsessive-compulsive disorders.¹⁹⁸ AD/HD medications can also reduce the risk of substance abuse and criminal behaviour for a child with AD/HD.¹⁹⁹ Standard stimulants, however, also have the disadvantage of short duration even though they can lead to stable and long-term

improvements, provided the intake of the drug continues.²⁰⁰ Headaches, which can be related to depression and low self-esteem, are often stress induced.²⁰¹ Apart from medication, a comprehensive treatment approach is also taken, whereby medication is supplemented by a reduction in psychological distress and behaviour modification.²⁰² Even though anxiolytics are widely prescribed, the effectiveness of benzodiazepines for childhood anxiety disorders has not been proven.²⁰³

It is essential to note that most pharmacological practices in child psychiatry are based on adult literature with the presumption that treatments are safe and effective in adolescents.²⁰⁴ A recent review of published trials for newer antidepressants raises also serious concerns about biased and overconfident reporting by researchers, which may result in misleading doctors who often have to rely on online abstracts rather than study detailed analyses of complete trial reports.²⁰⁵ Furthermore, as Brown and Sawyer emphasize, these medications may also cause many short-term and long-term cognitive and behavioural effects and are associated with a series of adverse physical effects.²⁰⁶ The FDA just issued a Public Health Advisory regarding antidepressant medications.

Anxiety, agitation, panic attacks, insomnia, irritability, hostility, impulsivity, akathisia (severe restlessness), hypomania, and mania have been reported in adult and pediatric patients being treated with antidepressants....There is a concern that patients who experience one or more of these symptoms may be at increased risk for worsening depression or suicidality.²⁰⁷

Despite the scarcity of positive findings in the field of adolescent psychopharmacology, clinical practice remains based on adult-oriented and conventional models of care and is quite prevalent.²⁰⁸

It becomes evident from this review that the field of conventional approaches to adolescent well-being, particularly mental health aspects, requires further scrutiny. As

McClellan and Werry state, “this is a major public health issue, since approximately 20% of children and adolescents suffer from significant emotional difficulties.”²⁰⁹

Overall, the conventional approaches to the well-being of teenagers do not appear to work all that well, otherwise all the statistics cited would look quite different. The fact that the World Health Organization also has placed a huge emphasis on the health of the children, as discussed before, underlines the urgency to find long-term and lasting solutions to the multiple factors that influence the well-being of adolescents. Some of the conventional approaches appear to work well dealing with symptomatology, yet fail to address the root cause. Others fail or do badly, in part due to the fact that the adolescent population remains a neglected sector in research. Certain psycho-educational programmes have been successful though, for instance the anti-smoking campaign since the number of teen smokers has dropped steadily.

Upon examination of much of the literature dealing with conventional approaches to health and well-being, the question arises why it is so difficult to concede that perhaps considering a whole-person approach to well-being might be a viable option that invites change. However, in both Canada and the United States, much resistance still exists in the domain of education and health to embrace such possibilities. The literature dealing with conventional approaches to health and well-being quite obviously remains silent on the possibility of a spiritual component to the entire discussion.

Review of Holistic Approaches to Well-Being

To let be—that is, to let things be as the beings which they are—means to engage oneself with the open region and its openness into which every being comes to stand, bringing that openness, as it were, along with itself.

Martin Heidegger

For the purpose of this study, the two most commonly employed terms of Alternative and Complementary Medicine (CAM) will be replaced by the word “holistic.” A holistic approach encompasses the whole person. In other words, the body, mind, relationships, emotions, and spirit are placed in the context of the individual’s personal values and beliefs, social and cultural as well as spiritual community. Perhaps this definition comes closest to “contextual medicine.”²¹⁰ The use of the term mind-body interventions is also avoided in this study because it rarely surfaces as a discrete category, as J. Astin and his colleagues aptly point out.²¹¹ Various mind-body techniques are often blended, such as imagery and relaxation, or biofeedback and relaxation. Furthermore, mind-body techniques are combined with other modalities, including conventional treatments.²¹²

The number of individuals seeking holistic approaches to healing has increased steadily over the past two decades, with the 1997 figures being conservatively estimated at \$27 billion out-of-pocket expenditures in the United States.²¹³ This number is comparable to the projected 1997 out-of-pocket expenditures for all U.S. physician services.²¹⁴ According to both the surveys conducted for the study cited, holistic therapies were most frequently sought for chronic conditions, such as back problems, anxiety, depression, and headaches.²¹⁵ More than half of all the holistic therapies were used for health promotion or disease prevention rather than for treating an existing

illness.²¹⁶ At least 75% of the 125 U. S. medical schools taught some form of Complementary and Alternative Medicine in 1999.²¹⁷ Current estimates of paediatric CAM use in the United States range from 10% to 15%, although much more conservative counts exist as well.²¹⁸ D. Eisenberg and his colleagues attribute the discrepancy in numbers to the “disparity in definitions of alternative therapy and the selection of therapies assessed.”²¹⁹ Researchers tend to agree, though, that holistic medicine is primarily used for incurable, chronic, and recurrent medical conditions and disabilities, whereby herbal and dietary supplements rank at the top for most teenagers.²²⁰ Critical clinical research has grown steadily since 1970 and must continue to grow. However, as is the case in the conventional medical field, very little research has been done concerning children and teenagers. Out of those studies few concern themselves specifically with the adolescent population.

Relaxation Response and Progressive Muscle Relaxation

The relaxation response functions as “an integrated set of physiological change that are the opposite of the fight or flight (stress) response...”²²¹ The stress response, or the “fight or flight” response, includes increased levels of heart rate, breathing, blood pressure, blood glucose, and stress hormones. An excess of stress-induced adrenaline or cortisone may lead to damaged blood vessels and compromise the immune system, for instance. The relaxation response, on the other hand, is a state in which the heart rate, blood pressure, and breathing slow down and facilitate the uptake of oxygen.²²² The “relaxation response” was coined by Herbert Benson and originated out of E. Jacobson’s

concept of ‘progressive relaxation.’ Edmund Jacobson’s superb classic *Progressive Relaxation* provides intriguing insights into a physiological and clinical investigation of muscular states.²²³ His description of progressive muscle relaxation is detailed and easy to follow. The relaxation response generally consists of only four components: a mental device, a passive attitude, decreased muscle tonus, and a quiet environment. As no tools are required, the relaxation response is an absolutely low cost intervention.²²⁴ It is interesting to note that H. Benson, J. Beary, and M. Carol also provide a concise overview of the historical roots to the relaxation response in all the major religious traditions, usually phrased as the attainment of the mystical state, even though the relaxation response itself operates strictly on the mind-body connection and does not consciously include spiritual aspects.²²⁵

Studies show numerous benefits for engaging in relaxation response training. Psychological distress, anxiety, and perceived stress of college students were the subject of a comprehensive six-week study that showed significant reductions in all three areas of research.²²⁶ Apart from immediate physiological effects, relaxation response has also been associated with lasting effects, thus increasing “one’s resilience to stress.”²²⁷ Diminished aggressive behaviour and better control of anger were the outcomes of another study with adolescents.²²⁸ Behavioural relaxation training also yielded significant results in lowering anxieties.²²⁹ Another study, in which videotaped instructions were used to instruct the participating adolescents, only produced a reduction in state anxiety but not trait anxiety.²³⁰ Progressive muscle relaxation, which addresses specifically the somatic symptoms of stress, has shown remarkable success as well.²³¹ School-based relaxation training programmes do exist in some schools as a means to help

children and adolescents with anxiety problems such as headaches or test anxiety because they have proven to reduce anxiety to normal levels.²³² In another most interesting study, conducted over the course of one year, high school students were exposed to a health curriculum based on the relaxation response. This resulted in significant increases in self-esteem and a tendency toward greater internal locus of control.²³³

Autogenic Training

Autogenic Training (AT) is a relaxation technique, a psycho-physiologically based form of autonomic self-regulation. Its originator was Dr. Johannes Schultz, a psychiatrist and neurologist. He founded his theory on the idea that patients who practiced simple verbal exercises in a relaxed state of mind could alleviate many physical and mental ailments. In the 1930s, W. Luthe and J. H. Schultz went on to develop a series of six Standard Autogenic Formulae, which still form the core of Autogenic Training and Therapy today. The method is widespread, especially in some Western European and German-speaking countries, both in clinical and non-clinical settings. Autogenic Training can be taught one to one, or in groups of six to eight and is generally done over a period of eight weeks. The aim of the technique is to induce a balance between the two hemispheres of the brain, as well as between the sympathetic and parasympathetic nervous system. It aims to give the individual the power to induce physical and mental relaxation from within, the “trophotropic state.”²³⁴

Many studies with experimental controls exist on the subject of Autogenic Training. Wolfgang Linden’s review of clinical outcome studies supports previous

findings, stating positive effects of autogenic training on migraines, insomnia, test anxiety, and hypertension, as well as asthma, eczema, and infertility.²³⁵ It was observed that the length of treatment did not appear to affect clinical outcome. Similar results were obtained by a qualitative meta-analysis of 64 controlled clinical studies from 1952 to 1997.²³⁶ Autogenic Training was proven to have positive effects on psychosomatic, sleep and anxiety disorders as well as on mood and the general sense of well-being. The authors concluded from their analysis that “autogenic training is an effective and useful component of preventative and rehabilitative or therapeutic interventions.”²³⁷

Relaxation techniques are increasingly utilized in the treatment of children and adolescents, whereby many different techniques are applied.²³⁸ Numerous studies have been conducted (particularly in Germany) in which AT is considered “a broadband preventive and therapeutic technique for children and adolescents with sleeping problems, nervousness, emotional irritability, recurrent headaches, hyperactivity, attention problems, fatigue and anxiety.”²³⁹ However, as generally in the field of adolescent research, a lack of randomized and controlled studies exists. Goldbeck’s and Schmid’s recent study specifically tested the effectiveness of AT on children and adolescents as a group intervention, one important reason for the relevance to the research project at hand.²⁴⁰ The target audience were school-age children and adolescents with mild to moderate behavioural and/or emotional problems. The conclusions of the study support the use of AT as an effective broadband method for children and adolescents.

Biofeedback

Even though the theories involved in psychophysiology and biofeedback date back to the early part of the twentieth century, the application of specific techniques began only fairly recently, in the early 1960s with Elmer and Alyce Green. The use of electromyography (EMG) and peripheral skin temperature are the principal modalities used in clinical practice. Biofeedback takes autogenic training one step further:

[It] combines the conscious self-regulation or volitional aspect of yoga and the psychological method of autogenic training, with a modern technique called physiological feedback. This feedback, of physiological information, generally consists of providing visual or auditory displays which show the subject, or patient, what is happening in certain functions of his body as he attempts to control them.²⁴¹

It is important to emphasize here that feedback is “feed-back to a *self* and that voluntary control over usually unconscious autonomic processes, autonomic self-regulation, by definition means conscious self-regulations.”²⁴²

Biofeedback has been studied extensively as a treatment for migraine and tension headaches in both adults and children.²⁴³ Overall, these studies corroborate that children who suffer from headaches benefit more than adults from biofeedback although the underlying reasons have yet to be understood.²⁴⁴ Perhaps the supposition could be made that children are more readily accepting of their own inner awareness which they gain in the process of biofeedback: “Included here is a confidence in the validity of inner awarenesses.”²⁴⁵ Furthermore, results indicate that biofeedback might not only serve as a “primary intervention but may also hold promise to reduce the risk of pain chronicity and pain-related emotional sequelae.”²⁴⁶ This is particularly exciting since particularly thermal biofeedback is such a low cost intervention tool.

Test anxiety and general anxiety have also been the subject of research, usually involving EMG feedback. Generally a significant reduction of the level of anxiety is achieved through biofeedback training.²⁴⁷ Thermal biofeedback, used in a controlled study with children and adolescents, confirmed its efficacy in treatment of paediatric migraine.²⁴⁸

Biofeedback most often finds itself joint with other relaxation therapies, such as autogenic training and progressive muscle relaxation, as in L. W. Braud's study on aggression.²⁴⁹ Biofeedback is also used as an efficacious intervention in conjunction with a lecture or discussion, i.e. in an educational scenario, as measured by the State-Trait Anxiety Inventory, with B. S. Yorde and J. M. Witmer focusing on state-anxieties in their study on stress-management.²⁵⁰

Meditation

Increasingly more research helps explain why this ancient discipline has a long history within many healing traditions. Two types of meditation form the focus of the research, mindfulness meditation and transcendental meditation, a widely practiced form of yoga. Both forms of meditation produce measurable benefits for the human mind and body. Mindfulness meditation has as its goal that the mind that brings non-judgmental conscious awareness to the moment. There are basically three ways in which to practise mindfulness meditation: 1) meditating while sitting; 2) meditating while walking (vipassana); 3) meditating while performing daily activities.

Transcendental Meditation (TM), as taught by Maharishi Males Yogi, is a simple and currently widely used form of meditation. It is usually practiced for ten to fifteen minutes twice daily with focused attention on one thing, often the breath or a mantra. The Maharishi International University alone has compiled an overview of over 500 research studies that have been conducted in the past few decades. Over 150 of them have been published in peer-reviewed journals, demonstrating benefits for health and well-being on all levels, in particular with regards to aggression, anxiety, reduced blood cortisol levels, and blood pressure.²⁵¹ Kabat-Zinn and his colleagues demonstrate the benefits of meditation on chronic pain.²⁵²

Research suggests that school-related behaviours in youth may improve through stress-reduction using TM even though few studies with an adolescent focus exist.²⁵³ Richard J. Davidson's study on adolescents showed that meditation increased activation in the left frontal region of the brain, an area linked to reduce anxiety and a positive emotional state, thus reducing symptoms of anxiety and depression.²⁵⁴ Furthermore, the authors suggest that meditation may effect positive changes in the brain and strengthen the body's immune function, thus being able to ward off illness, in this case in form of a flu shot.²⁵⁵ The impact of stress reduction on blood pressure through TM becomes evident through a study that showed statistical significance in youth at risk for the development of hypertension.²⁵⁶ A novel and most interesting study examined the impact of behavioural stress-reduction over a four-month period on a quality of life-related issue (school behaviour) in youth and produced statistically significant results.²⁵⁷

Overall, it appears that relaxation and meditation techniques at the very least present coping strategies to manage and reduce stress and associated health problems, while also presenting a transformational tool for conscious change.²⁵⁸

Therapeutic Touch™

Bio-energetic healing exists in many different forms and under various names. Therapeutic Touch™ (TT™) has become the best-known version in North America, being widely taught (even at nursing schools) and practised in the world.²⁵⁹ It is also supported by the most research in the field of wholistic medicine to date, mainly due to the efforts of Dr. Dolores Krieger and Dora van Gelder Kunz. D. Krieger is credited coining the term Therapeutic Touch™, rather than using the rather controversial term ‘laying-on of hands,’ when she began her research examining the effects of TT™ on human physiological indices.²⁶⁰ Perhaps an even greater contribution, though, to the field of wholistic and conventional research rests with the fact that she introduced the notion of consciously exercising the higher orders of self as an extension of professional skills in the health sciences.²⁶¹ R. Gerber proposes several possible explanations for the actual mechanisms behind this form of healing process. The first variation relates the healer’s stimulating effects to a simple “life-energy transfusion,” whereas the second one relates it to some type of “energetic restructuring” of the patient’s bio-energy field.²⁶² A third possible explanation is based on the concept of the non-local mind, which allows for healing to be “triggered by an act of consciousness distinct from the inner healing effects

of the placebo effect of faith in a particular treatment.”²⁶³ The bio-informational model provides another explanation, which suggests that “healing may be brought about by supplying appropriate bio-informational instructions to the human body in an effort to stimulate an individual’s own inner mechanisms of healing.”²⁶⁴ Several other theories exist, according to R. Gerber. At the present time, however, no explanation has been verified, which does not diminish the effect of TT™ on the human being.

Once again, most of the existing research focuses on the adult or very young population, where TT™ “has been shown in controlled studies to help in treatment of pain, anxiety, depression, enhanced arthritis, immune function, hypertension, wellbeing in palliative care, and disruptive behaviour in Alzheimer’s Disease.”²⁶⁵ Research that examines stress reduction also tends to be tied to a hospital setting, as is the case with the studies done by P. Heidt and J. Quinn, where the use of TT with hospitalized patients produced significantly decreased levels of anxiety.²⁶⁶ V. Bzdek and E. Keller found a significant difference in pain reduction of tension headache in the treatment group in their experiment in which the control group received mock treatment.²⁶⁷

It is interesting to note that most studies only focus on measuring state anxiety rather than trait, which of course can easily be attributed to the fact that TT™ is primarily applied in hospital and hospice settings.

[Applied Kinesiology](#)

Kinesiology is a form of biofeedback, in which muscles are monitored manually in order to elicit a subconscious response:

Specific muscles may either ‘lock’ and hold strong, or ‘unlock’ and give, to determine imbalances of stressors not only within the muscle systems themselves, but also within interfacing subconscious systems. These systems include not only the generally recognized autonomic and proprioceptive feedback of the nervous system but also the subconscious emotional and mental processes underlying our feelings and thought.²⁶⁸

Applied Kinesiology (AK) was developed by George Goodheart, a chiropractor, and has been extended by Alan Beardall into Clinical Kinesiology and by the psychiatrist John Diamond into Behavioral Kinesiology, whereby the tested muscle becomes a “sort of bioenergetic meter that provides immediate feedback about physical and psychological states.”²⁶⁹ The advantage of using this form of muscle testing is the fact that individuals can employ this technique for their own self-healing and growth in self-awareness. Researchers, such as G. Leisman and his colleagues, are beginning to demonstrate the scientific validity of this tool. Their study showed that strong and weak kinesiological muscle testing produced distinct electromyographic responses from fatigued muscles.²⁷⁰ Caruso and Leisman analyse the force/displacement in muscle testing and convincingly conclude that applied kinesiology muscle testing is reliable and objective, when practised by an experienced clinician (more than five years of experience), arriving at a 98% accuracy.²⁷¹

In the bioenergetic, transpersonal and spiritual realms, applied and behavioural kinesiology are used by clinicians and therapists even though less proof to verify the questions asked exists.²⁷² It does appear to provide, at least in the opinion of the principal investigator of this study, an invaluable tool for transpersonal explorations when taught with the appropriate cautions regarding possible miscommunications or interpretations.

Educational Kinesiology and Brain Gym®

Educational Kinesiology is a distinct branch of education, which is based on the principle that movement is the basis for all learning. It offers individuals a way to reconnect with innate intelligence and to develop or restore both physical and mental functioning. P. E. Dennison, a learning specialist in the U.S.A., developed H. Gardner's bodily-kinesthetic intelligence further by incorporating principles of yoga and acupressure points to comprise the Brain Gym® programme, which consists of a series of 26 exercises. These exercises are designed to integrate the brain in mainly three dimensions: laterality (the ability to coordinate one cerebral hemisphere of the brain with the other, especially in the midline); centering (the ability to coordinate the higher and lower parts of the brain); and focus (the ability to coordinate the back and front lobes of the brain). P. Dennison and G. Dennison explain that Brain Gym® promotes efficient communication among the many nerve cells and functional centres located throughout the brain and body.²⁷³ The exercises help to remove the blocks that occur and that impede information flow.

While there has been much clinical and field work done on the subject of Brain Gym®, most of the controlled studies that have been published thus far have appeared in the Brain Gym Journal and only few of them in other peer-reviewed journals. One of those is a study conducted by J. Siffert and G. C. K. Khalsa, a true experimental research design, in which they measured the effects of Educational Kinesiology techniques on simple response times and choice response times.²⁷⁴ The study yielded statistically significant results in both treatment groups as opposed to the control group. Another interesting study describes the effects of Brain Gym® with Special Education students in

grades three through five. C. Hannaford concludes in her research that Brain Gym movements can greatly ameliorate the symptoms of learning disabilities, Fetal Alcohol Syndrome, emotional handicaps, ADD, and ADHD.²⁷⁵

Guided Imagery and Visualization

Many studies have been written about the healing aspects of guided imagery and visualization. Jeanne Achterberg's seminal work, in which she treats imagination as an actual healer, contains a few hundred entries on important books and studies in the field.²⁷⁶ In her view, the image impacts positively on health in two ways that are superficially distinct, yet intricately interwoven in practice. First, J. Achterberg discusses 'preverbal' imagery, in which "the imagination acts upon one's own physical being."²⁷⁷ The second type of imagery, on the other hand, is 'transpersonal,' which means it embodies "the assumption that information can be transmitted from the consciousness of one person to the physical substrate of others."²⁷⁸ According to Daniel Benor in his latest volume on healing research, the best research on visualization exists in the realm of self-healing for cancer and atherosclerotic cardiovascular disease.²⁷⁹ Having examined a myriad of literature on imagery, he concludes that there "seem to be no physical or psychological problems that cannot be aided to some extent through imagery...Imagery techniques are readily learned and used as self-healing."²⁸⁰ R. J. Bauman confirms the benefits of behavioural treatment of migraine on children and adolescents, summarizing in his article that guided imagery and other relaxation techniques have been found "to be as effective, or more effective, in reducing migraine headaches than modest doses of a β -

blockade medication.”²⁸¹ He also emphasizes the cost efficiency with which these techniques can be taught to children and adolescents.

For the purposes of this study the term ‘guided imagery’ is used for the narrated script that participants follow. ‘Visualization’ is understood as the spontaneously arising, subjective creation of sense impressions sparked by the guided imagery. The different aspects of visualizations provide an “opportunity to understand the needs of an organism that are being somatically expressed.”²⁸²

Theoretical Basis for the GUS™ Programme for Teenagers

*We must take into consideration that from birth the child has a power in him.
We must not just see the child, but God in him.
We must respect the laws of creation in him.*

Maria Montessori, 1935

In order to create a workshop for adolescents which addresses the well-being of adolescents, a few key questions demanded attention. First of all, why was it necessary to deliver a series of techniques to the teenagers rather than focus on one or two techniques? What determines the basic inclusion criteria for the selected techniques? Is it possible at all to convey in a one-day workshop what balance, inner power and wisdom, and wholeness could possibly mean? And if so, how can that be achieved in a way that remains acceptable to a large cross-sector of the population?

Out of this internal debate, two ideas arose. The workshop must be set within a broad educational context and fused within the conceptual framework of a discussion and inherent presence of the role of intentionality and choice. Since this study is set up as a

psycho-educational and spiritual workshop in which the adolescents participate experientially and cognitively, it follows to deliberate more closely principles of holistic and aesthetic education. After all, the field of education has been debating the ‘wholeness’ of the human being, the whole self, and the importance of soul, for more than two centuries now, even if the current public education systems in Canada and the United States do not appear to reflect that. It is this educational context that justifies the choice of “wholistic” for the title of the programme. A review of the literature on intentionality and choice follows the overview of holistic and aesthetic education, highlighting the importance of both these components as the theoretical basis for the GUS™ programme.

Holistic and Aesthetic Education

*There was a child went forth every day,
And the first object he look'd upon that object he became,
And that object became part of him for the day
Or certain part of the day,
Or for many years or stretching cycles of years*

Walt Whitman

The group of holistic and aesthetic educators (who did not use the terms holistic or aesthetic for themselves but can be considered a philosophical movement), argued for and emphasized the organic, emotional, spiritual, mythical, creative, aesthetic, physical, and intuitive aspects of human experience long before the existence of transcendentalism, new thought religions or any other holistic movements.²⁸³

The first educator in this movement was Johann Heinrich Pestalozzi, who considered love the essence of education. Friedrich Froebel, now commonly known as the founder of the kindergarten, built on Pestalozzi's spirituality. Perhaps the three basic themes of his philosophy can be summarized as follows: Human development is an expression of a divine principle; this unfolding is characterized by its spontaneous and essentially creative nature; and an educational environment must be cultivated that honours the fullness and natural stages of this process.²⁸⁴

The American Transcendentalists, in particular Ralph Waldo Emerson, Henry David Thoreau, and Bronson Alcott, focused their attention on the primacy of individuality and personal spiritual development, a notion common to the transcendentalists of the period. Emerson's contribution to holistic educational philosophy is his truly holistic understanding of life. Education must nurture the soul and "allow for contemplation where the soul can witness from a more inclusive perspective."²⁸⁵ Thoreau believed in the value of direct experience as a means to educate and aimed at removing artificial cultural restraints from self-realization.²⁸⁶ Alcott also believed that education must encourage the full development of each child from within.²⁸⁷ Francis Parker, for whom education meant spiritual growth, regarded education as a process that involved and encouraged self-initiated, focused and sustained activity.²⁸⁸ John Dewey focused on the social aspects of education, where the children's engagement in their environment through socially significant activities assumes priority.²⁸⁹

Other educators also contributed to the development of this 'alternative' movement in education, most notably Maria Montessori and Rudolph Steiner.

Montessori concerned herself mainly with “the natural development of the child, the healthy formation of the physical, mental, and spiritual qualities that are latent in the human being and which unfold ... according to a purposeful, even divine, life force.”²⁹⁰ That position defined the educator’s job as a provider of the appropriate learning environment.

Steiner’s worldview is also rooted in a spiritual conception of the world and of the human being. He became involved with the Theosophy movement, which resulted in the formation of his own anthroposophist tradition. Anthroposophy teaches that the inner life of the human being, the soul, contains the deepest truths about human existence. Through the individual soul spiritual awareness is attained. Rudolf Steiner’s ideas about education and transformation of society affected almost every area of life.²⁹¹ In the area of education, Rudolf Steiner established the ‘Waldorf Schools,’ which understand the child as a spiritual being who unfolds and develops in a metaphoric manner in certain stages.²⁹² Particular interest is paid to the body (physical matter and vital forces), soul (personal inner life), and spirit (ultimate being) of each individual, teacher and student alike.²⁹³ According to his philosophy, distinct developmental stages form the foundation through which the unfolding of the consciousness soul begins. Waldorf education is planned on the basis of these realizations, and seeks to aid and stimulate the aspects of the human being, which are unfolding at a given time.²⁹⁴ It is also aimed at making the children conscious of their interaction with the spiritual world, and of humanity’s spiritual heritage, “Fundamentally, the Waldorf School does not want to educate, but to awaken... First of all, the teachers must be awakened, and then the teachers must awaken the children and the young people.”²⁹⁵

Rudolph Steiner was a mystic, an intellectual, and an educator, who belonged to the group of philosophers and writers such as Edmund Husserl, William James, and Aldous Huxley. They challenged conventional scientific materialism because it is too limiting to include the entire reality of the universe. This becomes evident from the following excerpt from Steiner's teachings:

The capacities by which we can gain insights into higher worlds lie dormant within each one of us. Mystics, Gnostics, and theosophists have always spoken of a world of soul and spirit that is as real to them as the world we can see with our eyes and touch with our hands....All we need to know is how to begin to develop these faculties ourselves...Why and how should one seek for something of whose nature one can have no clear idea?

Such questions are based on a completely false idea of the nature of esoteric knowledge. In actuality, esoteric or inner knowledge is no different from other kinds of human knowledge and ability. It is a mystery for the average person only to the extent that writing is a mystery for those who have not yet learned to write.²⁹⁶

This concept of 'spirituality,' of knowing and working through higher worlds in Steiner's terminology, is strikingly absent in the mainstream educational philosophy and curricula in the public school system. It has become apparent to many educators, though, that the educational system finds itself in a spiritual crisis.²⁹⁷ This spiritual void appears to be growing steadily and deeply. That tendency is not really surprising, when "it has become common practice for teachers to suppress student expression of exploration of their own beliefs, longings, or search for a spiritually meaningful experience."²⁹⁸

Despite the resistance over the past two hundred years to acknowledge spirituality in the educational setting, the field of education is finally in the process, albeit still reluctantly, of rediscovering the importance and interconnectedness of teaching, learning, and the soul, mainly through the work by Howard Gardner²⁹⁹ and Daniel Goleman³⁰⁰ at the end of the twentieth century. Howard Gardner's concept of 'multiple intelligences'

finally provided a seemingly more acceptable framework and language to discuss interpersonal and intrapersonal faculties in particular.

Daniel Goleman decided to focus on the emotions themselves, taking Gardner's approach one step further and closer to the transpersonal realm by introducing the concept of 'emotional literacy', which is a "shorthand term for the idea that children's emotional and social skills can be cultivated, and that doing so gives them decided advantages in their cognitive abilities, in their personal adjustment, and in their resiliency through life."³⁰¹ Another novelty that has helped to at least open the door to discussions of spirituality in schools because of his emphasis on the emotions and heart connections was Robert Sylwester's work, bridging brain theory and schooling.³⁰²

The current holistic educational theories have evolved out of this, granted very sketchily described history, and have become enmeshed with transpersonal theories as well. Carl Jung's work, of course, became quite popular among certain groups of intellectuals in Europe at the beginning of the twentieth century. A reflection of his understanding of synchronicity, collective unconscious, and archetypes has influenced everyone to some degree since then who works in the field of holistic education and healing.³⁰³ The notion of wholeness and its importance in education was emphasized in a different vein by the work of the transpersonal psychologists, such as Abraham Maslow³⁰⁴ and Carl Rogers.³⁰⁵

Increasingly more literature is being published on the subject of 'spirituality in education' or the concept of 'nurturing wholeness'. As Rachael Kessler states, "academic performance itself, as well as self-esteem, character, and human relationships, suffer when the education of the whole person is neglected."³⁰⁶ Even though this is not a

new idea, some hope exists that perhaps now the message will be heard. In *The Universal Schoolhouse*, James Moffett presents human development and cultural life in the spiritual and cosmic context in which the growth of the individual (and thus the evolution of culture) toward freedom and wisdom are considered the primary mission of education.³⁰⁷ Rudolph Steiner's and Maria Montessori's spiritual models are reflected in James Moffett's view on holistic education, which he describes as a completely individualized curriculum that allows each person to develop his or her unique calling and as an organic relationship among all disciplines, with a profound respect for the developmental stages people experience throughout their lifetimes.

Rachael Kessler explains safe, responsible, and effective ways to nourish the souls of students and explores various curriculum models that foster connectedness and wholeness.³⁰⁸ She speaks to what constitutes the ails of most public schools and suggests solutions that are aimed at the students as the main sources of change. This educator knows that bringing the soul back into education must be a common goal by educators and parents. She also openly discusses how to address the meaning and concept of soul in the public education system without violating the separation of church and state or the deeply held beliefs of families and students.

Alex Gerber provides another approach to the question of wholeness in the context of education in his phenomenal work *Wholeness: On Education, Buckminster Fuller, and Tao* where he explains very succinctly the idea of wholeness as “as a state of being, an experience, a perspective.”³⁰⁹ He continues by saying “awakening to wholeness implies an ongoing process.” Once again, this is not a new idea; just the packing is different. The experience of wholeness, in his opinion, is each human being's

birthright. His optimistic conclusion reads as follows: “As society comes to recognize how many problems and how much misery is associated with fragmentation and disconnection, wholeness will be seen as the only antidote.”³¹⁰ Alex Gerber’s book offers a synthesis of existing information on the topic as well as detailed references and curriculum suggestions.

Riane Eisler, among many other researchers, points out that a dominator model, which emphasizes control, authoritarianism, violence, gender discrimination, standardization and competition, has characterized the educational system.³¹¹ It is partially responsible, according to her, for the significant deterioration over the last two decades of the poor mental and emotional, let alone spiritual condition, in which adolescents find themselves today.

It is precisely this societal change that holistic education addresses as it provides a philosophical base for answering the bigger questions in and about life. According to Ron Miller, one of the leading American educators and authors in this field, holistic education deals with

The fragmentation, alienation, competition, violence, and gross materialism that pervade much of life...[while seeking] to heal the many divisions our civilization has induced between mind and body, intellect and emotion, rationality and intuition, science and art, individuality and community, humanity and the natural world. Holistic education focuses on ultimate unity, relatedness, and inherent meaningfulness of all existence.³¹²

As already shown above, a growing number of researchers in education around the world are emphasizing the need and see the possibility to implement soulful learning in schools, which involves both inner and outer work and must address teachers and students alike:

Holistic educators recognize that all aspects of human life are fundamentally interconnected. They contend that education must respect the dynamic and mutually supporting relationships between intellectual, emotional, physical, social, aesthetic/creative, and spiritual qualities of every person....Holistic education is founded upon a deep *reverence for life* and for the unknown (and never fully knowable) source of life.³¹³

Creative tools and webs of communication are explored within this context.

Contemplative practices, both on the part of the students and the teachers, are emphasized in order to reach a higher level of consciousness of learning and teaching. The soul is also nourished through creative methodology that emphasizes arts education and transpersonal techniques, such as the use of dreams, journal writing, guided imagery, and visualizations.³¹⁴ After all, “the connection among souls is ultimately what education is about. There is no single right way to do it, no blueprint. But there are paths to the souls of students that are open to every teacher, in every classroom, in every school. All we need is the courage to walk these paths with our students.”³¹⁵

Intentionality and Choice

The Getting Unstressed™ programme (GUS™) developed for this study addresses the well-being of adolescents. The idea for this programme originated out of practical experience with students in form of a club the students created at a high school, at which the principal investigator taught. They needed a forum that first allowed them to learn more techniques; second, they wanted to learn more about the theories behind some of the techniques; and third, they wanted to do so in a group to benefit from discussions,

questions, and answers. Many of the self-concept as well as the locus of control theories strongly emphasize the importance of this point of interactive learning.³¹⁶

Overview and definitions

The pertinent questions that were raised by the students dealt with very complex issues, such as: What is choice? What is intentionality? What is awareness? However, the field of intentionality and consciousness—the two concepts are usually intertwined—is enormous and incredibly complex, involving philosophers, psychologists, and physicists. Due to its wonderful mixture of disciplines, from metaphysics to religion, from neuroscientists to biologists and quantum physicists, from psychologists to philosophers and linguists and probably many others in between,³¹⁷ it represents an area where many opposing views exist, all contributing though to deepening our comprehension of what constitutes consciousness.³¹⁸

It is also a concept with a long historical tradition.³¹⁹ As a matter of fact, the concept of intentionality was at the core of the scholastic philosophical debates of the Middle Ages.³²⁰ Franz Brentano, a psychologist and philosopher, reintroduced it in the last half of the nineteenth century, when it was disseminated mainly through the efforts of Edmund Husserl. Intentionality is frequently rather simplistically summarized as the relationship between mental acts and the external world. Here is a dictionary definition of intentionality:

1. The ability of consciousness to a) create a mental object which need not exist in the external world, b) refer (apply) its content to reality, and c) direct activity toward results.
2. The ability of consciousness to

refer to something that is not like itself or that is not like its own activity.
3. The condition in which something directs, points to, or refers to something beyond itself.³²¹

The ideas and constructs, philosophical and scientific in nature, that have relevance to this particular study can be found in the works by Amit Goswami,³²² Walter Freeman,³²³ William A. Tiller,³²⁴ and Ken Wilber,³²⁵ among others, mainly because they approach consciousness from the viewpoint of non-duality or wholeness and allow for the human being to co-create ‘reality.’ As Amit Goswami points out, our experiences appear to be dualistic and therefore, it seems difficult to discard dualistic thinking.³²⁶ His explanation of the perception of the quantum self and the ego as expressions of one consciousness make sense and aid in making the transfer from theory to the practical application of these studies. W. Freeman offers a definition of the properties of intentionality that is useful for the comprehension of the subject, which are “a) its intent or directedness toward some future state or goal; b) its unity; and c) its wholeness.”³²⁷

The role of language also plays an important role in this discussion. Richard Bucke presents this explanation of consciousness:

Language is the exact tally of the intellect: for every concept there is a word or words and for every word there is a concept; neither can exist apart from the other...Intellect and speech fit one another as the hand and the glove, only far more closely...As is implied in what has been said, it is to be especially noted that not only does language fit the intellect in the sense of covering it in every part and following all its turning and windings, but it fits it also in the sense of *not going beyond it*. Words correspond with concepts, and with concepts only, so that we cannot express directly with them either sense impressions or emotions, but are forced to convey these (if at all) by expressing, not themselves, but the impression they make upon our intellect.³²⁸

It is precisely the illusion of the domination of the intellect that must be under scrutiny in any discourse on consciousness. Of course, John Searle deserves mention here, mainly because he focuses as well on the connection of language and

consciousness.³²⁹ Many of the essays in his latest book examine the implications for speech act theory and for a theory of conversation. He challenges various forms of philosophical scepticism and presents his point of view on the existence of mental phenomena, the determinacy of meaning, rules and, intentionality.³³⁰

A number of overarching themes and arguments emerge in that discussion, the most important of which is the question how human beings can entertain and maintain an integrated and unified sense of themselves within the context of their social and natural environments, in particular the opposing forces between free will and the deterministic principles of physical laws.

Of course, it is important to mention contradictory opinions as most recently expressed by Daniel Wegner, for instance, who concludes that conscious will is simply an illusion.³³¹ Perhaps though it can be argued that it is precisely this ‘illusion’ that helps individuals to gain a better understanding of themselves and to develop a sense of responsibility and morality. John Eccles offers another opinion, espousing as a dualist a clear differentiation between a physical world and a world of states of consciousness, and that both of them simply interact with each other.³³² He appears to justify how there can be mind-brain interaction without violating the principle of the conservation of energy. This theory has significant implications for the concept of free will.³³³

The question that must be answered now is how these philosophical arguments form the basis for the study at hand. For that purpose, the concept of intentionality is discussed in the context of social cognition, a branch of psychology. Social cognition studies the mental representations and processes that underlie social perception, social judgment, and social influence.³³⁴ If beliefs and desires as internal mental states are

regarded as components of intentionality, then the question about the role of volition must be raised, which Rollo May considers as “present in the structure of consciousness itself.”³³⁵ He carries this notion further when he claims that therefore inherent in each act is intent, thus dissolving the mind-body duality as well, “The act is in the intention, and the intention is in the act.”³³⁶ At this point in the discourse of intentionality, it has become obvious that “the concept of intentionality is essential to people’s descriptions and explanations of behaviour,”³³⁷ according to Bertram Malle and Joshua Knobe. Their model of a folk concept of intentionality is based on a three way model of intentional actions—including beliefs, desires, and intentions—as proposed by J. Searle, for instance.³³⁸ B. Malle and J. Knobe conceptualize intentionality as a hierarchical process whereby belief, combined with desire, create intention. Only when that intention is enriched by both skill and awareness is intentionality present.³³⁹ Such an understanding of intentionality perhaps sheds light on child development since “the process of internalizing the shared folk concept of intentionality may well reach into adolescence.”³⁴⁰ The possible implications for teaching children and adolescents go deep:

[If] children master the relationship between belief, desire, and intention, they must learn that a desired, foreseen, and intended act is not necessarily intentional. For one, the actor must fulfill her intention by having awareness of acting with the intention of doing so. This awareness is self-reflective, and it implies the capacity for subtle action identification processes.³⁴¹

Finally, contemplating the practical applications of intentionality for the structure, content and delivery of the GUS™ programme, transpersonal psychology and psychosynthesis must also be examined. They appear to offer the most direct, transferable insights for two reasons. First, they are holistic in nature, combining

empirical, existential, humanistic, and transpersonal methods and concepts. Second, they emphasize the ‘active’ component in the discussion, namely the immediate and direct experience of willing, expressed as willing action.³⁴² That is a concept, which is eminently teachable.

Once again, though, a larger context must be established first. Jenny Wade renders a useful description of how a transfer between theory and practise is possible when she applies David Bohm’s holonomic paradigm³⁴³ to developmental psychology.³⁴⁴ In the chapter on “A Holonomic Theory of Consciousness” Jenny Wade provides helpful visual depictions of noetic stages where she distinguishes between the externally and internally driven sources of motivation, which adds to the discussion of the students’ locus of control.³⁴⁵ She presents a concise picture of the neurological evolution of the noetic stages, namely, the individual’s basic assumptions about reality in each stage, at a conscious or subconscious level, with the general areas of influence.³⁴⁶ This model of the implicate order where “each person is a perfect reflection of What Is, *regardless of the expressed stage of development*” offers a most satisfying interpretation of being.³⁴⁷ The concept of “*the whole, perfectly realized person...in the partially evolved self*” can be taught and experienced through meditations, discussions and experiential discoveries.³⁴⁸

[Practical application to the GUS™ programme](#)

What this means in terms of the actual research is reflected in the content of the teaching modules of the study. One of the main inclusion criteria for the content of the multi-modal programme was the consideration of independence for adolescence.

Therefore, only those techniques are presented to the teens, which they can use for themselves and by themselves, leading to a true exploration of the Self. On the subject of free will and choice, helpful resources have been Roberto Assagioli's writings because psychosynthesis has much to offer that is of practical value.³⁴⁹ His work is also deeply embedded in spiritual thought even though it purports to be a "scientific conception," which "does not aim nor attempt to give a metaphysical nor a theological explanation of the great Mystery—it leads to the door, but stops there."³⁵⁰ R. Assagioli connects his explorations of the will, which ultimately facilitates choice, to R. May's definition of intentionality: "Intentionality is an essential part of the first stage of the willing action."³⁵¹

The tools that are offered to the students in the programme are intended to aid them in obtaining and maintaining an optimal sense of well-being. That must include a discussion of choice, a concept that "arouses strong resistance and reluctance, often indeed rebellion."³⁵² The adolescent population in particular often denies the notion of having choice; often feeling stuck and 'decided upon' by parents, teachers, and society at large.³⁵³ It is therefore important that the teenagers be offered access to their own ability to choose while gaining awareness of the effects these choices will have. The students have opportunity to practise this ability to choose and to choose well through some of the techniques offered, such as muscle testing, for instance. On the subject of choice, Avrom King's book *Choosing to Choose*³⁵⁴ provides excellent insights, again easily transferable to daily life, into what 'living by intent' truly means. It seems his entire work can be summarized in the words of William James, whom A. King quotes twice, "By changing

the inner attitudes of their minds, human beings can change the outer aspects of their lives.”³⁵⁵

Of course, intentionality is closely linked to all methods of self-regulation and biofeedback, which are part of the multi-modal programme as well. Elmer Green, the visionary in the subtle energy field and the father of biofeedback, offers much scientifically grounded information in his work on how to transform our lives through the practice of meditative states.³⁵⁶ As suggested in the holistic and aesthetic education curriculum, various relaxation and meditation techniques as well as guided imagery and visualizations make up a substantial portion of the programme offered to the students, thus allowing for the contemplative and participatory aspect of spirituality. Edmund Jacobson’s ‘progressive muscle relaxation’ and Dr. Schultz’s Autogenic Training are extremely useful tools adolescents can acquire and enjoy that reveal to them the interconnectedness of mind and body as well as the role of intent.³⁵⁷ Biofeedback and Autogenic Training serve particularly well as beautiful demonstrations of B. Malle’s and J. Knoke’s folk concept of intentionality.

The experience of A. Nunley’s Inner Counselor Process™ in the last module of the programme demonstrates very clearly the complete the role of choice in particular, as well as the interconnectedness of body, mind, emotions, and spirit.³⁵⁸ This technique, easy to learn and so effective and potentially life-changing, has its roots in Carl Jung and Abraham Maslow, synthesizing and crystallizing in a powerful manner the delicate dance between conscious, subconscious and super-conscious states through which individuals can move in a conscious fashion.³⁵⁹ Through accessing the Higher Self that acts as a guide using symbolic imagery, the individuals gain insights into themselves. As Elmer

Green points out in the forward to A. Nunley's book, eventually "the personality merges with 'your very being,' the Higher Self."³⁶⁰ That is the final lesson the students learn in the multi-modal programme, which is in a sense a holographic representation of Energy Medicine and Spiritual Healing combined with the principles of Holistic and Aesthetic Education.

Perhaps A. Kings summary of 'learning' provides the best illustration why concepts of intentionality and choice serve as pertinent grounding for this study:

True learning, which *always* is manifested in an enduring alteration of behaviour, involves this process: First, awareness of new information. Second, discovery that the new information is personally relevant. Third, an opportunity to share our *feelings* about this personally relevant new information. Fourth, an opportunity to use or apply the information. Fifth, an opportunity to incorporate the experience and subsequent experiences in what we do (our behaviours).³⁶¹

The structure, content and delivery of the multi-modal study adhere to all those criteria. The adolescents thus have the opportunity to become intentional participants in the creative process:

Spiritual inquiry then becomes a journey beyond any pre-given goal, an endless exploration and disclosure of the endless exploration and disclosure of the inexhaustible possibilities of an always dynamic and indeterminate Mystery...Spiritual truth is perhaps not a pathless land, but a goalless path.³⁶²

Research Question and Hypotheses

The primary question on which this study is built is simple. Does the exposure to GUS™, a wholistic multi-modal programme, improve the well-being of adolescents? The

aspects of the well-being that will be measured are the levels of state and trait anxiety, locus of control, and self-concept.

The study focuses on three hypotheses, which are related to the well-being of the teenagers.

1. The adolescents experience a shift towards a more internal locus of control due to their participation in the GUS™ programme. This effect will be measured by the Nowicki-Strickland Locus of Control Scale.
2. The adolescents experience lower levels of anxiety, both state and trait anxieties, due to their experience with the GUS™ programme. This effect will be determined by the STAI.
3. The adolescents' self-concept improves due to their experience with the GUS™ programme. This effect will be measured by the SDQ-II.

Purpose of This Research Study

Whatever you can do, or dream you can, begin it.

Johann Wolfgang von Goethe

It has become apparent from the review of the literature that today's adolescents are facing many serious challenges. Unfortunately, the teenagers frequently do not know or do not have access to tools that could help them cope with the stressors in their lives. Even if they do have the appropriate skills, they might feel less capable or incapable to successfully deal with their problems when they are faced with a seemingly overwhelming accumulation of minor stressors:

Instead, they often resort to avoidance, shift causal attributions to factors beyond their control, or adopt irrational beliefs. Therefore, interventions that focus on improving adolescents' orientation to problems—helping them effectively resolve daily stressors—are recommended for reducing symptomatology.³⁶³

The purpose of this study is to provide a series of tools to the individuals that address aspects of the adolescents' well-being at multiple levels. These tools can be used as prevention and as treatment interventions. The programme is structured in such a way that the participants are completely self-reliant in the use of the techniques, which are taught in an informal experiential setting. Unlike other programmes, GUS™ not only provides the tools but also the cognitive experience, a combination that more readily effects change than either component on its own.³⁶⁴ As Yorde and Witmer point out, “the ubiquitous nature of stress dictates the need for wide-scale dissemination of information regarding relaxation techniques and alternative coping mechanisms.”³⁶⁵ Their study appears to be among the first ones in which stress management concepts and skills to lower anxiety is taught to the general population in an educational format. Education therapies in general require the participant “to accept a much greater personal responsibility for the conduct and the success of the treatments” and group settings can also “provide the strength of community.”³⁶⁶ Norman Shealy has found that biofeedback combined with progressive relaxation training and AT has not proven adequate other than in pain management of headaches. He therefore developed Biogenics, a synthesis of Biofeedback Therapy (BFT), progressive relaxation, AT, autosuggestion, Jungian-guided imagery, Gestalt exercises and psychosynthesis, which consists of 45 hours of instruction in BFT and a comprehensive mental exercise program, supplemented during the 12-day training with at least 45 hours of personal patient practice with BFT devices and over 30

cassette tapes.³⁶⁷ The GUS™ programme takes those ideas even further and, at the same time requires only an eight-hour commitment of the participants in a formal teaching setting.

In addition to the cognitive and psychological domains, this study also addresses the spiritual void that exists for the adolescents.³⁶⁸ The programme considers the adolescent as a whole person. It therefore allows for the possibility to reflect on the larger questions of meaning, choice, and identity, for instance. Rather than changing exterior circumstances for the adolescents upon which many initiatives and interventions are focused, GUS™ offers an approach that affords the adolescents with the cognitive and spiritual awareness as well as the practical tools to create changes from the inside-out. Overall, this study demonstrates that through the exposure to the GUS™ programme, the adolescents experience a measurably higher sense of well-being on multiple levels. Because of the educational aspects of lecturing, Socratic teaching style, sharing by participants, and open discussions in a group setting in which the practical skills are taught, applied, practiced, and discussed, the adolescents receive the opportunity to realize the immediate impact of their own attitudes and decision making processes in a safe and nurturing environment:

The more that researchers, school personnel, probation officers, case workers, parents, and others realize, for themselves, the principles of mind, thought, and consciousness, the healthier they will become, the less reactive they will be to the insecure behaviour of troubled adolescents, and the more they will intervene with creative, commonsense, positive approaches. If adolescents are exposed to concepts of mental health in ways that relate to their own experiences, as well as responded to in ways that engage their healthier states of mind..., and these interactions occur within the context of secure, supportive settings, the results will have a cumulative effect that will reverse the process leading to alienation and deviance.”³⁶⁹

As the preceding discussion has demonstrated, much thought has been given to the curriculum components of the GUS™ programme. Each teaching module was carefully chosen, with pedagogical and methodological considerations given to the sequence, in which the curriculum was assembled. The following chart briefly summarizes the basic ideas of what each component has to offer and places it in the context of the overall workshop, while the Methodology Chapter provides a detailed description of each component and how it is taught.

Table 1. Content and Sequence of Curriculum Components of GUS™

<i>Dowsing Rod Demonstration</i>	Visual demonstration of subtle energy fields and their potential impacts
<i>Whole Self Model</i>	Visual and intellectual basis for further discussion of energy fields, Higher Self, and how stress can manifest itself on various levels
<i>Discussion about Stress Grounding, Centring: Breathing, Balancing Brain, Emptying Mind</i>	With the focus on breathing, balancing the brain and emptying the mind are considered the cornerstones of any stress management, relaxation and meditation work and thus essential for all that follows in this workshop; providing practical exercises participants can use anywhere and any time
<i>Air Meditation</i>	The How-To of emptying the mind
<i>Progressive Muscle Relaxation</i>	Shifts conscious awareness to where stress is held in the physical body and provides an effective technique of releasing physical tension; allows for further practice of Grounding and Centring
<i>5-Step Meditation</i>	Further application of above techniques while adding a self-realization component
<i>Place of Peace Discussion & Guided Imagery</i>	All of the above building blocks are brought together in this guided imagery exercise, where the participants find an inner Place of Peace they can use from that moment on
<i>Muscle Testing/ Dowsing:</i>	From the point of awareness the participants have gained to this point, they are able to tap into their intuition and connect with their Higher Selves
<i>Biofeedback</i>	Provides a direct experience of self-regulation of autonomic physical experiences—“mind over matter”
<i>Autogenic Training</i>	Another application of previously learned components, in particular the psychoneuroimmunology connection
<i>Chakras: Discussion & Guided Imagery</i>	Connects everyday physical and psychological experiences of participants, such as stomach cramps because of nerves,

<i>Review: Breathing, Centring, Grounding</i>	headaches, throat tightening etc to energy fields, whole self model; providing a visual/kinesthetic experience of energy centres and how to achieve balance on multiple levels Reiterating the obvious and essential: the most basic method to deal with stress—and life in general—is the ability to ground and centre
<i>Higher Self Discussion & Guided Imagery</i>	After experiential encounters in the various activities with the Higher Self during the workshop, the concept is further discussed, other opinions/experiences are shared, and then the participants are given the opportunity to further acquaint themselves with their own Higher Self
<i>Review: Balance</i>	Once again, emphasizes the basics: grounding, centring and the importance of balance on multiple levels
<i>Therapeutic Touch™</i>	Brings all components together, in order to deal with predominantly physical and emotional pain energetically; demonstrating the immediate impact of TT™ and its meditative/relaxing qualities
<i>Finding Guide Discussion & Guided Imagery</i>	Gives permission to the participants to further explore their connections with the universe and emphasizes the fact that help is available from various sources
<i>Inner Counselor Process</i>	Culminating experience that requires application of all other components taught thus far; also provides the participants with the opportunity to change behaviour patterns if so desired
<i>Dowsing Rod Demo</i>	Demonstrates to participants quite effectively what they have learned over the course of the day; makes them feel proud of their accomplishments and abilities to take care of themselves

The GUS™ programme presented in this study offers a cost-efficient, self-reliant, safe, effective, and wholistic approach to teaching adolescents effective techniques through which they can cope with daily life and stress in a healthy and soulful manner, and experience wholeness and empowerment from within, thus improving their overall sense of well-being. Johann Wolfgang von Goethe, one of the world's foremost writers and poets expresses this process as follows, "Trust yourself, then you will know how to live."³⁷⁰

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CHAPTER 2: **METHODOLOGY**

*Learning is finding out what you already know.
Doing is demonstrating that you know it.
Teaching is reminding others that they know just as well as you.
You are all learners, doers, teachers.*

Richard Bach (Illusions)

This chapter contains four major sections, which describe the participants of this study, the instrumentation, the research design, and the procedures employed in the research. This study utilized an experimental pre-test/ post-test control group design to measure the effects of GUS™, a wholistic multi-modal programme, on the well-being of adolescents.

Participants

The logical place to recruit adolescent participants ages 13 to 19 would be through the local schools. However, the various local school boards, who were initially contacted by phone (see [Appendix A.1](#)) and at first showed interest, finally declined any involvement with the research project. The principal investigator was also denied permission to advertise the study within the schools of the local boards. Therefore, the principal investigator explored five other main routes to recruit teenagers from the public in the local area. All the information on the research study made use of the term ‘participant’ rather than ‘subject’ because of the former word’s less clinical nature.

Population

The private schools within a 100 km radius around the home of the principal investigator served as the first resource. After placing an initial phone call to the principal, director, or owner of the eighteen schools (see [Appendix A.2](#)) six schools asked to receive an information package (see [Appendix A.3](#)), which was sent out with a cover letter (see [Appendix A.4](#)). Only one school asked for a meeting with the principal investigator, during which the two guidance counsellors of the school became convinced that they would like to advertise the study. The principal investigator left 50 copies of the information package with the two teachers, who made two morning announcements to inform the students of the available workshops. The guidance counsellor provided the principal investigator with the script after he had made the first announcement. He used the exact same script for the second announcement three days later (see [Appendix A.5](#)). The same guidance counsellor also invited the principal investigator into one of the morning assemblies, which was attended by grade 9 to 12 students. After a very brief introduction by the guidance counsellor, the principal investigator introduced the study personally (see [Appendix A.6](#)). There were 10 minutes allotted at the end, during which 8 students introduced themselves to the principal investigator and picked up the information package.

The yellow pages of the local phone book, which covers a substantial population base of about 350, 000 people provided the basis for the second resource. The principal investigator called every counselling organization, private or public, that was listed there, a total of 67 individual units. The principal investigator followed a basic script, which was left on all the answering machines. If the call was received in person, the script was

still used, but small deviations occurred from time to time depending on the reception the principal investigator was given (see [Appendix A.7](#)). Out of these 67 calls, the principal investigator was given permission to either mail or e-mail the information package (see [Appendix A.3](#)) for distribution in the counselling offices (a total of 18) or, as was the case for 10 offices, to put up a poster (see [Appendix A.8](#)) in the office. The principal investigator also contacted all the health food stores and alternative bookstores in the area, covering a total of 23 more units, using the same basic script (see [Appendix A.7](#)). Each one of the store managers agreed to display a poster and 10 of them allowed the principal investigator to leave behind 10 information packages for possible distribution. The last group that was contacted were all the complementary and alternative health practitioners, naturopaths and chiropractors in the area, a total of 74 units. Out of those, 41 one of them responded positively. 21 requested posters, 5 of them requested a bundle or 20 packages, 3 of them a bundle of 5 information packages by mail, all of which were accompanied by a cover letter (see [Appendix A.9](#)); twelve of them opted to print out the electronic version of the information package on a needs basis, informing their clients verbally about the research study, based on the written information provided through the package.

As the third major resource served the friends, acquaintances, former students, clients, participants in the two pilot studies, and current and past colleagues of the principal investigator, who were either contacted by e-mail, mail (see [Appendix A.10](#)) or by phone to inform them about the research study. For the phone calls, the principal investigator relied heavily on the actual wording of the letter and made as few deviances

from the text as possible. The principal investigator passed on 110 copies of the information package to this group for further distribution, plus 6 more posters.

The fourth resource was a newspaper article about the research the principal investigator was conducting, which was published in the local paper, and subsequently in two other papers within a 100 km radius (see [Appendix A.11](#)).

As a consequence of the many contacts the principal investigator established over the course of the six months of recruitment, many referrals were made through secondary and tertiary sources. The principal investigator was either contacted by telephone or through e-mail by potentially interested parents of teenagers or teenagers themselves, including two youth organizations from two different churches in two cities other than the city of residence of the principal investigator, the local home schooling organization, and the local YMCA who all agreed to advertise the research study by displaying the poster (see [Appendix A.8](#)) and distributing the information package (see [Appendix A.3](#)) to interested adolescents or parents/guardians of adolescents.

[Samples](#)

Out of all the contacts that were made, a total of 86 teenagers responded. Two decided not to commit to the study since none of the workshop dates set fitted their schedules. Only two parents asked to see the three dependent measures prior to permitting their teenagers to participate in the study—this offer was made to them by the principal investigator in the information package (see [Appendix A.3](#)). In both cases, the teenagers participated in the study. No parents/guardians expressed any concerns

regarding the dependent variables, the written instructions or the workshop, either before, during, or after the course of the 7-week period the adolescents were involved with the research study.

Inclusion criteria

84 adolescents fulfilled the initial inclusion criteria:

1. The adolescents had to be between 13 and 19 years of age at the beginning of the study period.
2. The adolescents had to complete the assent form (see [Appendix A.12](#)) since most of them were under the age of 18; and their parents/guardians had to complete the consent form (see [Appendix A.13](#)). Both those forms were included in the initial package the participants received by mail, containing also the three measures used to establish the baseline (see Appendix B) and the initial letter of instruction (see [Appendix A.14](#)). All five pieces of documentation had to be returned within a week of a set date determined by the date of the workshop.

Two more criteria were applied for final inclusion in the study:

3. The adolescents had to complete another set of questionnaires on their own and return it to the principal investigator, within a week of a set date determined by the date of the workshop.
4. The adolescent had to attend a full-day workshop at a given location. No allowances were made for late arrivals or early dismissals, as it was clearly stated in the information letter that accompanied the first instructional package.

Out of the initial 84 teenagers, 14 % (n=12) did not meet all four inclusion criteria. One teenager became ill and was unable to attend a workshop. Two teenagers, siblings, were faced with an unexpected death of a family member and therefore had to withdraw from the study. One adolescent reported feeling uncomfortable with the questions she was asked in the three instruments and therefore did not want to continue. Her friend decided to withdraw “because she felt too shy to attend the workshop without her,” according to her mother’s description. A group of seven adolescents, who completed the first set of questionnaires and received the intervention, had to be excluded from the study because their final questionnaires (sent by their teacher as a package) were lost in the mail and no back-up copies existed.

Exclusion criteria

Two exclusion criteria existed:

1. Youth below the age of 13 and above the age of 19.
2. Insufficient command of the English language to comprehend language used in dependent measures.

No adolescents requested to participate in the study, to whom the exclusion criteria would have applied. Only two parents asked if it were possible for the younger sibling to accompany the older teenager who signed up for the study. In both cases, the principal investigator declined the request.

Demographic information

72 adolescents, 63.9% (n=46) females and 36.1% (n=26) males, who committed to the study through the various sources described above, finally fulfilled all four inclusion criteria. Group A, the treatment group, consisted of 32 adolescents. 56% (n=18) were female and 44% (n=14) were male. Group B, the control group, consisted of 40 adolescents. 70% (n=28) were female and 30% (n=12) were male. Both groups represented all ages between 13 and 19 (see Table 4). The mean age difference between Group A and B was one full year, 14.9 years in the Treatment Group compared to 15.9 years in the Control Group.

Table 2. Age Groups Represented in the Study.

	Age 13	Age 14	Age 15	Age 16	Age 17	Age 18	Age 19	Mean
Group A	11	3	7	4	5	1	1	14.9
Group B	3	7	4	10	11	3	2	15.9
Total	14	10	11	14	16	4	3	15.4

Geographic location

The workshops were held in four different cities, all of them within the 100 km radius from the principal investigator's residence. City 4 represents a group of senior students, all of whom attended a private school where the workshop was conducted. It was also the only workshop where ESL students participated in the study and which had a strong racial mix. Although no other demographic data were collected on the participants, it is perhaps interesting to note that 9.8% (n=7) of the participants had no access to computers and e-mails at their homes, which may reflect on their socio-

economic background. According to a Statistics Canada publication, the latest figures (available for 2000) indicate that 25% of students in Ontario did not have access to the Internet at home. Low socio-economic status decreases the likelihood of home access to a computer and the Internet.¹

Table 3. Gender Breakdown and Mean Age by Geographic Location

	City 1	City 2	City 3 (home base)	City 4
Total Number	17.7% (n=14)	21.5% (n=17)	39.3% (n=31)	13.9% (n=10)
Mean Age	14.9 years	15.3 years	15.3 years	17 years
Males	50 % (n=7)	35.2% (n=6)	38.7% (n=12)	10.% (n=1)
Mean Age	14.1 years	14.7 yeas	15 years	18 years
Females	50 % (n=7)	64.7% (n=11)	61.3% (n=19)	90% (n=9)
Mean Age	15.7 years	15.6 years	15.4 years	18 years

The principal investigator was personally known to 8.3% (n=6) of the participants. In 2.7% (n=2), the principal investigator knew the parent/guardian, but not the adolescent. The remaining 89% (n=64) of participants had absolutely no prior knowledge of or familiarity with the principal investigator.

Instruments

In order to measure the effects of the wholistic multi-modal programme on the well-being of adolescents, three different instruments were used to test the three hypotheses stated earlier. A fourth measurement, a qualitative report included in the final observation, was optional for the participants. The principal investigator based the selection of the three main instruments on the following criteria:

1. The participants needed to feel comfortable using the measures by themselves since two of the four sessions of data collection occurred without supervision, using written instructions only. The ease of use therefore became an important consideration to increase the rate of completion by the participants as well.
2. The measures had to be easily reproducible since data collection for all participants occurred at four different points during the course of the study.
3. The measures had to be age appropriate for the adolescent population, age 13 to 19.

Nowicki-Strickland Locus of Control Scale

The Nowicki-Strickland Locus of Control Scale² (N-S) was the first measure used in this study (see [Appendix B.1](#)). This scale was specifically constructed for children (grades 3 through 12) and was derived from the older Rotter Locus of Control Scale.³ It is designed on the basis of Rotter's definition of external-internal control of reinforcement dimension and measures a generalized expectancy of the extent to which individuals perceive that events in their lives are consequences of their behaviour. Since this study focused on the effects of the wholistic multi-modal programme on adolescents, this particular measurement was considered very significant. Several studies examine the relationship between locus of control and achievement⁴ as well as locus of control and self-esteem.⁵

The Nowicki-Strickland Locus of Control Scale consists of 40 Yes/No questions and takes approximately five minutes to administer. Since the language level is geared to

grade 5 reading level, yet still appropriate for older adolescents, it is an easy test for the students to complete, either on their own or in a group situation. The items describe reinforcement situations across interpersonal and motivational areas, such as affiliation, achievement, and dependency. A low score indicates an internal locus of control, whereas a high score indicates an external locus of control.

The means and standard deviations for males and females at each grade level are presented. According to Nowicki and Strickland,⁶ estimates of internal consistency via the split half method, as corrected by Spearman-Brown, are: $r=.74$ (grades 9, 10, 11) and $r=.81$ (grade 12). Test-retest reliabilities, taken six weeks apart, are .63 for grade 3, .66 for grade 7 and .71 for grade 10.

With regards to construct validity, this scale was compared to the Intellectual Achievement Responsibility Questionnaire (1982): grade 3: $r=.31$; $p<.01$ and grade 7: $r=.51$; $p<.01$. A comparison with the Bialer-Cromwell scale (1961) produced the following results: $r=.41$; $p<.05$.

State-Trait Anxiety Inventory for Adults

The State-Trait Anxiety Inventory for Adults (STAI)⁷ was selected to measure levels of anxiety (see [Appendix B.2](#)). This self-reported assessment device includes separate measures of state and trait anxiety that differentiate between the temporary condition of state anxiety and the more general and long-standing quality of trait anxiety. The State Anxiety scale evaluates feelings of apprehension, tension, nervousness, and worry, which increase in response to physical danger and psychological stress. It is a

widely accepted test, which is used for screening purposes, and more importantly with regards to the implications for this study, for evaluating the immediate and long-term outcome of psychotherapy, counselling, behaviour modification, and drug-treatment programmes.⁸

The choice for the STAI was also determined by its appropriateness for high school students as it was originally developed for use with high school and college students and adults. An additional benefit of this 40-question test where subjects respond on a 4-point Likert scale, indicating the frequency with which each strategy is used, lies in its succinctness. It could be completed within ten minutes, which was an important consideration since three individual tests formed the total baseline test, and from a pedagogical point of view, 25-35 minutes of administering various self-reporting measures appears to be the maximum. Lastly, the test could be administered either independently at home by the teenagers or in a group, which fell within the adolescents' comfort zone and therefore did not appear to unduly influence the levels of anxiety among the subjects the day of the workshop.

The STAI is composed of two scales: The STAI Form Y-1 consists of 20 items measuring situational or state anxiety (STAI-S). The STAI Form Y-2 consists of twenty items for underlying or trait anxiety (STAI-T). Scores on the STAI have a direct interpretation: high scores on their respective scales mean more state or trait anxiety, whereas low scores mean less. Both percentile ranks and standard (T) scores are available for male and female high school students from grade 9 on.

According to Spielberger, the stability of the STAI was assessed on male and female samples of high school students for test-re-test intervals ranging from thirty to

sixty days.⁹ The test-retest correlations for the T-Anxiety scale ranged from .65 to .75 (males: $r=.68$ to $.71$; females: $r=.65$ to $.75$) For the S-Anxiety scale, the stability coefficients were expectedly lower, ranging from .34 to .62 (males: $r=.51$ to $.62$; females: $r=.34$ to $.36$). This low level of stability for the State-anxiety scale is expected since responses to the items on this scale are thought to reflect the influence or whatever transient situational factors exist at the time of testing.

Evidence of internal consistency is provided by strong alpha coefficients for the S-Anxiety scale (males: $\alpha=.86$; females: $\alpha=.94$) and the T-Anxiety scale (males: $\alpha=.90$; females: $\alpha=.90$). Internal consistency is further demonstrated by item-remainder correlations computed for the normative samples (S-Anxiety: $.55$; T-Anxiety: $.52$).

Concurrent validity of the T-Anxiety scale is evident by its high correlations, ranging from .85 to .73, with the *IPAT Anxiety Scale*,¹⁰ the *Taylor Manifest Anxiety Scale*¹¹ and the *Zuckerman Affect Adjective Checklist*.¹²

[Self-Description Questionnaire-II](#)

As the third instrument, the Self-Description Questionnaire-II, was chosen to measure the students' self-concept (see [Appendix B.3](#)).¹³ This questionnaire (SDQ-II) was specifically designed for use by junior high and high school students in grades 7 through 12. It reflects a multi-faceted and hierarchical conceptualization of self-concept that is consistent with the perspectives of many researchers, yet not apparent in many other instruments. It presumes the ontological integrity of a self, which is suitable to the

overall nature of this study. The 102-item questionnaire, which was administered either at home individually or in a group during the workshop, took approximately 15-20 minutes to complete. It assesses three areas of academic self-concept, seven areas of non-academic self-concept, and general self-concept derived from the Rosenberg self-esteem scale.¹⁴ These eleven scales, which are also summed to yield a Total Self-Concept score, reflect an adolescent's self-ratings in various areas of self-concept. Other self-esteem scales, such as Susan Harter's Self-Perception Profile for Adolescents¹⁵ and the Rosenberg Self-Esteem Scale,¹⁶ were not considered as suitable because they tend to focus on general factors to the exclusion of domain-specific criteria for self-concepts.

Detailed instructions pertaining to the procedure for administering the questionnaire are outlined in the manual. In completing the SDQ-II, the subjects are asked to respond to simple declarative sentences with one of six responses: False; Mostly False; More False Than True; More True Than False; Mostly True; True. Each of the 11 SDQ-II facet scores is based on the adolescent's self-ratings on 8-10 items, half of which are negatively worded in order to disrupt positive response bias. A computerized scoring programme is provided. A higher score indicates a more positive self-concept than a lower score. Norms are presented for each of the SDQ-II scales and for the Total Self-Concept score. They are presented as both percentiles and non-normalized T scores. Separate norms tables are presented for males and females.

According to Marsh and Peart the coefficient alpha of reliability for each SDQ-II scale is generally high,¹⁷ varying from .83 for Emotional Stability to .91 for Physical Appearance (median = .87), whereas the average correlation among the factors is modest (mean r = .18). They also determined the test-retest reliability (stability coefficients) as

substantial, ranging from .72 for Emotional Stability to .88 for Math, with a median of .79.

Content validity of the SDQ-II is highly supported through its foundation in the Shavelson, Hubner, and Stanton multifaceted, hierarchical model of self-concept.¹⁸ Construct validity receives special attention in the form of several exploratory and confirmatory analyses designed to examine the structure of self-concept and provide a strong empirical foundation for the measures. The SDQ-II responses are related to a wide variety of external criteria. Each of its factors is significantly correlated with other constructs. However, since no other scale of this kind exists, more research to refine and demonstrate construct validity needs to be done in order to clarify some issues related to discriminant validity.¹⁹

[Anecdotal Questionnaire](#)

As an additional qualitative measurement tool for this study an anecdotal questionnaire was used once, at the end of the study period only, consisting of nine questions (see [Appendix B.4](#)). The questionnaire was designed by the principal investigator and remained optional for the participants. The participants could use descriptive language to express their personal opinions about the questions asked. Because it was optional and anonymous, the adolescents were invited to freely voice their feelings and thoughts. The participants were given the option of adding their name to the questionnaire with the explanation that the principal investigator could then contact them for the purpose of testimonials. A total of 92% (n=66) of questionnaires were returned

within one week of the given date, which was set at the two-week post-intervention point, with 35% (n=25) of participants identifying themselves by name despite the fact the adolescents were given the choice to remain anonymous.

Research Design

The study was designed as an experimental pre-test/ post-test control group design with limited random assignment. Additionally, there was a probe at week 5 post-intervention, although only for Group A (O₄)—see section on Data Collection below—to assess the stability of the intervention. This design allows for the comparison of the post-test between the treatment group and the control group. Such a design lowers the threat to internal validity except for mortality and increases the probability that any differences between the treatment group (Group A) and the control group (control B) are due to the actual intervention.

Randomization

The assignment was only partially random for the reason that the participants had to commit to a full-day workshop on a weekend, which needed to fit into their schedules. However, the adolescents did not know if their choice slotted them into the treatment or the control group. For the vast majority of adolescents only one date worked out. Only 30% (n=24) of the adolescents were truly randomly assigned. The random assignment

was also complicated by the fact that parents/guardians requested to have their children attend the same workshop, mainly for logistical reasons of their own, such as driving or planning the family weekends.

As an incentive for the adolescents to sign up for the workshop, the participants in the control group also received the intervention, which coincided with the 5-week probe for Group A. Since the research was conducted in more than one location, the principal investigator insured a treatment as well as a control group existed in each location.

This study was designed to measure the effects of the GUS™ programme, a wholistic multi-modal programme, on the well-being of adolescents. This programme, consisting of fifteen major teaching modules, was developed and delivered in the form of a workshop in its entirety solely by the principal investigator. The principal investigator did have attachment to outcome for two main reasons: 1) The programme arose out of years of personal practice of the modalities and techniques taught. 2) The programme also reflects many years of teaching these modalities to adolescents who have shared the impact the teaching has made on them. Therefore, the principal investigator did have certain expectations regarding the effectiveness of the GUS™ programme from the outset.

Independent Variable

The independent variable used in this analysis was the intervention, an 8-hour workshop, in which adolescents were taught the GUS™ programme by the principal investigator. Group A (the treatment group) received the intervention after the initial pre-

test, whereas Group B (the control group) received the intervention only after the post-data for Group A had been collected.

Dependent Variables

There were four dependent variables utilized in this research study. These dependent variables were as follows: locus of control, state anxiety scores for teenagers, trait anxiety scores for teenagers, and self-concept, which consisted of a total of 12 individual scales. Out of the four observation times, the scores of the dependent variables for both groups were compared at three data collection times. For Group B, a comparison of pre-and post-intervention data was also undertaken.

Procedures

*You are never given a wish
Without also being given the power to make it true.
You may have to work for it, however.*

Richard Bach

Pilot Studies

The principal investigator conducted two pilot studies, one of which was completed before commencing the dissertation research; the other one was partially completed at the time. Both pilot studies were set up as multi-week workshop

programme. The first one was conducted in a high school with 13 gifted students over a ten-week period. Because the principal investigator subsequently was denied permission by the local school boards to conduct the study there or to recruit from the student population, a second pilot study was devised. This study was carried out at the home of the principal investigator and in another city with a total of 17 adolescents who were recruited from the same population as described earlier in this chapter. The second pilot study contained three data collection points, as opposed to two in the high school pilot, in a pre-test/ post-test control group design. However, because of the difficulty in getting enough students to commit to participating in the study, the control group consisted of only 3 teenagers as opposed to 14 in the treatment group. Having received excellent feedback on the content of the material in both pilot studies, the principal investigator decided to maintain as much as possible the integrity of the programme offered to the teenagers while shortening the duration of the programme from 10 hours of instruction over several weeks to a one-day workshop of seven instructional hours. This was achieved by removing one teaching module. Otherwise the curriculum remained the same, only the order changed slightly given the difference in format.

[Research Study](#)

This section describes the location for each workshop, the conditioning of the space, the manner in which contact occurred with the participants and their parents/guardians, data collection, as well as the intervention itself in the format of a one-day workshop.

Location of workshops

The workshops were held in four different geographic locations, all within a 100 km radius from the principal investigator's residence. The requirements set out by the principal investigator regarding the locations, were simple: a safe, quiet, and carpeted room where there was enough floor space possibility for each participant to lie down comfortably. An important practical consideration for the principal investigator was also cost, preferably securing a room at no cost.

Workshop 1 in City 1 (about 100 km from the residence of the principal investigator): Through a third or fourth level contact, a parent who was interested in securing her daughter's participation in the workshop, made the arrangements with one of the churches in City 1 to provide a free space for the two workshops, with the workshop for the treatment and control group scheduled at two weeks apart. The room, in the basement of the church, fulfilled the conditions described above, and the principal investigator incurred no rental cost.

Workshop 2 in City 2 (about 30 km from the home of the principal investigator): Through a friend who is a member of this congregation in City 2, the principal investigator was also provided with a free space in the basement of the church for the two workshops, with the workshop for the treatment and control group scheduled at two weeks apart. Once again, the conditions for the room as outlined above were fulfilled and the principal investigator incurred no cost.

Workshops 3, 4, 5 and 7 in City 3 (the residence of the principal investigator): A fairly large room served as the workshop location. The space was quiet and no other person was present for the duration of the workshop.

Workshop 6 in City 4 (about 60 km from the home of the principal investigator): This workshop was added later on after the first five workshops had already been conducted. It came about at the request of a teacher at a private school in City 4 who read the article in the paper. This teacher requested the workshop to be conducted at her school, where the only room available was rather small and not carpeted. For half of the workshop, the noise from the rest of the school penetrated the space to some degree.

[Conditioning the teaching space](#)

Given the difference in workshop location and quality of space, the principal investigator paid careful attention to conditioning each space for each workshop in order to create a quiet, safe, and peaceful environment in which to teach and interact with the participants.²⁰ Several steps were taken to ensure the space was conditioned appropriately: 1) The principal investigator spends each morning approximately 60-90 minutes in prayer and meditation. The morning of each workshop, a specific prayer was included in the ritual to request conditioning of the space for the duration of the workshop (see [Appendix C.1](#)). 2) The principal investigator burned a 'Blue Pearl' lavender incense stick approximately 30 minutes before each workshop and spent 10 minutes in sitting meditation after having completed the set-up of the room. 3) A large

single point, 8 inch, clear quartz crystal was used, which the principal investigator imprinted in meditation the day before with the task to hold the space for each workshop. After spending approximately 15 minutes in a deep meditative state, the principal investigator placed the crystal on a purple velvet cloth in front of her and focused her attention on the crystal, voicing the required task out loud (see [Appendix C.2](#)). This crystal was then centred on a table (outside of the actual teaching circle) in each specific location and remained there for the duration of the workshop. 4) In each room, the principal investigator set up a table, on which reference materials, consisting of books, dowsing rods and a bowl containing a collection of miscellaneous small crystals were laid out for perusal during the breaks and lunch (see [Appendix C.3](#)). The table was always arranged in a similar way, with the crystal bowl being in the centre, the CDs that were played on a portable stereo system off to the side, and all the books spread out, including the Inner Counselor cards. 5) Each room was arranged in such a way that the teaching space was a circle, with the participants starting out sitting on chairs until the first break, then on blankets and cushions on the floors, or on sofas which were available in City 1 and 3. The principal investigator provided 10 large blankets to cover the floor space. Each participant brought a blanket and pillow to keep warm and comfortable. In City 4 the workshop occurred in such a small place that the teaching space became a rather elongated oval—the closest way to replicating all the other spaces. 6) The principal investigator started playing recorded music approximately 20 minutes before the start of the workshop. Music was used during the two data collection points and at the breaks to help clear and hold the space (see [Appendix C.4](#)). 7) Food was kept in a fridge close by in all locations. Drinking of water was encouraged at all times and most

participants had brought their own water bottles, as had been suggested in the informational letter. Participants could leave at their own discretion to use the washroom, which only happened 9 times altogether. Otherwise, participants appeared to wait for the scheduled breaks. Snacks and lunch were eaten in the same space, with the principal investigator energetically clearing the space during and after each break before continuing the workshop. The first aspect to clearing the space and holding the sacred atmosphere of the space was to play a piece of music during each break, leading into the teaching, and thus bridging the multi-purpose aspect of the space (see [Appendix C.4](#)). In addition to the music, the principal investigator said a silent prayer, standing in one of the corners of the room and facing the teaching space right at the end of each break (see [Appendix C.5](#)).

[Contact of principal investigator with participants and parents/guardians](#)

As described in the section on ‘participants,’ the principal investigator sent out approximately 400 information packages (see [Appendix A.3](#)) and 60 posters (see [Appendix A.8](#)). Except for 10% (n=8) of the participants, either the adolescents or their parents/guardians had received the information package when they contacted the principal investigator. In the case of the 10% of the teenagers, the principal investigator sent the same package to the interested parties.

The contact by the interested adolescent or parent/guardian of the adolescent consisted of the assignment or selection of a workshop date for the teenager. The

principal investigator always asked if all of the dates could potentially work for the participant. The answer was affirmative for 33% (n=24) of them, provided they were assigned to one of the workshops within the city of residence; and thus they were randomly assigned to one of the conditions in that geographic location. The random assignment was done by a draw. All the other participants chose a workshop that fitted into their and their families' schedules, which led to another 11% (n=8) attending a workshop outside of the city of residence. In addition, the principal investigator required a complete mailing address and telephone number of the participant as well as e-mail addresses, when available. The initial exchange also included a statement by the principal investigator as to when to expect the first mailing.

The second contact occurred by mail for each participant. Within the week prior to the baseline test date, each participant received a mailing that contained the following documents: an instructional letter, personally signed by the principal investigator (see [Appendix A.14](#)), an assent form for the participant (see [Appendix A.12](#)), a consent form for the parent/guardian of the teenage participant (see [Appendix A.13](#)), a self-addressed and stamped envelope to return the materials, and one copy each of the three instruments used for the study: the Nowicki-Strickland Locus of Control Scale (see [Appendix B.1](#)), the State- and Trait-Anxiety Inventory (see [Appendix B.2](#)), and the Self-Description Questionnaire II (see [Appendix B.3](#)). All materials were duplicated and printed on plain white paper. Pertinent information (e.g. name, gender, age, stating how they are feeling right now or how they generally feel) on each test was highlighted for emphasis by the principal investigator, which remained the same for each time the participants completed the questionnaires.

The principal investigator followed this procedure for all of the mailings. For Group B the second mailing occurred two weeks after the initial mailing. The participants received the same three sets of questionnaires with a self-addressed and stamped envelope, accompanied by another covering letter, personally signed by the principal investigator (see [Appendix C.6](#)). Group A received the second mailing two weeks after the workshop. Once again, the participants received the same three instruments, a self-addressed and stamped envelope, and a final letter of instruction, personally signed by the principal investigator (see [Appendix C.7](#)). If the questionnaires had not been received by the principal investigator within a week of the baseline test, the principal investigator called the participants to inquire if the questionnaire had arrived, and if so, if it had been completed and returned. Only 5.5% of the adolescents (n=4) had completed but not mailed the envelopes at the time of the phone call in the first (groups A and B); only 2.7% (n=2) during the second round of questionnaires, group B only, and 6.9% (n=5) during the third round, group A only. The principal investigator received 100% of all questionnaires that were sent out by all 72 adolescents who participated in the workshop.

The principal investigator called each participant within three days of the workshop and either left a message on the answering machine, with a parent/guardian, or with the participant directly, as a reminder of where and when the workshop was taking place as well as clarifying any need for direction to the location. The adolescents were reminded to bring lunch and water as well as a blanket and a pillow, as had been stated in the instructional letter.

The first time, the principal investigator met most of the participants occurred the day of the workshop. The workshops started at 9:30 AM and lasted until 5:30 PM on either a Saturday or Sunday, with the exception of workshop 6, which began at 1:30 PM and ended at 9:30 PM. The parents/guardians tended to arrive on time at the teaching location between 9:10 AM and 9:30 AM. Only once, a parent arrived ten minutes late with two teenagers. All participants were picked up by the parents/guardians within fifteen minutes upon completion of the workshop. Most parents/guardians briefly introduced themselves either when dropping off their child/children or when picking them up.

During the day of the workshop, there were no other persons present. The principal investigator spent the entire day with the adolescents, including supervising the snack breaks in the morning and afternoon as well as lunch. The only exception occurred in City 4, where the teacher joined the workshop as a participant for the second half of the workshop only.

Upon completion of the study, the principal investigator received unsolicited comments from both parents and participants (see [Appendix C. 8](#)).

Data collection

There were four data collection points, as illustrated by the following table:

Table 4. Data Collection Points

O = data collection: completion of N-S, STAI, and SDQ-II questionnaires; O₄ only also included the 'Anecdotal Questionnaire'

T = data collection used in the two-way repeated measures ANOVAs

X = intervention: one-day workshop

	Week 1	Week 3	Week 5
Group A	O ₁ (T ₁)	O ₂ X O ₃ (T ₂)	O ₄ (T ₃)
Group B	O ₁ (T ₁)	O ₂ (T ₂)	O ₃ (T ₃) X O ₄

For the treatment group (Group A), O₁ and O₄ were completed by the participants at their residence and mailed to the principal investigator. O₂ occurred at the beginning of the workshop, while O₃ occurred at the end. For the control group (Group B), O₁ and O₂ were completed by the participants at their residence and mailed to the principal investigator. O₃ occurred at the beginning of the workshop, while O₄ occurred at the end.

The principal investigator was the only person who received and sorted the information, as well as followed up on questionnaires that had not been received by the required date. A university student helped the principal investigator with the coding of each questionnaire and with the data input of approximately half of the questionnaires. A statistician, hired by the principal investigator, conducted the statistical analyses of the data.

Intervention—GUS™ Programme

To be aware of a thing or being means, in quite general terms, to experience it as a whole and yet at the same time without reduction or abstraction, in all its concreteness. To be aware of a man, therefore, means in particular to perceive his wholeness as a person determined by the spirit; it means to perceive the dynamic center which stamps his every utterance, action, and attitude with the recognizable sign of uniqueness.

Martin Buber, 1954

Each intervention was delivered as a one-day workshop, which each participant attended once for 8 hours. The 8 hours included two 10-minute breaks for snacks, one in the morning and one in the afternoon, and a 35-minute lunch break. The snacks were provided by the principal investigator and consisted of grapes, fresh-baked cookies from the local market, mini-carrots and water. The adolescents brought their own lunch. Due to the interactions among the adolescents and with the principal investigator during the breaks, these times must be included as part of the intervention (see also [Appendix C.4](#) for the list of music used during the break times).

Prior to the intervention, the participants were only in possession of the information included in the initial information package, the instructional letter and the assent forms. The principal investigator met most of the participants for the first time the day of the workshop, which always followed the same format (see [Appendix C.9](#)). In designing the curriculum content and order of the lesson plan, the principal investigator benefited from the experiences she had gained from the two pilot projects she had conducted and her experience as a classroom teacher. Independent of the number of participants in each workshop, which varied from four to 10, the format and time allotment remained the same. That implied the principal investigator had to remain

conscious of the time throughout the day, particularly during the discussion, demos and sharing sessions.

As mentioned before, the participants arrived at the location of the intervention between approximately 15 to 2 minutes before the beginning of the workshop, while the first CD was still playing (see [Appendix C.4](#)). Most of the participants were accompanied by parents/guardians who briefly introduced themselves and then left. The principal investigator greeted each participant at the door and helped the adolescents to find a place for their coats and shoes. After the participants had placed their lunch in the fridge (they were encouraged to keep a bottle or glass of water with them), they stored their pillow and blanket along the walls of the room and could choose a seat in the circle. Since the participants were not familiar with each other as a rule, the room tended to be rather silent in the morning. At 9:30 sharp, the principal investigator started the intervention, which consisted of 24 steps as outlined in the format (see [Appendix C.9](#)). The 24 individual steps included 14 teaching modules, two data collection points as well as opening and closing exercises and breaks. The intervention is now described in detail, following the 24 steps mentioned above.

Opening circle—introductions

[9:30-9:40] The intervention began with an opening exercise, an icebreaker. All the participants were asked to introduce themselves by first name preceded by an adjective using an alliteration, whereby the adjective had to convey positive meaning.

The teenagers were asked to introduce themselves using three to four sentences that included at least one piece of information, which showed each one of them as special or uniquely distinct from anyone else. The principal investigator began and then always asked the participant to her left to continue, proceeding clockwise. Each participant could temporarily pass until later on in the round if they so desired. That only occurred three times in total.

Questionnaires

[9:40-10:10] The principal investigator then continued informing the teenagers that the next step was another completion of the three instruments, with which they were already familiar. She also asked if there were any questions or concerns regarding those questionnaires. The participants never raised any questions or concerns on that topic. The principal investigator continued by distributing a clipboard to each participant and by handing out black pens or pencils (participants could choose), which remained with each participant for the remainder of the day. The principal investigator reminded all participants of three important points regarding the completion of the questionnaires: “A) Answer the questions as spontaneously as possible. B) There is no Right of Wrong Answer. C) Check to make sure you answered all questions checked off only one choice very clearly.” The participants were then given the three instruments, one at a time. The same information was highlighted as it had been on those questionnaires the participants had received in the mail. The Nowicki-Strickland Locus of Control Scale (see [Appendix](#)

[B.1](#)) was handed out first. Once all the questionnaires were collected by the principal investigator, the adolescents received the State-Trait Anxiety Inventory, with the Y-1 side facing them, to describe how the participants were feeling ‘right now’ (see [Appendix B.2](#)). Upon completion of first the state, then the trait anxiety scales, and collection of this questionnaire (as a group), the teenagers received the third instrument, the SDQ-II (see [Appendix B.3](#)).

[Workshop notes sheet](#)

[10:10-10:15] Once that questionnaire was completed and collected, the principal investigator distributed the participants’ version of the lesson plan, which was also intended as a summary sheet for the adolescents to take notes (see [Appendix C.10](#)). The participants were told that the principal investigator would allot time to take notes after each curriculum component and simultaneously clarify any questions.

[Dowsing rod demonstration & Whole Self model](#)

[10:15-10:30] The dowsing rod demonstration (see [Appendix C.11](#)) was used to provide a visual demonstration of the individual’s energy field and what may impact on it. Even though the principal investigator carried out the experiment with a different person each time, the actual results always remained extremely comparable. Perhaps it

must be emphasized here that the principal investigator had to remain detached from outcome, grounded and centred, in order to do the demonstration.

After the demonstration, a discussion ensued during which the participants arrived at the conclusion that they now understood that their state of mind and emotions could be and are easily influenced not only by their own thoughts and emotions but also just as easily by those of others. This demo served as a powerful visual representation of the power of the mind/emotions over matter for the rest of the workshop and was often referred to by the participants. Usually, at least one or two of the participants would share a personal story of how they perceived this kind of silent impact of energy without really knowing what was happening. It became apparent to the principal investigator that watching and/or experiencing the demonstration helped the participants understand their daily lives better. The principal investigator limited her role to listening and encouraging the participants so they felt free to voice their opinions and feelings, even if those might appear or be perceived outside of the normal comfort zone by some of the participants

The participants were then shown an illustration of the Whole Self Model in the form of a handout (see [Appendix C.12](#)). This model was provided for five reasons: 1) to discuss further the insights gained from the dowsing rod demonstration; 2) to provide names for the energy bodies; 3) to introduce the concept of chakras; 4) to bring the participants to a common base of knowledge on which the principal investigator could build the rest of the intervention; and 5) to stimulate discussion on each point and enable the participants to espouse their feelings, understanding, thoughts, and ideas on any of the topics broached by the Whole Self model. At this point, one or two of the participants would indicate that their sense of praying and making connections with God, angels, the

universe, and nature (which were all ideas expressed by them without the solicitation of the principal investigator) is located in the outer layer around them, which many of them referred to as the part of themselves that ‘just knows.’ Many of them appreciated being offered the term ‘Higher Self’ since they were looking for a word to describe this aspect of themselves. The participants could choose to take the depiction with them or leave it behind. 93% of the participants (n=67) opted to take the handout with them.

Stress; breathing; grounding; centring; balancing brain

[10:30-10:55] The next major point in the intervention focused on finding out the participants’ understanding of stress. This five-minute segment in the curriculum contained all the points listed in the script but was not limited to them since the principal investigator respected each group’s individual needs (see [Appendix C.13](#)). The principal investigator spent approximately five minutes asking the adolescents questions and soliciting their response. The comments by both the principal investigator and the participants usually sparked an animated discussion. As in all discussions and times of sharing, the role of the principal investigator consisted mainly of steering the flow of the discussion, perhaps clarifying a point by helping the participants express themselves in the most concise language and by providing a safe space for the participants to truly express their innermost feelings among a group of strangers. After discussing the effects of stress on the well-being of the participants, the principal investigator taught the adolescents the basics of diaphragmatic breathing, the basis for the most fundamental

technique of grounding and centering (see [Appendix C.14](#)). The grounding and centring technique also entailed balancing the brain (see [Appendix C.15](#)), which then led to the discussion of the ‘busy-ness’ of the brain. Most participants admitted that they did not know how to breathe properly, had no idea how to balance their mind and bodies, and could not remember when their minds were not racing. The participants commented on how difficult they found focusing their mind on one item, such as reading, without having at least another dozen thoughts cross their minds.

Air meditation

[10:55-11:10] Having taught the breathing and the idea of creating balance, the principal investigator concentrated on teaching the participants simple techniques, which could be used in any circumstance, to clear or empty the mind. The ‘Air Meditation’ served as a very basic, brief and powerful technique, to which the participants responded extremely well (see [Appendix C.16](#)). The principal investigator read the script at medium-low volume level in a calm and centred voice. As a rule, after each practical component, the principal investigator invited the participants to share their experiences with the group, which the vast majority wanted to do, some to a larger extent than others. Only 5.5% of all teenagers (n=5) preferred to simply listen rather than join in. The general comment regarding this particular meditation was how relaxing it felt and at the same time how strange it appeared not to have thoughts running through the head.

Break

[11:10-11:20] A ten-minute break followed to use the washroom, replenish fluids, chat, look at the table with the reference materials, try out the dowsing rods, and eat the snacks the principal investigator had prepared and laid out on another table. During the break, the second CD provided the background music (see [Appendix C.4](#)). At the end of the ten minutes, the principal investigator reminded the participants that the break was over and the workshop was about to continue five minutes later. While the students finished their snacks, discussions and activities and returned to their seats, the principal investigator stood in one corner of the room and engaged in her prayer-meditation, intending to clear the space and hold it safe and sacred (see [Appendix C.5](#)). At the end of the break, the music was stopped.

Progressive Muscle Relaxation

[11:25-11:40] The principal investigator then referred to some of the comments made earlier by the participants, stating how tense their physical bodies tended to be, so much so that their sleep was seriously affected. She suggested paying attention to what was happening during the course of the following exercise, which was the Progressive Muscle Relaxation (see [Appendix C.17](#)). The principal investigator read the script at medium-low volume level in a calm and centred voice. By the end of the exercise, on

average three quarters of the participants were astounded how relaxed they felt and how many areas in their bodies needed relaxation. The participants shared some of their observations and usually asked the question if the exercise was perhaps most useful at night before going to sleep because they felt it helped their minds to relax as well as their bodies. Therefore, they might fall asleep more easily and perhaps the quality of their sleep might improve. Time was provided for notes and clarification if necessary.

Five-Step meditation

[11:40-11:55] The previous exercise led naturally to the ‘Five-Step Meditation,’ in which the participants could experience a sense of self-realization (see [Appendix C.18](#)). The principal investigator read the script in a calm voice at medium-low volume level from her seat. Again, perceptions, feelings, and experiences were shared following the meditation. Overall, as with each component in the daylong curriculum, some participants were deeply affected by this technique, others moderately and a few remained somewhat indifferent. It was interesting to observe how some teenagers were surprised about the extent to which they were affected and about the fact that others did not share the same feelings. Time was provided to take a few notes.

Place of Peace

[11:55-12:20] The fact that most participants had been able to achieve a certain degree of grounding and centring, which included balancing the brain hemispheres, quieting and relaxing their bodies and emptying the mind, provided a perfect foundation to lead into the discussion of a Place of Peace. The principal investigator started out by asking the participants if they were familiar with the concept of a Place of Peace. At least two or more participants always volunteered to comment. The common understanding was that of a physical place, most times their bedroom and less frequently the summer cottage or beach, which the teens perceived as their Place of Peace. The majority of teenagers expressed they did not really know of a Place of Peace for themselves.

The principal investigator then suggested that a Place of Peace could simply exist in their imagination, which generally sparked a comment or two by participants stating that they sometimes invented a place that made them feel safe but were not sure they could share this information with other people. The principal investigator then encouraged the participants to be open to the following guided imagery exercise that would lead the participants to finding/creating their personal Place of Peace. The adolescents were given permission to either sit on their chairs, on the floor, or to lie down (always on the back with legs stretched out or in semi-supine position), using the pillows and blankets. Ninety percent of all participants tended to stretch out whenever they were invited to do so. Once everyone had assumed a balanced and comfortable position, the principal investigator read the script in a calm and centred voice at medium-low volume (see [Appendix C.19](#)). Following the guided imagery exercise, the participants were usually elated about having found a wonderful Place of Peace, which most of them referred to as their 'Happy Place.' Most participants wanted to share aspects of their

Place of Peace with the rest of the group. Except for one group, the participants usually wanted to find out details of the Place of Peace of the principal investigator, which she then shared. The adolescents also wanted to know if one could really “live” in this place of peace, which the principal investigator confirmed as possible even though events happen in life that catapult the individual out of this place for certain periods of time. The participants were generally intrigued and enjoyed the announcement by the principal investigator that they would receive a lot of practice during the rest of the day to become familiar with their Place of Peace. Then time was given to jot down notes.

Muscle testing and dowsing

[12:20-1:00] Various forms of muscle testing/dowsing became the next topic that was taught in the intervention. The principal investigator first asked the group if anyone had heard of muscle testing. Generally, the answer was no. Although, after the first muscle testing demo, 13.8% of the participants (n=11) did recognize the technique and reported having experienced it themselves by a naturopath or chiropractor or seen it ‘somewhere.’ Two forms of muscle testing/dowsing were taught (see [Appendix 20](#)): 1) Full arm testing by another person, 2) Self-muscle testing and 3) dowsing with a pendulum. By the end of this session, all participants had found at least two methods that suited them and was deemed reliable by the participant. Once everyone felt satisfied and confident with their way to muscle-test/dowse, the principal investigator encouraged the participants to voice the many questions they had wanted to ask throughout the various

demonstrations. Once again though, the principal investigator did her best to stay as much as possible outside of the discussion, only directing the exchanges and clarifying certain points if necessary. Invariably, one adolescent would explain the muscle testing/dowsing process to others. Each group came to the consensus that muscle testing/dowsing meant tapping into the 'gut feeling'. The gut feeling in turn was their knowing that all of them had and knew of and generally referred to as intuition. "It's the part of me that just knows," tended to be a common statement. The adolescents would ask if this part of them was the same that sometimes just knew an answer without any seemingly real reason for that knowledge, or knew who was going to be on the phone or what would happen at a given moment. They also queried if that 'larger' part of them, as they referred to, was perhaps the Higher Self, through which they were connected in a bigger way. When the principal investigator confirmed those notions, most participants expressed deep interest in learning more about muscle testing/dowsing. Comments such as, "this is cool" and/or "it's freaking me out," and "I always knew I knew but didn't know how" were repeated numerous times in each workshop.

The adolescents also wanted to know how else they could use the muscle testing/dowsing. At this point in the teaching, the principal investigator instructed the participants that in order to receive as much accuracy as possible (the participants usually queried if it was possible to influence the outcome by thought) a definite protocol had to be followed. The participants received the following instructions, to be noted on their sheets: "First, in order to muscle test/dowse go to your Place of Peace, ground and centre. Then hold your question in mind and ask for permission: Do I have permission to ask this question? If you receive a no, stop. If the answer is affirmative, proceed by asking

the question, Is this the right time and place to ask the question? If you receive a no, stop. If the answer is affirmative proceed. Begin your question with the following phrase: Is it in the best interest of all concerned for ? Or another phrase: Is it for the highest good of all for?”

The principal investigator finally suggested to use another person to muscle test/dowse if there is too strong an attachment to outcome, which addressed the participants' question regarding the reliability of the testing. The principal investigator also related different scenarios where muscle testing/dowsing serves her and others well, for instance, selecting books for a project, gifts for friends, testing for which brand of supplements, for instance may be the best; which watermelon to buy or whether to turn left or right at the traffic light, just to name a few possibilities. The participants were then told they could practice over lunch or ask the principal investigator for further demonstrations.

Lunch

[1:00-1:30] A thirty-minute lunch break was given, during which the third CD was played. By this time, each group of students had bonded already that they made sure nobody was left out of the conversations that occurred. The adolescents would peruse the material presented on the table, practice various forms of muscle testing and work with the dowsing rods or pendulums as they were having their lunch. The principal investigator engaged in the conversations when asked a question, otherwise remained a

listener as much as possible. She also laid out the materials she needed for the afternoon session. At 1:30 PM she reminded the participants that the workshop was about to resume in five minutes. She physically cleared the teaching space if necessary (most of the time the adolescents ate on the outside of the circle), and then stood in one corner of the room to energetically clear the space again for the afternoon session, using her prayer request (see [Appendix C.5](#)). The music was turned off for the afternoon session.

Biofeedback

[1:35-1:45] The participants were always on time to continue the sessions according to schedule. The principal investigator introduced the first afternoon component by first distributing finger thermometers and masking tape.²¹ The participants were told to follow the principal investigator's example of taping the thermometer to the index or middle finger of their dominant hand, just strongly enough for it to hold. They could ask their neighbour to help them if needed. The thermometer was taped with the scale pointing away from the teenager when the hand was resting palm up in the lap. While the participants were carrying out the instructions, the principal investigator asked if any of the participants had heard of 'biofeedback.' None of them had and none of them volunteered any guesses. The principal investigator asked for a show of hands how many of the participants suffered from headaches, migraines, severe stomach-aches, or back pain. In each group, 80-95% of participants answered affirmatively. The principal investigator then gave a short explanation of biofeedback

and why it was included in this intervention see (see [Appendix 21](#)). The explanation of biofeedback led directly into the Autogenic Training exercise, which was used as the relaxation method to test the biofeedback experiment.

Autogenic Training

[1:45-2:05] Once the participants had found a way to ground and centre themselves and appeared to be in their Place of Peace, either sitting down or lying on the floor, the principal investigator pushed the start button of the tape. The principal investigator chose the *Biogenics: Basic Schultz* tape by Dr. Norman Shealy²² in order to provide a different voice for focus for the participants. This tape follows the standard formulae for the Autogenic Training. The principal investigator stopped the tape just before the end of the recording, after eleven minutes because she wanted to create her own transition from the training to the present moment. She therefore reminded the participants to state their intent one more time, as soon as she had stopped the tape. Then she asked them to remain in their relaxed state for one extra minute, practising any of the techniques learned thus far. After sixty seconds, the principal investigator cued all participants to wiggle their fingers and toes and to take a deep breath as practised before. She then instructed the teenagers who were lying on the floor to turn over to one side and pull up their knees to their chins into a fetal position. Then they were asked to slowly bring themselves up into a sitting position and to join the rest of the group in the circle again. Finally, she suggested checking the thermometers at that point. There tended to

be a gasp from many of the participants because the temperature had risen in most cases, anywhere from 0 to 18 degrees, with a mean of 8.3 degrees F, in the twelve minutes the exercise took. Only 5.5% (n=4) of the participants were unable to raise their temperature during this exercise, their first conscious attempt at biofeedback. The participants could barely contain their surprise at the control they obviously exerted over their bodies. The participants were told to remove the thermometers at this point from their hands or feet. The principal investigator also informed the adolescents at that moment that the thermometers were a gift for them. Except in two cases, all participants took the thermometer home. Some of the participants expressed their desire to teach the biofeedback exercise to their parents because they tended to suffer from migraines or headaches in particular. These two exercises ended by the participants taking notes and/or asking clarifying questions of the principal investigator who, as usual, preferred a participant to answer the question if at all possible.

Chakra balancing

[2:05-2:25] The Chakra balancing exercise provided a very different experience for the participants. The principal investigator introduced the exercise by referring back to the Whole Self Model introduced in the morning (see [Appendix C.12](#)). She asked the participants how many of them had heard about chakras, which were very few, only 11.1% (n=8) of the adolescents. Out of those, only 5.5% (n=4) actually knew what chakras were. The principal investigator then proceeded to tell the group that chakras are

energy centres in the body at certain locations that behave like vortices and, ideally, spin at a certain rate in their centres if the body is in a healthy and balanced state. She also affirmed that those individuals, who can see energy, see these centres in their distinct colours and others can sense or feel those centres and/or the colours. The question was generally raised immediately at this point if those colours are connected to a person's aura, a term that most participants had heard even if they could not clearly grasp it. They did connect it though to the opening dowsing rod exercise and asked if what the dowsing rod reacted to then could be called the personal aura. Others wondered if it was the same as 'my personal space.' The principal investigator affirmed all those associations and proceeded to show to the participants Barbara Brennan's book²³, particularly the coloured depictions of the chakras and energy fields of the human body as seen between pages 44 and 45, and Alex Grey's drawings, especially 'Psychic Energy System,' 'Spiritual Energy System,' and Universal Mind Lattice.'²⁴

The principal investigator then proceeded to suggest to the participants that many of them were probably quite aware of the activities of some of the energy centres in certain situations. When she asked where the teenagers usually felt tension or anxiety, most of them pointed to their third chakras (and mentioned butterflies in the stomach or actual aches), a few to their second chakras (pointing out digestive problems), some to their throats (not being able to speak in some instances, having to clear their throats etc.) and some to their hearts (racing heart). The principal investigator used the opportunity to teach the participants the name of each chakra and the corresponding colour, which the adolescents noted on their summary sheets. The principal investigator then asked everybody to find a comfortable spot again to sit or lie down in and to prepare for the

guided imagery journey balancing the chakras (see [Appendix C.22](#)). At the completion of the exercise, each group engaged in sharing their experience before proceeding to the next module in the curriculum. In the sharing, the participants realized that the opening demonstration with the dowsing rods showed them their energy field that some of them could either see or feel during the visualization process of this exercise. At this point the principal investigator elaborated just a little on the concept of the bubble. She stated: “‘Bubble’ is a descriptive word to indicate the size and quality of the energy field around your individual body at any time. As we saw in the dowsing rod demonstration that bubble can change, not only because you as the individual find yourself in different frames of mind, but also because your environment impacts on you.” Generally, a teenager would interject a remark here to the effect: “Is that why I always feel X saps all the energy out of me?” Or another common statement was, “Is that why I can feel really good about myself and all of a sudden, for no reason at all, I feel lousy when I arrive in X-class?” The principal investigator confirmed the connections and associations the adolescents made and suggested that each individual had the power to constantly build their own bubble to protect themselves. “The nature of this bubble is such that it is flexible and can therefore walk with each person. It allows a two-way flow of positive intention, feelings, thoughts etc. However, its reaction to “junk” (personal or other people’s) can be likened to that of a boomerang. Someone else’s negative and destructive emotions, behaviours, thoughts just bounce off the outside of the bubble. It is up to the owner to deal with those. Each individual’s negative and destructive emotions and behaviours remain inside the bubble, again for this individual to deal with them on

their own.” The response to this explanation was always very positive since it appeared to make sense to the participants.

Review

[2:25-2:30] At this point, the principal investigator simply asked the participants to restate out loud how they understood the various basic concepts of breathing, centring, and grounding. The participants were encouraged to simply put forth an answer, whatever came to their minds or they could check their notes. As the participants provided the explanations and their understanding, the principal investigator simply listened and nodded, encouraging the adolescents to help each other out. Collectively, the group always covered the concepts as completely as possible. The principal investigator then drew attention to experience the state of a quiet and still mind.

Higher Self

[2:30-2:50] This module in the curriculum of the intervention dealt with the concept of the Higher Self. The principal investigator chose this particular term but had early on in the day accepted any version the participants suggested, such as ‘Inner Self,’ the ‘part of me that knows,’ ‘my inner voice,’ ‘my helper,’ ‘my wise Self,’ ‘my God-connection.’ These were all terms the adolescents would suggest in the course of the day up to this point and therefore the principal investigator simply stated that her preferred term was ‘Higher Self’ and could be substituted any time by any of the other terms each

individual found suitable. The principal investigator proceeded to ask who could describe their own Higher Self a bit more. Generally, one or two participants in each group volunteered. Their descriptions were always beautiful, ranging from “It’s all the good part of me,” to “It’s me at my best” to “It’s the sacred aspect of me that’s bigger than the me right here.” The principal investigator also suggested to think of the Higher Self as the version of the individual for whom all the ‘what ifs, buts, cannots, should nots and impossibles’ are eliminated. She then continued to tell the participants that the following guided imagery exercise might perhaps provide them with even more insights into their Higher Self. Since at least one adolescent in each group would invariably ask a question pertaining to the physical appearance of the Higher Self, the principal investigator also indicated to keep an open mind with regards to the manifestation of the Higher Self. Any sense, knowing, shape, figure, form, colour, actual animal or human being was acceptable if it felt right.

The participants were then given time to once again find a comfortable spot to sit or lie down in. The principal investigator then proceeded by reading the script of the guided imagery exercise in a steady and calm voice at a medium-low volume level (see [Appendix C.23](#)). Once the exercise ended, the participants were again encouraged to share their visualizations, which most of them wanted to do. It was fascinating for both the participants to realize how differently individuals perceive the world and each aspect in it, including themselves. Most participants expressed they truly had gained a better sense of their Higher Self through the visualization process.

Review—Balance

[2:50-3:00] In order to provide a break from the guided imagery, another quick review was inserted, this time with the emphasis on balance and bubbling. The participants quickly listed again the basics of breathing, grounding and centring, including clearing the mind and the idea of achieving balance on a physical level, as well as on an emotional, mental, and spiritual level. Many adolescents commented that they did not see themselves do that very much and even less so observed the adults they knew engaging in a balanced life-style. And yet, they always concluded that it made so much sense to them to achieve more of a balance. The principal investigator drew attention to the final aspect of centring, namely the chakra-balancing. She asked the participants to imagine the line of the seven chakras in their perfect rotation and colour as part of the anchor that balances each individual and connects them with the earth and the universe. In addition, the participants were invited to imagine the colours radiating out into the aura, forming their protective bubble. Many adolescents used the opportunity to take further notes at this point.

The principal investigator then taught the students one more exercise to improve the balance of the brain and create harmony for themselves, the so-called Lazy 8's, another one of the Brain Gym activities (see [Appendix C.24](#)).

Therapeutic Touch™

[3:00-3:35] This module in the curriculum taught the participants the very basic technique of Therapeutic Touch™. The following explanation was given to the participants: “This modality was included in the intervention because it allows you to deal with acute pain and injury very efficiently at the moment it occurs as well as with more chronic pain. Most hospitals in Ontario offer Therapeutic Touch™ to their patients and is used extensively in cancer treatment and hospice care. Engaging in Therapeutic Touch™ in itself is believed to be relaxing and distressing and you can do it for yourself or ask a friend to give you a treatment. And contrary to its name, one does not really touch anyone with the possible exception of feet and shoulders. Is anyone familiar with Therapeutic Touch™ or TT™, as it is generally referred to?” Most of the time, one or two participants had either heard of it, knew a practitioner, had experienced it or asked if it was related to Reiki, which they had heard of. The majority of participants were not familiar with it. The principal investigator then requested a volunteer who had no prior experience with Therapeutic Touch™. She proceeded to explain the technique in three basic steps while she was demonstrating it on the volunteer who sat on a chair in such a way that all participants could see what was happening (see [Appendix C.25](#)). Usually by the end of the second step, the volunteer voiced some remarks to the effect of how astounding the experience was. Often the comment was expressed: “This is freaking me out—I can really feel this.” Or, “My [part of the body] has not felt this good in x months.” Or, “If it didn’t feel this good, I would run away right now because it’s freaking me out.” That, of course, caught the curiosity of the other participants who were skeptical yet eager to try out what this technique was all about.

Once the demo was finished, the participants wrote down the steps on their summary sheets and then paired up. If the number was uneven, the principal investigator played the role of the evener. The participants were given twenty minutes maximum to walk through the three steps with their partner, each giving and receiving a mini-treatment. They were told to work only briefly around the head at any given time. They were also encouraged to call the principal investigator if they encountered any problems even when the principal investigator played the role of the evener. Generally, the participants were incredibly successful, despite their skepticism. At the end of the practice session, the same question was always asked, namely, how to work on their own back or other areas that are not easily reachable by themselves. Again, the principal investigator would refer back to the group for their input and invariably a teenager would tentatively suggest perhaps to pretend the front of the body could serve as the back—“since it’s all energy anyway, right?” (Several participants used the same or a similar phrase here.) Each time, someone else would also suggest imagining the back of one’s body to be right in front of them and scanning the back that way. It was very encouraging to notice how many participants accepted those ideas as rather feasible and normal. The principal investigator then encouraged the participants to do experiment with those two options.

Break

[3:35-3:45] The Therapeutic Touch™ discussion or experiments often continued into the short break that followed, which was accompanied by the fourth CD playing in the background (see [Appendix C.4](#)). The principal investigator provided more cookies, grapes, carrots, and water for the snack break. She encouraged the adolescents to physically stretch their bodies and move around the room, use the washrooms, and drink more water. By this time, the participants had become so familiar with each other that interesting discussions occurred among them. Once again, the principal investigator reminded the participants after ten minutes that they needed to be ready to continue in five more minutes. She then removed anything from inside the teaching space that did not belong there and engaged, from the corner of the room, in her clearing prayer to prepare the room for the last part of the intervention (see [Appendix C.5](#)).

Finding your guide

[3:50-4:05] After the break, the participants entered a very brief discussion on the concept of ‘helpers’ in their lives. The principal investigator asked the participants: “Do you believe you have ever received help or guidance from people or unseen entities or powers, such as angels, spirits, nature and others in certain situations?” The responses varied (always containing some affirmative answers) and at least one participant would wonder if this intervention could come directly from God. Another participant usually stated feeling a strong connection with a cat/dog and always talking with him/her when needing answers. Others admitted openly to being clearly connected to their Guardian

Angel. Others still wondered if a connection with the Higher Self through whom they could tap into all the other knowing around them would not be sufficient. The principal investigator saw her job simply in encouraging an open exchange of ideas, thoughts and feelings, since (as many participants pointed out towards the end of the workshop) many of them had never felt safe before sharing these kinds thoughts and feelings with anyone because they expected to be declared “crazy”.

The principal investigator then suggested to the participants to position themselves comfortably, either sitting or lying down, for the guided imagery exercise on finding a guide. She explained to the adolescents, as they were getting ready, that this exercise was going to give them the opportunity to possibly make contact with a guide. She emphasized to remain open to whatever would come to them through any of their senses. Any questions that might arise would be addressed at the end. She then proceeded to read the script in a low-medium volume in a calm voice (see [Appendix C.26](#)). At the conclusion to the exercise, the participants once again shared their observations and comments. Generally, most participants who joined in the conversation had very intriguing visualizations they wanted to impart. The others were either too shy, not ready to share at this point, and in about 10% (n=8) of the cases, they did not meet a guide. The principal investigator did not offer any further explanations at this point.

[4:05-4:50] The last major teaching module consisted of the Inner Counselor Process™, which brought together many of the components that had been taught up to that point. The principal investigator asked the participants: “Are there any issues in your life that annoy you because they tend to be repetitive, or perhaps your own behaviour patterns and reactions? For instance, you get angry or upset every time your mother calls your name in a particular tone of voice and you cannot even listen to what she has to say any more. Or, perhaps you tend to procrastinate and get yourself into more and more trouble because of that? Or perhaps you are a perfectionist and have become the victim of your own drive to be perfect? These are just some examples. Who understands what I mean?” All participants nodded in agreement and usually offered a few more examples of their own.

The principal investigator then proceeded by stating: “The Inner Counselor Process™ provides a tool to find the root cause of such behaviour, which often does not at all appear related to the issue and happened early on in childhood. Once the root cause is identified, all that needs to be done is to shift the energy around that event through a symbolic process. And you have experience many different types of energy shifts during the course of the day. Are you ready for one more?—When I ask now for a volunteer I would like you to know that you do not have to share any secrets with anyone in this process. All I am going to do is take you through the process in the fifteen steps that are on the handout you are receiving right now (see [Appendix C.27](#)). [At this point the principal investigator distributed a two-sided handout to each participant, which consisted of the Inner Counselor Process™ script on the one side, and the Personality Integration Chart on the other side (see [Appendix C.28](#)).] I am only going to read the questions and

comments from that sheet. As the person being guided through the process, you can stop at any time, ask any question for clarification, or state you do not wish to say something out loud. The process is still effective. Now, is there a volunteer?" There was always at least one volunteer in each group.

The principal investigator placed two chairs in the centre of the circle, facing each other. Both the principal investigator and the volunteer sat down. The rest of the participants were encouraged to follow the script and watch the process quietly. The principal investigator asked all participants to go to their Place of Peace, to ground and centre there before beginning the process. The demo usually lasted approximately ten minutes, since the principal investigator always set the intent quietly for the universe to support that timeframe and for the process to proceed smoothly. The principal investigator did not include the energy exercise in the process but asked the participant to engage in the grounding and centring techniques taught in the course of the day, including the chakra-balance. At the end of the process, she thanked the volunteer and asked this person if there was something that individual wanted to share. The general comment was, "I just feel the way it's supposed to feel." Or: "I feel great." The second comment generally pertained to the new symbol the individual received: "I love my new symbol."

The principal investigator then simply pointed out two major points that needed clarification. "How do you identify the true needs?" After directing the participants' attention to the back of the handout, generally one of the more senior participants would supply the following answer: "Isn't it something that underlies all of the exterior? I mean it is something I need for myself that really has nothing to do with what somebody else

does or does not do?” Or another answer would be: “If I look at all the words on this sheet in the upper boxes, they describe how I know I ought to feel but don’t in that situation. Doesn’t that describe the need?” Since these explanations appeared so logical to the rest of the participants, the principal investigator usually refrained from other comments until after the participants had taken their partner through the process. The teenagers were asked once again to find a partner and spread out in the room as much as possible to create a space for themselves and bubble themselves as a pair and then work through the process. They were told they could call on the principal investigator any time. Only one student asked to sit out the exercise, which worked out perfectly since the number of participants was uneven in that group. Each pair generally only took a maximum of twenty minutes, and yet they all experienced success to varying degrees, it seemed. The only question the participants tended to ask after the process, dealt with a stubborn symbol. They just needed to feel secure to have the questions pointed out to them to help the old symbol become a willing participant in the process.

Dowsing rod demonstration

[4:50-5:00] The final step in the intervention was to demonstrate visually the impact the workshop had made at this point on the participants. The participants were told that the exercise would be a repeat of the dowsing rod demo from the morning. The principal investigator once again asked for a volunteer. That volunteer stood, as in the morning, approximately ten feet away from the principal investigator. This time the

volunteer was asked to breathe, ground and centre first and then to walk toward the principal investigator. The rest of the group was watching the proceedings. The dowsing rods crossed approximately four to five feet away from the volunteer. The second step entailed the following: all participants were told to hold a sad thought in their minds. The volunteer was asked to breathe, ground and centre and focus on their bubble. Once that bubble was in place the volunteer walked towards the principal investigator. The dowsing rods crossed approximately at the same spot, about four to five feet away from the volunteer. The third step consisted of all participants holding a happy thought in their mind. The task of the volunteer was the same as before: breathe, ground, centre, and build bubble, then walk. The dowsing rods crossed at a distance of approximately eight to nine feet. There generally was a huge gasp among the participants and then the question was asked what would happen if the volunteer was also thinking a happy thought and building the bubble. That became the last part of the demo. Usually the dowsing rods crossed immediately when the volunteer had built the bubble and thought of a happy moment, before he/she could even walk—that meant the dowsing rods crossed at a distance of ten feet, indicating a huge energy field around the person when aided by the group energy. The participants usually expressed a mix of amazement and pride that they were able to accomplish creating and maintaining their bubble regardless of external circumstances.

Questionnaires

[5:00-5:25] The principal investigator then started playing the last CD as background music, which accompanied all the tests and closing circle (see [Appendix C.4](#)). The participants were then asked to complete the three questionnaires, yet again. The principal investigator followed the same procedure as before. She reminded all participants of three points: A) “Answer the questions as spontaneously as possible.” B) “There is no Right or Wrong answer.” C) ”Check to make sure all questions are answered and only one choice is checked off.” The participants were then given the three instruments, one at a time. The Nowicki-Strickland Locus of Control Scale (see [Appendix B.1](#)) was handed out first. Once all those questionnaires were collected by the principal investigator, the adolescents received the State-Trait Anxiety Inventory, with the Y-1 side facing them to describe how the participants were feeling ‘right now’ (see [Appendix B.2](#)). Upon completion and collection of this questionnaire (as a group), the teenagers received the third instrument, the SDQ-II (see [Appendix B.3](#)). For those participants in the control group, they also received the anecdotal questionnaire. They had the option to complete it right then or to take a self-addressed and stamped envelope with them and send the completed questionnaire to the principal investigator from home within the next three days. 62.5% (n=25) opted to complete the questionnaire right then, some of the adolescents even staying behind after the workshop to finish it to their satisfaction. The principal investigator received 27.5% (n=11) of those questionnaires that were taken home, with only 10% (n=4) not being returned.

Closing circle

[5:25-5:30] Upon completion and collection of the questionnaires, the participants were invited to put their pens down and to get up on their feet for the closing exercise. The participants and the principal investigator formed a circle. Each person rubbed their hands together for a little and then pulled them apart. Then the hands were brought together to shape the energy between the hands into an energy ball that could fit on the palm of the left hand. Everybody then was asked to extend their right arm and place the right hand underneath the left hand of their neighbour. Once the right hand was in place, each person turned their left hand and placed the energy ball into the palm of the neighbour's right hand. The participants were asked to be grounded and centred and to focus their minds on passing the energy balls from person to person in clockwise fashion. About sixty seconds into the exercise, the principal investigator asked the group to intensify their energy and to send all the positive energy and love they could muster into the balls passing through and to breathe in from those energy balls as much of that positive energy and love that they needed. After another sixty seconds, the principal investigator requested each participant say thank-you to their neighbour from whom they received the energy ball and say thank-you to the group. The principal investigator then placed in her left hand the bowl of crystals that had been sitting on the table with the reference materials. She instructed the participants to either close or unfocus their eyes, to ground and centre and to ask their Higher Self to direct their hand to the crystal that they most needed at this time. The principal investigator then stepped in front of each participant, again in clockwise direction from where she had stood in the circle, and let each participant pick the appropriate crystal. The participants received this crystal as

their parting gift with the suggestion to place the crystal in their pocket or in some sacred spot when they got home.

That ended the workshop at 5:30 PM. Upon completion of the workshop, the participants were told that they could contact the principal investigator regarding questions related to the programme. The adolescents then packed their lunch belongings, handouts, thermometer and crystal, put shoes and coats on and waited for their rides. Generally, the parents who had not introduced themselves in the morning did so in the evening. A few adolescents asked if their parents could enter the teaching space because they wanted to show them reference materials. Others asked if they could take a few extra minutes to add more information to their comment sheet. By the time the last participant left, it was 5:45 PM.

Even though the principal investigator had made the offer to answer questions, she has been contacted so far only because participants or parents/guardians wanted to share their observations, comments and success stories (see [Appendix C.8](#)).

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³ Julian B. Rotter, "Generalized Expectancies for Internal Locus of Control of Reinforcement," *Psychological Monographs* 80, no. 1 (1966), 1-28.

⁴ Daniel Bar-Tal and Yaakov Bar-Zohar, "The Relationship between Perception of Locus of Control and Academic Achievement," *Contemporary Educational Psychology* 2 (1977), 181-91; Crandall et al, "Children's Beliefs in Their Own Control of Reinforcement in Intellectual-Academic Achievement Situations," *Child Development* 36 (1965), 91-109; D. Wiest et al, "Predictors of Global Self-Worth and

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¹² M. Zuckerman, “The Development of an Affect Adjective Check List for the Measurement of Anxiety,” *Journal of Consulting Psychology* 24 (1960), 457-62.

¹³ Herbert, W. Marsh, *Self Description Questionnaire II (SDQII): Manual* (Macarthur: University of Western Sydney, 1990).

¹⁴ Morris Rosenberg, *Society and Adolescent Self-Image* (Princeton: Princeton University Press, 1965).

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¹⁷ H. W. Marsh and N. D. Peart, “Competitive and Cooperative Physical Fitness Training Programs for Girls: Effects on Physical Fitness and on Multidimensional Self-Concepts,” *Journal for Sport Psychology* 10 (1988), 390-407.

¹⁸ R. J. Shavelson, J. J. Hubner, and G. C. Stanton, “Self-Concept: Validation of Construct Interpretations,” *Review of Educational Research* 46 (1976), 407-41.

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²⁰ For an in-depth discussion of conditioned space, which is a concept in quantum physics that only recently has been examined, Dr. William Tiller’s work must be cited. William Tiller and others demonstrate through research that intention does indeed influence specific space. W. A. Tiller, W. E. Dibble, and M. J. Kohane, *Conscious Acts of Creation: The Emergence of a New Physics* (Walnut Creek: Pavior Publishing, 2001); W. Tiller, E. Dibble, and C. T. Krebs, “Instrumental Response to Advanced Kinesiological Treatments in a Conditioned Space,” *Subtle Energies and Energy Medicine* 13, no.2 (2002), 91-108.

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²³ Barbara Brennan, *Hands of Light: A Guide to Healing Through the Human Energy Field* (New York: Bantam, 1988).

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CHAPTER 3: RESULTS

*Not everything that counts can be counted.
Not everything that can be counted counts.*

Albert Einstein

In this chapter, following a brief description of the data collection times and reporting as well as choice of statistical procedures, the results of the quantitative data analysis are presented according to the three hypotheses posed in this study.

Data Collection

The design included four observation times for both groups, referred to as O_1 through O_4 . However, only three of the data collection points correspond to each other between the groups. Those three corresponding points are used in the two-way repeated measures ANOVAs (see [Table 5](#)).

These are referred to as Time One (T_1), Time Two (T_2), and Time Three (T_3). The baseline data were collected at T_1 , two weeks prior to the intervention for Group A. T_2 collection occurred two weeks later, immediately following the intervention for Group A; for Group B it also was obtained on the same day as the intervention for Group A occurred. The post-data, T_3 , were collected from Group A (O_4) and from Group B (O_3) two weeks after the intervention for the treatment group.

Table 5. Observation Points and Time Points Used in the ANOVAs

<i>Treatment Group (Group A)</i>	<i>Control Group (Group B)</i>
T₁ (O₁) –Baseline (two weeks prior to intervention)	T₁ (O₁) –Baseline (two weeks prior to intervention for Group A)
O₂ –Second baseline immediately prior to intervention T₂ (O₃) –Immediate post-intervention	T₂ (O₂) –Second baseline (on day of intervention of Group A)
T₃ (O₄) –Two-week follow-up	T₃ (O₃) –Third baseline (two weeks past intervention for Group A) O₄ –Intervention for Group B (two weeks past intervention for Group A)

Choice of Statistical Analysis

Two-way repeated measures ANOVAs were conducted examining these three test times in order to test the three hypotheses stated for this research study. The results for the Group by Time interaction comparing the six Group by Time means, Group by Time means and standard deviations were examined. Follow-up comparisons of groups at each time point and T₁ vs. T₂ and T₂ vs. T₃ within groups were conducted when interactions were found to be statistically significant. An alpha value of $p \leq .05$ was used to determine if the interaction and follow up test results were significant.

In order to assess the effect the intervention had on the control group, separate paired t-tests were undertaken, examining whether or not there was a difference between O₃ and O₄ (see [Table 4](#)). O₃ and T₃ signify the same data collection point; however, O₃ is always used when addressing results from the paired t-tests as opposed to the ANOVAs.

Compliance Rate

The compliance rate of the adolescent sample returning all questionnaires was 100%. Out of the 728 questions each participant had to answer in total, which equalled 52,416 individual data entries, only 25 questions were missed. In each case, the data were still considered usable according to the manuals of both the SDQ-II and the STAI. No data were missing from the Nowicki-Strickland Scale. No ambiguous answers were given that would have required interpretation.

Locus of Control

The test of Group by Time interaction from the two-way repeated measures ANOVAs indicated statistically significant differences for the locus of control ($F(2, 140)=3.95, p\leq.05$). Further testing found statistical significance comparing T_1 with T_2 ($F(1, 70)=18.76, p\leq.001$) in Group A. Comparing T_2 with T_3 ($F(1, 70)=2.74, p=.102$) suggests the intervention remained stable over time.

The means and standard deviations for the two study groups are presented in [Table 6](#).

[Table 6. Locus of Control: Means and Standard Deviations.](#)

	Treatment (n=32)		Control (n=40)	
	Mean	SD	Mean	SD
T_1 *	14.63	5.14	13.28	5.25
T_2 *	11.59	5.25	12.83	5.76
T_3	12.50	5.57	12.12	5.50

*The comparison of T_1 versus T_2 was statistically significant for the Treatment group.

The paired t-tests that were conducted to examine the behaviour of Group B at the immediate pre (O₃)- and post (O₄)-intervention points also yielded statistical significance, $t(39)=1.79, p \leq .05$ (see [Table 7](#)).

[Table 7. Locus of Control-Group B: Pre- and Post-Intervention Data.](#)

	O ₃ ; n=40		O ₄ ; n=40	
	Mean	SD	Mean	SD
Locus of control**	12.12	5.50	11.43	5.48

**This paired t-test found a statistically significant difference across time at $p \leq .05$.

The results of the two-factor repeated measures ANOVAs of the locus of control scores as well as the paired t-tests carried out on Group B provide evidence to support the hypothesis that the intervention shifts the locus of control towards a more internal locus of control. See [Figure 1](#) for a summary of the means at all data collection points, which show the changes pre- and post-intervention for both the control and the treatment group.

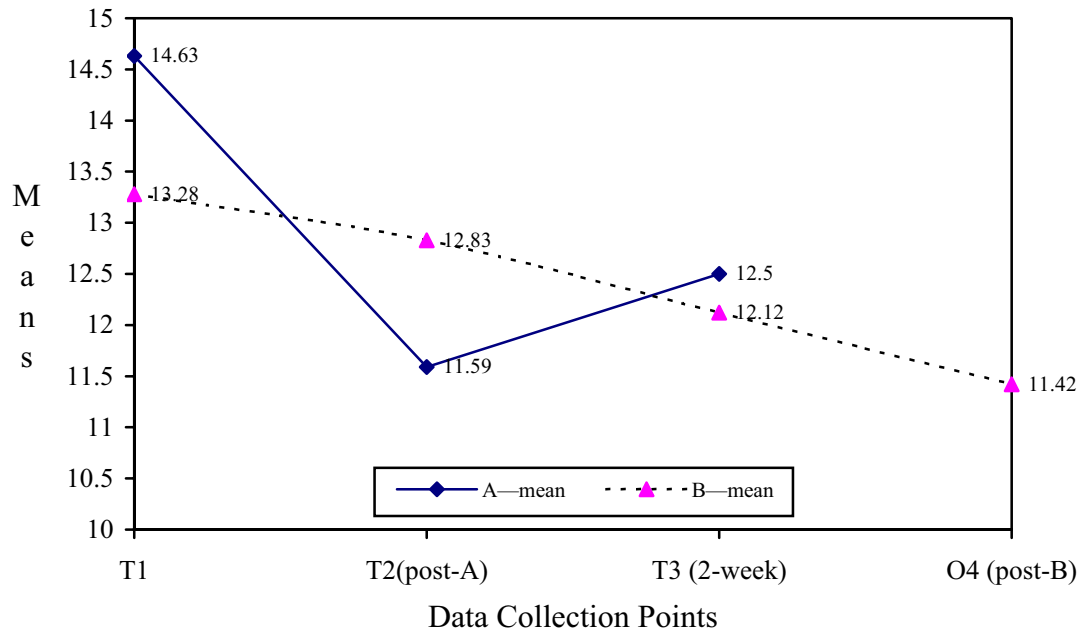


Figure 1. [Locus of Control: Means by Group from Week I to Week 5](#)

State Anxiety

The results of the two-factor repeated measures ANOVAs of the state anxiety scores provide evidence to support the hypothesis that the intervention lowers the state anxiety levels (see [Table 8](#)). The lower anxiety levels appear to be holding over time.

[Table 8. State Anxiety: Means and Standard Deviations.](#)

	Treatment (n=32)		Control (n=40)	
	Mean	SD	Mean	SD
T ₁ *	49.06	9.48	52.55	10.35
T ₂ */ ***	42.19	9.80	51.52	12.32
T ₃ *	46.25	10.30	46.83	10.08

*The comparison of T₁ versus T₂ was statistically significant for Group A at p≤.001.

* The comparison of T₂ versus T₃ was statistically significant for both Group A and B at p≤.05.

*** The F-test found a statistically significant difference between Group A and B at p≤.001.

The results from the test of Group by Time interaction from the ANOVAs indicated statistically significant differences in the mean state anxiety scores ($F(2, 140)=5.66, p \leq .01$). Further testing found statistical significance in three different areas. First, a significant difference was found between the treatment and control group ($F(1, 70)=12.81, p \leq .01$) at T_2 , the immediate post-intervention data point. Second, the comparison of T_1 and T_2 within Group A showed a statistically significant difference ($F(1, 70)=12.09, p \leq .01$), indicating a shift toward lower levels of state anxiety. The results of the F-test comparing T_2 versus T_3 ($F(1, 70)=3.78, p = .056$) suggest the effects of the intervention remained stable. Unexpectedly, the F-test for the control group also revealed statistical significance when comparing T_2 versus T_3 ($F(1, 70)=6.31, p \leq .05$).

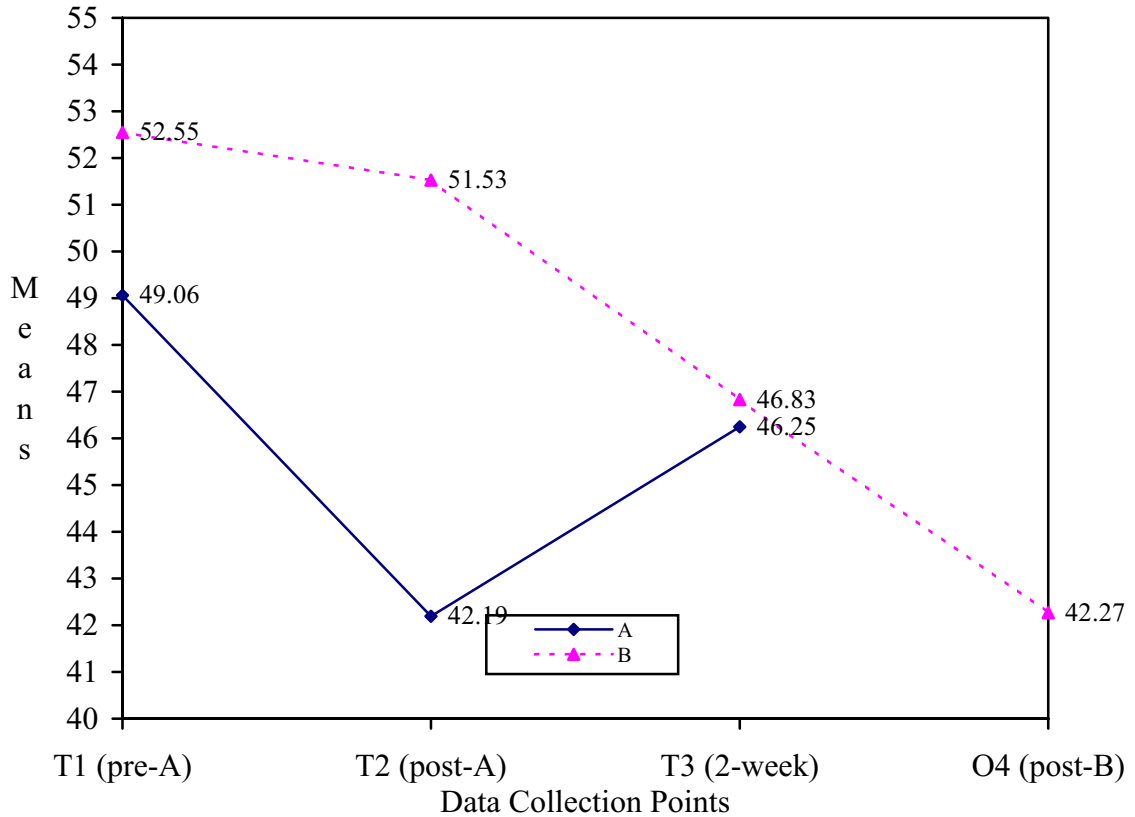
The paired t-test conducted for the Control Group between O_3 and O_4 (see [Table 9](#)), which was statistically significant ($t(39)=2.91, p \leq .01$), also appears to support the hypothesis that the intervention lowers state anxiety levels.

[Table 9. State Anxiety-Group B: Pre- and Post-Intervention Data.](#)

	O ₃ ; n=40		O ₄ ; n=40	
	Mean	SD	Mean	SD
State Anxiety**	46.83	10.08	42.28	9.88

**This paired t-test found a statistically significant difference across time at $p \leq .01$.

[Figure 2](#) shows a trend towards lower levels of anxiety for both groups at the post-intervention points.



[Figure 2.](#) [State Anxiety: Means by Group from Week 1 to Week 5.](#)

[Trait Anxiety](#)

The results of the two-factor repeated measures ANOVAs testing the Group by Time interaction did not indicate statistically significant differences in the trait anxiety scores ($F(1)=1.83, p=.164$), and therefore no further F-tests were executed. See [Table 10](#) for the presentation of means and standard deviations at the three data collection points.

[Table 10. Trait Anxiety: Means and Standard Deviations.](#)

	Treatment (n=32)		Control (n=40)	
	Mean	SD	Mean	SD
T ₁	52.53	10.37	53.75	10.35
T ₂	49.03	10.80	53.35	12.20
T ₃	46.34	10.76	50.63	10.73

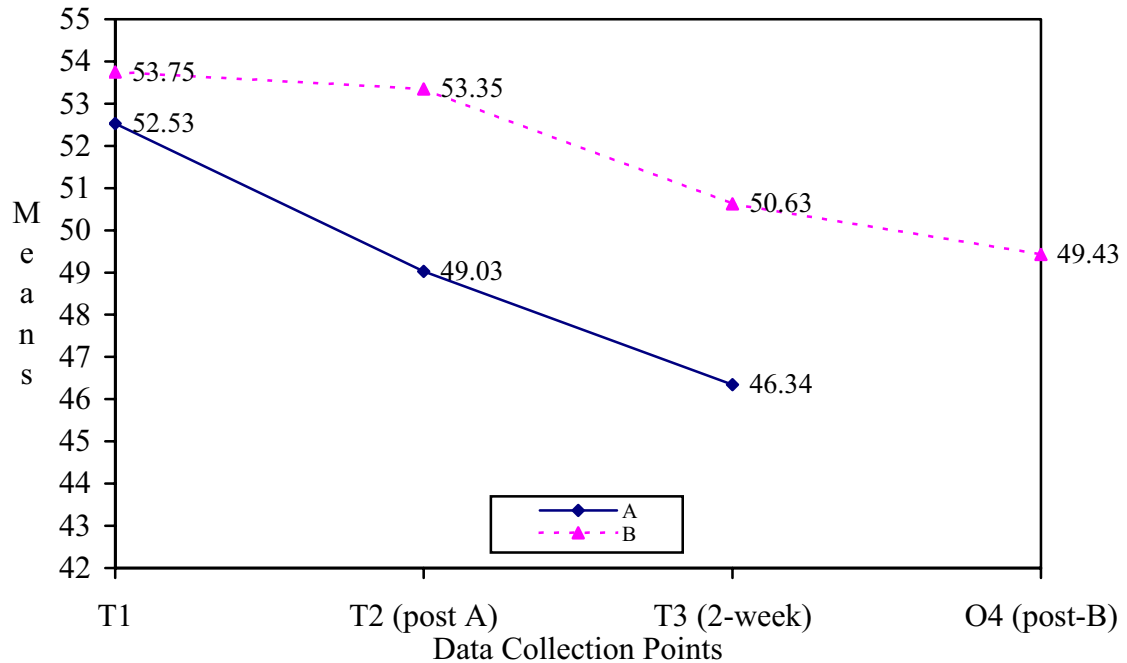
Unexpectedly, the results of the paired t-tests conducted for Group B at immediate pre- and post-intervention points do show statistical significance there, $t(39)=1.88, p \leq .05$ (see [Table 11](#)).

[Table 11. Trait Anxiety-Group B: Pre- and Post-Intervention Data.](#)

	O ₃ ; n=40		O ₄ ; n=40	
	Mean	SD	Mean	SD
Trait Anxiety**	50.63	10.73	49.43	11.15

**This paired t-test found a statistically significant difference across time at $p \leq .05$.

These results provide evidence to support the hypothesis that the intervention may lower the trait anxiety levels, at least at the immediate post-intervention point, as the following [figure 3](#) (providing the means of the data collection points for both groups) illustrates as well.



[Figure 3.](#) [Trait Anxiety: Means by Group from Week 1 to Week 5.](#)

Self-Concept

The results of the two-factor repeated measures ANOVAs testing Group by Time interactions indicated statistical significance for two of the sub-scales of the Self-Concept as well as the Total Self-Concept. Those were the Verbal ($F(2, 140)=3.37, p \leq .05$) and the General Self ($F(2, 140)=3.83, p \leq .05$) sub-scales. The same test conducted for the Total Self-Concept also indicated statistical significance ($F(2, 140)=3.45, p \leq .05$). Even though many of the other sub-scales showed an increase in the mean (see Table 12), no statistical significance was found.

Table 12. Self-Concept: Group by Time Means and Standard Deviations.

		Treatment (n=32)		Control (n=40)		F	p
		Mean	SD	Mean	SD		
Physical Abilities	T ₁	46.50	13.64	50.25	10.92	2.41	.094
	T ₂	49.13	11.43	50.80	11.43		
	T ₃	47.25	12.81	51.40	11.31		
Physical Appearance	T ₁	51.91	10.09	52.08	8.84	2.65	.074
	T ₂	54.84	10.27	52.40	10.03		
	T ₃	54.84	10.04	52.92	9.39		
Opposite Sex Relations	T ₁	52.41	9.63	49.23	12.23	.18	.832
	T ₂	54.41	10.16	51.03	12.54		
	T ₃	53.25	11.24	50.58	13.64		
Parental Relations	T ₁	45.71	10.05	46.13	10.08	2.07	.130
	T ₂	49.36	9.79	46.80	10.47		
	T ₃	48.26	11.03	48.08	10.36		
Same Sex Relations	T ₁	52.81	11.59	49.00	11.04	.01	.989
	T ₂	54.41	11.41	50.49	12.60		
	T ₃	53.63	13.73	49.46	13.87		
Honesty/Trustworthiness	T ₁	51.91	8.65	53.98	8.51	2.62	.076
	T ₂	54.66	9.04	53.75	9.09		
	T ₃	53.56	8.02	54.85	8.89		
Emotional Stability	T ₁	48.03	10.57	48.75	11.72	1.74	.180
	T ₂	50.87	10.33	49.43	12.05		
	T ₃	51.84	11.14	50.00	12.37		
Math	T ₁	51.56	11.84	45.10	10.84	.25	.775
	T ₂	53.47	11.73	46.28	10.92		
	T ₃	52.47	10.83	45.98	11.11		
Verbal*	T ₁	51.97	11.38	53.10	10.09	3.37	.037
	T ₂	55.09	10.59	52.60	10.97		
	T ₃	53.56	9.61	52.88	9.69		
General School	T ₁	49.28	11.32	47.98	10.26	.04	.674
	T ₂	52.00	10.98	49.68	10.59		
	T ₃	51.00	11.25	49.80	10.82		
General Self*	T ₁	47.88	10.36	49.28	9.26	3.82	.024
	T ₂	51.53	10.03	48.88	10.66		
	T ₃	50.94	10.05	50.50	9.41		
Total Self-Concept*	T ₁	50.00	11.48	49.08	10.59	3.45	.034
	T ₂	54.38	11.67	50.18	11.59		
	T ₃	53.03	12.03	50.75	11.62		

* The comparison of T₁ versus T₂ was statistically significant at p≤.01 for Group A.

Based on the above findings, the two sub-scales of Self-Concept as well as the Total Self-Concept were examined further (see [Table 13](#)).

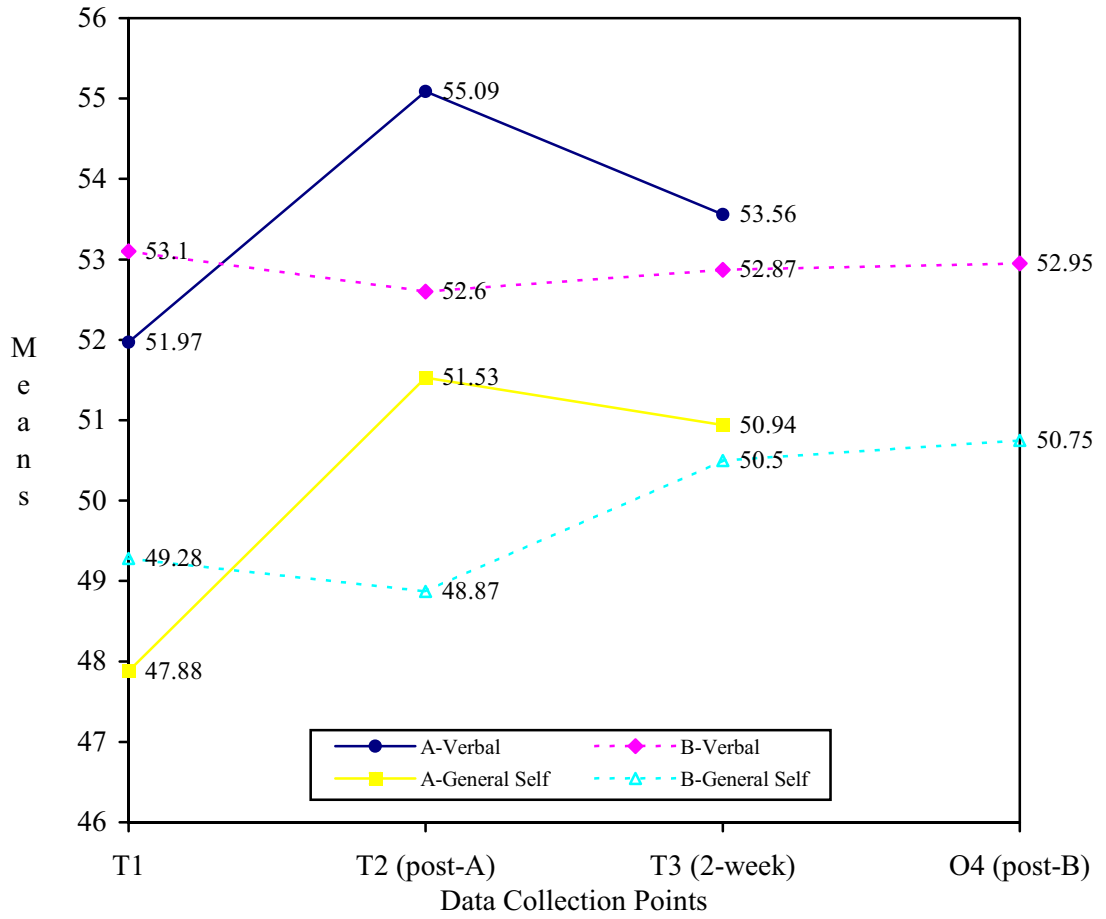
[Table 13.](#) Means Within-Group Effects for Verbal, General and Total Self Scores.

	Treatment (n=32)		Control (n=40)	
	T ₁ versus T ₂ *	T ₂ versus T ₃	T ₁ versus T ₂	T ₂ versus T ₃
Verbal	F= 8.47, p≤.01	F=2.11, p=.151	F= .27, p=.604	F= .08, p=.771
General Self	F=10.47, p≤.01	F= .33, p=.566	F= .15, p=.693	F=3.11, p=.082
Total Self	F=23.49, p≤.001	F=2.62, p=.110	F=1.86, p=.177	F= .44, p=.441

Note: The degrees of freedom were 1 and 70.

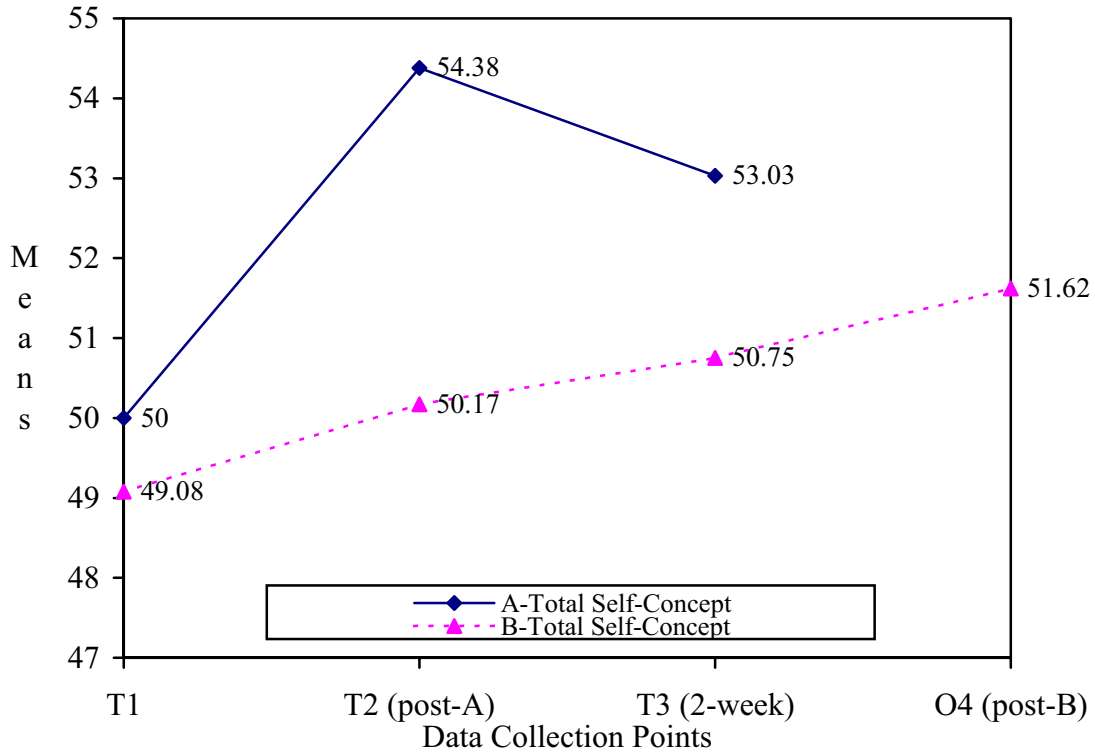
*The comparison of T₁ versus T₂ was statistically significant for Group A at p≤.01.

For all three scales, the results showed statistical significance when comparing T₁ versus T₂ within Group A. The results of the F-test comparison of T₂ versus T₃ found no statistical significance, thereby suggesting the changes remained stable over the time tested. These results provide evidence to support the hypothesis that the intervention positively affects the self-concept of adolescents. [Figure 4](#) shows an increase in the mean score for the treatment group in both sub-scales that remained significant over the 5-week study period.



[Figure 4. Verbal/General Self-Concept: Means by Group from Week 1 to Week 5.](#)

A similar trend can be seen in [Figure 5](#), which shows the means for the Total Self-Concept scale across time.



[Figure 5.](#) Total Self-Concept: Means by Group from Week 1 to Week 5.

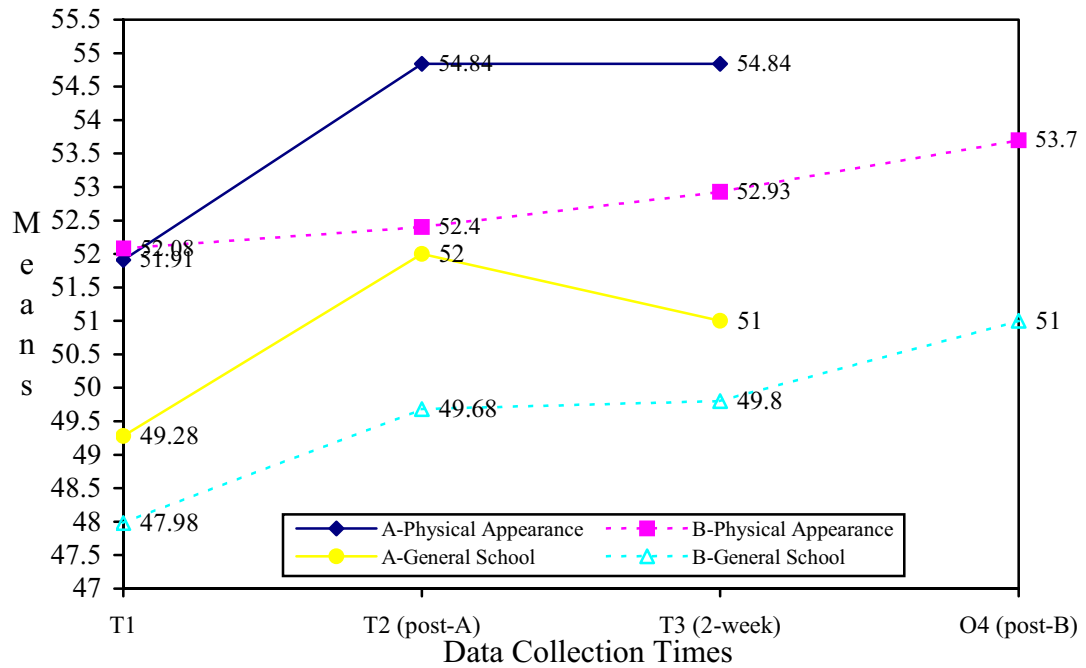
The results of the paired t-tests conducted for Group B at immediate pre- and post-intervention points (O₃ versus O₄) indicated statistical significance in three scales as well (see [Table 14](#)), even though the means of most sub-scales might suggest more change.

Table 14. Self-Concept-Group B: Pre- and Post-Intervention Data.

	O ₃ ; n=40		O ₄ ; n=40	
	Mean	SD	Mean	SD
Physical Abilities	51.40	11.31	52.08	10.20
Physical Appearance**	52.93	9.39	53.70	9.75
Opposite Sex Relations	50.76	13.64	51.25	12.55
Parental Relations	48.08	10.36	48.00	10.87
Same Sex Relations	49.68	13.75	50.43	14.01
Honesty/Trustworthiness	54.85	8.90	55.38	8.78
Emotional Stability	50.00	12.37	50.55	12.39
Math	45.98	11.11	46.45	11.44
Verbal	52.88	9.68	52.95	9.94
General School**	49.80	10.83	51.00	9.84
General Self	50.50	9.41	50.75	9.66
Total Self-Concept**	50.75	11.62	51.63	11.98

** These paired t-tests found a statistically significant difference across time between O₃ and O₄ at $p \leq .05$.

Statistically significant results were found for the Total Self-Concept scale ($t(39)$, $p \leq .01$), see [Figure 5](#), as well as two sub-scales; Physical Appearance ($t(39)$, $p \leq .05$) and General School ($t(39)$, $p \leq .05$). Thus, the results of the paired t-tests conducted for Group B at immediate pre- and post-intervention points (O₃ versus O₄) also support the hypothesis that the intervention improves the adolescents' self-concept. [Figure 6](#) displays the means by group in the two sub-scales, Physical Appearance and General School.



[Figure 6. Physical Appearance/General School: Means by Group from Week 1 to Week 5.](#)

The results of this study appear to provide evidence to support all three hypotheses stated. The findings will be further examined in the Discussion chapter. Additional information, possible reasons for the results obtained in the statistical analysis, strengths and weaknesses of this study, and confounding variables will also be studied.

CHAPTER 4: **DISCUSSION**

*Soul learning does not consist of internalizing of knowledge,
the determination of right meaning, the achievement of accuracy,
but is to be found in what sounds right.
That soul sings was understood
by the ancient psychology of the soul of the world—the singing of the spheres.*

Robert Sardello (Facing the World with Soul)

Did the Exposure to GUS™, a Wholistic Multi-Modal Programme, Improve the Adolescents' Well-Being ?

The findings in this research study suggest an affirmative answer to this question: the exposure to GUS™, delivered as a one-day, eight-hour workshop, does appear to improve the well-being of adolescents.

As described in the Literature Review chapter, well-being is conceptualized as a phenomenological organization of cognitive, social, emotional, and spiritual experiences. It was operationalized through three major components of well-being: locus of control, levels of anxiety and self-concept. Statistical significance was found in all three areas when comparing the pre- and post-intervention data within both the treatment and control group, even though no statistical significance was found between the treatment and the control group. Additionally, these findings were supported by the qualitative data collected as part of the research study as well as by qualitative data gathered upon completion of the study.

Overview and Implications of Significant Findings in the Study

The findings are discussed in response to the three hypotheses stated in this study. Each one of the findings will be highlighted with the qualitative data obtained from the anecdotal questionnaire.

The two-way repeated measures ANOVAs were determined as the most appropriate test of choice in order to avoid type I errors. For that reason, the principal investigator decided against a series of post-hoc comparisons, which could have possibly produced more statistically significant results but at the same time would have weakened the integrity of the study. Therefore, the results presented in this study are considered robust findings.

Two aspects of the findings must be highlighted. First, all of the means at baseline for both the treatment and the control groups were within the norms presented in the manuals for all four measures used in this study. By the end of the study, the means averaged by the participants had generally dropped to below normative range between 1.5 and 8 points. Second, self-concept and trait anxiety in particular are considered stable, and thus change is difficult to effect.¹ Therefore, the fact that a sample that was showing normative means at baseline can possibly be impacted by the GUS™ programme to reach statistical significance at both post-intervention points suggests these results may be of clinical significance.

A question that must be addressed here is why no statistical significance was found between groups, while within each group statistical significance was demonstrated in a comparison of the pre- and post-intervention results in all areas. One possible explanation could be found in the relatively small sample size, in particular with the

control group exceeding the treatment group by 20%. A second reason for the lack of differences could be seen in the difference between groups. Even though statistical analysis confirmed that the two groups were equal at baseline, there could have been enough difference, which may have balanced out any possible effects over time because of divergent movement. This consideration is important given the general responses of both groups, which can be clearly seen in the graphs provided in the Results chapter. The mean of the control group generally begins at a baseline point that is already closer to the desired outcome than the mean of the treatment group. Therefore, if there is even greater movement in the control group in the direction of the desired outcome between T₁ and T₃, statistical significance may not show between the two groups. And yet, the results of the scores of the treatment group and later on the control group do indicate statistical significance relative to their own baseline. Such results appear to be consistent when analysing the means obtained in this study: except in four out of twelve scales of the self-concept, Group B begins at a point that is less likely to emphasize significant difference. For instance, [Figure 1](#) illustrates very clearly how such a scenario can play itself out. The mean difference at T₁ between the two groups is 1.4 points, with the control group scoring lower (and thus closer to the desired results) already at baseline. With the further drop in means of 1 point by T₃, the comparison between the groups does not reach statistical significance. However, statistical significance was found when comparing T₁ versus T₃ within the treatment group. [Figure 2](#), on the other hand, demonstrates how statistical significance is found when the control group starts out at a baseline point that is further away from the desired goal. It also displays clearly the interaction within group,

in this case how the means for both groups indicate statistical significance in the respective pre-and post-intervention data.

Locus of Control

The results obtained from this study provide evidence to support the hypothesis that the adolescents experienced a shift towards a more internal locus of control due to their participation in the one-day GUS™ programme, and that this shift remained stable over the course of the two-week follow-up period. Both the treatment group and the control group showed statistically significant results in the pre- versus post-intervention data. These findings imply the adolescents' perception of events has moved towards an understanding of events being contingent upon their own behaviours and actions, rather than perceiving events as unpredictable and due to factors outside themselves.

One main criterion must be highlighted when interpreting the results, which may be considered a confounding variable. Locus of Control scores become more internal (i.e., lower) with increasing age.² The mean age difference between the treatment and the control group consists of one full-year (14.9 for Group A versus 15.9 for Group B). Thus, the control group may demonstrate more focus on inner controls. Even though no statistical significance was found at the baseline point between the two groups due to the factor of age, the difference that did exist from the beginning could be enough to explain the lack of statistical significance at the post-intervention point. Comparing the means at T₁ for both groups with the means cited by Nowicki-Strickland, the treatment group started out by more than one point higher compared to the sample norm, whereas the control group differed by only .2 points.

It is interesting to note that in both groups the means dropped before any intervention occurred. For the control group, the means dropped further still at T₃, and once again after the intervention. Two possible explanations may apply: first, regression to the mean, which could account for the change, particularly when the proximity of the testing points is as close as in this study design. Second, it could be that the adolescents might have reflected on some of the questions after the baseline test and thus answered differently the next time. In other words, the tests themselves could suggest and encourage movement towards greater internal locus of control.

The qualitative data show substantial support for the conclusion suggested from the analysis of the quantitative results. The following highlights were excerpted from the questionnaire, which the participants completed as part of the research study (see [Appendix D.1](#) for the full content of all questionnaires). The questionnaire was optional and anonymous. The wording is taken verbatim from the questionnaires. *“I can control my mind better”, “my emotions”, “my pain”;* *“I am in control of everything that has to do with me.”* *“I can deal with my own problems.”* *“I know I have a choice.”* *“I am in charge of my bubble and how I feel.”* *“I feel I can face things that I couldn’t before—more ready for life.”* *“...feel more in control.”* *“It made me want to change what I don’t like about myself.”* *“...can protect myself from other people’s toxic feeling”*

These comments are further substantiated with anecdotal evidence provided spontaneously by both parents and participants from one week to four months after the workshop, which support the conclusion that participation in the GUS™ programme may shift the locus of control and that this shift may indeed be stable across time for the participants (see [Appendix C.8](#)).

State Anxiety

The analysis of the quantitative data provides evidence to support the hypothesis that adolescents experience lower levels of state anxiety due to their exposure to the GUS™ programme. A statistical significance was found between the treatment and the control group at the post-intervention data point (T₂). Additionally, the two-week post-test (T₃) indicated no statistical significance (even though it revealed a rise in state anxiety compared to T₂), thus suggesting the results remained stable across time for the treatment group. The results from the paired t-test on the control group, which began at a higher mean than the treatment group, also indicated a similar trend in which statistical significance was found in the comparison of the pre- versus post-intervention data.

The unexpected behaviour of the control group at T₃ is difficult to explain. Possible reasons are as follows. For the control group, this testing occurred the day of their workshop, at their pre-test point. That means the participants had actually met the principal investigator and their groups members for the first time, which may have lowered their fears of the unknown. They also had to wait for several weeks to finally reap the rewards for participating in the research study, as some of them stated. Perhaps finally arriving at this point (at least eight weeks from the day of signing up for the study) may have reduced anxiety levels as well. It can also not be ruled out that the presence of the principal investigator contributed to the results since both groups showed a drop in anxiety levels at the pre-intervention point, which was the first set of data collected in the presence of the principal investigator. Last, as with the other tests, repeated exposure to the testing situation and the tests themselves may have contributed to a lessening of anxieties.

The results from the two-way repeated measures ANOVAs as well as the paired t-test for Group B, testing state anxiety, are even more surprising in light of the fact that stability is relatively low for the State-Anxiety scale, according to Spielberger.³ Both groups exhibited a mean at baseline within two points of the normative sample with similar standard deviation as reported in the STAI manual for the high school population.⁴ The exposure to the GUS™ programme appeared to have lowered the state anxiety level by at least 6 points below what is considered the norm for this age group.

The participants' comments gathered from the qualitative data can help shed more light on the results, at least concerning the immediate post-intervention point (T₂) and the 2-week follow-up for the treatment group as well as O₄, the post-intervention point for the control group. These are some of the excerpts from the anecdotal questionnaire the adolescents submitted (see [Appendix D.1](#)) for the complete rendition of the responses): *“I can calm myself down and cheer myself up more easily.” “I can apply the techniques in real life situations and feel a lot better.” “When feeling stressed I can always go to my Place of Peace because it is always in my head.” “I stay calm more easily.” “I am not so much afraid to go outside and be around people and it’s not so hard to deal with them.” “...able to relax more easily.”* The participants may indeed have applied the techniques they were taught to lower their anxiety levels during the testing time, which would demonstrate the impact the GUS™ programme might have made on this group of participants.

Trait Anxiety

The results of the two-way repeated measures ANOVAs provide no evidence to uphold the hypothesis that the adolescents experience lower levels of trait anxieties due to their experience with the GUS™ programme. The paired t-tests conducted on the scores of the control group at the pre- versus post-intervention points, on the contrary, do indicate statistical significance. Similar to the state anxiety levels, the trait anxiety levels of both groups at the baseline corresponded to the normative sample within three points of the mean. An analysis of the trend in means to consistently lower levels (see [Figure 3](#)) might suggest that the exposure of the participants to the GUS™ programme could impact the relatively stable personality traits and thus may lower trait anxiety over time, but demonstrating this would require larger groups and a longer follow-up period.

The quantitative data gathered through the anecdotal questionnaire as well as through feedback from parents and participants submitted after the workshop appears to provide further evidence to suggest the intervention may have in fact lowered the trait anxiety levels of the participants. See [Appendix D.1](#) for the complete list of responses to the questionnaire as well as [Appendix C.8](#) for the complete list of written observations provided after completion of the workshop. The excerpts once again are cited verbatim. *“I am calm/calmer;” “less stressed; more confident;” “can help myself;” “chillax;” “go to my Place of Peace before I fall asleep;” “meditate;” “have become mentally peaceful;” “feel more secure in life;” “not so nervous any more around others;” “I know how to protect myself from others’ emotions;” “I cope better;” “through learning TT and other relaxation techniques I have been able to control and deal with my anxiety and panic attacks. Before learning these techniques I could barely function. I am very*

pleased with the results and couldn't imagine a time without these tools;" "during Math I breathed and did the leg/arm cross. I almost got perfect because I remained calm;" "Our school put on a huge production and I was in four transition scenes. I used the breathing techniques before I went on stage and I didn't feel any stress. I felt confident and everyone in the audience loved the production." And finally comments from a 16-year old female participant (received three months after completion of the workshop): "This course has helped me so much! I have noticed an improvement in my tests and ability to handle stress easier. I no longer break down with hard projects and I have been able to sleep easier because I meditate every night! Thank you again!"

These explicit statements suggest the personality traits might have been positively impacted by the exposure to GUS™ even though the quantitative data collected in this research study appear to only marginally suggest support for the hypothesis.

Self-Concept

The results obtained from this study provide evidence to support the hypothesis that the adolescents' self-concept improved due to their experience with the GUS™ programme and remained stable at the two-week follow-up. Both the analyses from the two-way repeated measures ANOVAs and the paired t-tests conducted for the control group indicated statistically significant changes within each group in the Total Self-Concept scales, in addition to statistical significance in two sub-scales, Verbal/General Self in Group A and Physical Appearance/General School in Group B.

These results are particularly revealing because "well-controlled studies designed to enhance overall self-concept typically do not change self-concept."⁵ Since the General

Self scale on the SDQ-II refers to an overall positive self-perspective that could be applied to each facet of the self,⁶ it is even more remarkable that the adolescents' participation in the GUS™ programme might have resulted in a higher General Self-Concept. The Total Self-Concept score represents the sum of the eleven sub-scales, thus providing a global measure, which can be most readily compared to other self-concept instruments. In particular, in light of the nature of the Total Self score, the results provide a revealing scenario. Although in both groups only two subs-scales indicated statistical significance, enough change in the other facets appear to have occurred cumulatively for the Total Self score to show statistical significance as well. [Table 10](#), indicating the Group by Time means, can serve best as an illustration of how all the mean scores indicate an upward trend towards a more positive self-concept across the study period in all sub-scales.

The qualitative data collected at the post-intervention collection point for both groups reveals very clearly how the participants view the impact of their exposure to the GUS™ programme. The comments (excerpted from the responses to questions 6 and 8 of the anecdotal questionnaire) highlight, in the adolescents' own words, what changes they perceive in themselves. For a complete synopsis of all the comments, see [Appendix D.1](#).
“I gained a wider perspective on certain concepts of life;” “feel more open-minded;” “wiser;” “more self-aware;” “I think more positively; have become more spiritually aware/open;” “more aware of myself/of others; more in tune/touch with myself;” “feel blessed;” “I know I’m not alone and never will be;” “I feel I have grown;” “I get better grades;” “it keeps me out of trouble;” “I believe in myself more;” “I am beginning to understand what’s inside of me;” “how what I give out affects everyone else;” “I

understand better what is happening with me and others;” “I learned to be one with myself;” “I’m starting to get in touch with my spiritual side;” “I have realized how many wonderful talents all of us have and I have become grateful for that new knowledge;” “I now believe in a higher power;” “feel more of a purpose for life;” “how I look at life or anything else is different;” “a whole new world to think and to live;” “I am changing my attitude towards life;” “I feel I have become a better person.” These remarkable realizations appear to further support the hypothesis that exposure to the GUS™ programme may improve the participants’ self-concept and remain stable, at least at the 2-week follow-up. Additional support with regards to stability of the effect of the intervention on the participants in this research study is provided by the written feedback from parents/guardians and participants after the completion of the study (see [Appendix C.8](#)). The following observation (received 2 months after completion of the workshop) made and reported by the mother of a 17-year old female participant may best exemplify the possible impact of the programme: *“I wanted to share with you [my daughter’s] break through in regards to a friendship she needed to confront. She stayed grounded and in her power as she honestly communicated her feelings towards her friend and her disappointment as to how things were going. She said in the past she would choose not to deal with it and remain detached until time would ease the pain. She shared with me how she realized it didn’t matter so much if the friendship survived her honesty or not. What mattered was the feeling of peace at having dealt with something honestly and whatever comes of it, so be it.”*

Qualitative Data

The qualitative measure used in this study was the final anecdotal questionnaire, containing nine questions, which were designed by the principal investigator (see [Appendix B.4](#)) and completed by the participants upon completion of the workshop, for group A. This optional questionnaire yielded a 92% (n=66) return rate, with 35% (n=25) of the participants indicating their identity. Group A complied at 94% (n=30), whereas Group B's compliance rate was at 90% (n=36). Since no apparent qualitative or quantitative differences in the answers of the two groups appear to exist, the responses are tabulated together. Question # 9 ('Do you have a personal success story you would like to share?') presents the only exception here for the following reason. The control group completed the questionnaire immediately following the workshop or within three days of the workshop. Therefore, most of the participants did not have enough time to apply their learning in their daily lives. Consequently, only 3 (n=4.5%) adolescents in this group provided answers, apart from the standard response "*not yet.*" All responses, organized by question, submitted to the principal investigator by the participants are included in the appendix (see [Appendix D.1](#)).

The questionnaire fulfilled several functions: first, to provide the principal investigator with feedback on the technical aspects of the workshop facilitation (questions # 1 and 2). Overall, the participants' support of the set-up, the structure and delivery of the study was overwhelming, which is particularly striking given the fact that the adolescents gave up a day of their weekend to receive the intervention. Second, the principal investigator wanted to determine what aspects of the intervention were particularly appealing to the participants and which ones were not (questions # 3 and 4).

The answers highlighted the value of offering as diverse a programme as GUS™ because every single component taught in the course of the day was both appreciated the least or the most by one or more of the participants. Third, and perhaps most importantly, four questions were intended to shed light on how the participants perceived the workshop as it related to them personally (questions # 5, 6, 7, 8). These are the questions that are directly linked to the research question posed in this study and to the three hypotheses stated. Appropriate excerpts were included in the discussion above. Last, the high return rate of the post-test questionnaire suggests a positive response to the GUS™ intervention.

Combining quantitative and qualitative results provides a more complete picture of possible changes, as demonstrated above. The final question, which invited the participants to share a personal experience related to the study if they so desired (question #9) reflected also in part the nature of the workshop. Sharing constituted a substantial part of the workshop experience and therefore was deemed appropriate to be included as part of the anecdotal evidence. The responses to that particular question did reveal, in fact, very clearly the depth of the impact the intervention appeared to have made on the participants.

As discussed above, the data from the anecdotal questionnaire appear to support all three hypotheses, and also suggest the stability of the results at the two-week post-intervention data collection point (T₃). Due to the adolescents' experience with the GUS™ programme, a) There is evidence to support the hypothesis that the adolescents experience a shift towards a more internal locus of control; b) The adolescents also seem to experience lower levels of anxiety, in particular state anxiety; c) The data provides evidence to suggest that their self-concept improves. The observations collected in the

weeks and months following the completion of this study also suggest stability of the effect over time.

Strengths of Design and Study

The design allowed for the comparison of the three test points, one baseline and two post-intervention points, between the treatment and the control group as well as within each group. This design also utilized a control group, while using partially random assignment to attempt to equalize the comparison groups. Therefore, most threats to internal validity, such as maturation or environmental events, ought to have been eliminated. The design also incorporated an additional post-intervention point for the control group, thus allowing for a planned post-hoc comparison of post-intervention data from that group to answer the research question posed in this study. Random assignment occurred when the participants chose the date for their workshop because they had no knowledge as to the assignment of treatment versus control group since both groups did receive the intervention at some point. Therefore, scheduling at least two dates for the workshop in each geographic location does produce randomization.

The nature of the study also lowered the threat to internal validity with regards to selection bias. The principal investigator recruited from a large and varied pool of resources. Less than half of the participants (indicated by show of hands) participated in the study because they were interested in the content of the study. Most of them, when asked, replied that they “were volunteered” by their parents/guardians and felt they were forced to participate. Thus, at least 50% of the sample agreed to participate in the study for various reasons unrelated to choosing a stress reduction workshop for themselves,

possibly lowering bias and strengthening external validity. A possibility remains, however, that parental/guardian selection of subjects for the study could produce an atypical group. This possibility appears less likely in view of the normative scores at baseline for both groups.

The measures and procedures employed in this study also support high internal validity. All constructs were clearly operationalized. Consistency on the part of the principal investigator was extremely high. All procedural aspects of the study were carefully planned and carried out. For example, instructions, scripts, discussion questions, and general concepts had been written out and were used consistently in the same manner by the principal investigator, who was the sole person involved in all aspects of the study. All the mailings to and from the participants were handled by the principal investigator as well as any follow-up phone calls. Therefore, the procedural aspects remained constant. The day of the workshop was also completely controlled by the principal investigator as the sole person designing the curriculum, following a tightly laid out schedule, administering the tests, delivering the GUS™ programme to the participants and interacting with the participants throughout the day. No other persons or equipment—with the exception of a portable CD player— were required, which reduced possible confounds.

External validity was also strengthened by the fact that the principal investigator recruited her samples from four different geographical locations within a 100 km radius. The principal investigator conditioned each space in which the intervention was administered in order to reproduce similar environments. An examination of place, conducted as a 3-way repeated measures analysis, found no significant 3-way interactions

for any of the variables. There were significant Group by Place and Time interactions for two of the sub-scales of the SDQ-II, though, which were Opposite Sex and Math. However, since the data used in the Group by Place test are collapsed across time, the fact that this term is significant does not in all likelihood reflect a problem. It could easily be a type I error because of increased testing. Particularly in light of the two sub-scales that demonstrated significance, practical significance prevails and determines that the various physical environments did not influence the results of the study to any statistically significant measure. The physical setting is easy to replicate because the only requirements are a quiet and spacious enough room in which the participants can lie on the floor (preferably a carpeted floor), and a refrigerator in convenient proximity. Chairs and two tables are generally available as well.

The cost of the study is minimal both with regards to materials and space. Apart from the measurement tools and the three handouts the participants received, which require printing, the inexpensive finger thermometers and the crystals for the closing ceremony as well as snacks for the participants' morning and afternoon breaks—no other expense was incurred. A portable CD player is needed as well. Appropriate space is easily found in all geographic locations at no cost through various community organizations and churches.

Another strength is the actual curriculum the principal investigator assembled and taught. The individual teaching modules, the wealth of materials that addresses also the various learning styles of the participants, the mix of theoretical and experiential components, the question and answer times as well as the group interaction times through

sharing and exchanging of ideas and comments truly make the GUS™ programme a strong, unique and pedagogically sound programme.

Limitations of Design and Study

One of the limitations of this study is the sample size, particularly the treatment group, because more variability tends to translate into less significance. A larger sample size probably would have produced clearer results.

The principal investigator was not given access to the local schools to advertise the study and therefore failed to reach a potentially large and perhaps more representative pool of participants for the study.

Limited randomization is another shortcoming of this study. The results obtained from this study cannot be generalized at this point to other groups of adolescents of the same age group.

Even though the teenagers did not know which group they were assigned to, the principal investigator was not blind to that information. Nor was the principal investigator detached from the outcome as the creator of the GUS™ programme. However, it appears both groups behaved similarly when comparing pre-and post-intervention data, which would indicate the lack of blindness and detachment from outcome did not affect the groups unevenly.

For the treatment group, the results from O₂ could not be used in the two-ways repeated measures ANOVAs because there was no equivalent data collection point for the control group. For Group A, the O₂ data point occurred the day of the intervention. That means, the participants completed the questionnaires just before commencing the

workshop. It also means they were together as a group for the first time and, in addition, they were also in the presence of the principal investigators. Both of those factors could possibly have influenced the data. The data could possibly be used for post-hoc comparison studies, although that may increase the risk of type I error. However, in order to provide all the information about the data collected, the O₂ are listed in the appendix (see [Appendix D.2](#)).

The follow-up period of two weeks for the treatment group was too short to determine what possible long-term effects the intervention may or may not have. The observations provided by the participants and their parents/guardians (see [Appendix C.8](#)) suggest stability of the intervention in those cases of up to several months. It may be interesting to see which, if any, effects might only begin to occur several weeks after the intervention has occurred. Overall, longer periods of time between each administration of the questionnaires might be preferable as well as an additional follow-up point six to eight weeks later.

The third data collection point must also be examined more carefully because of the presence of several confounding variables at this testing point, in particular the Rosenthal effect, often also referred to as the experimenter effect. For the treatment group, T₃ was the follow-up observation point and completed by the participants in their home environment by themselves. For the control group, T₃ equalled the pre-intervention testing point. This test was administered the morning of the intervention for the control group. That meant the participants were now at a different geographic location, had met one another and the principal investigator. The possibility exists—especially having examined the general trend of the T₃ scores—the relief of having reached this part of the

study may also have influenced the results. To what extent the experimenter effect played a role here is difficult to determine. If the test had been administered independently of the workshop for the control group in their home environment prior to coming to the workshop and not in the presence of the experimenter, then the Rosenthal effect could have been ruled out, thus perhaps resulting in different scores that might indicate greater statistical significance between groups. Therefore, separating T₃ from the actual workshop would further strengthen the design of the study.

The actual delivery of the one-day workshop presented a heavy burden for the principal investigator. Many factors contributed to this burden. This was the first and only time the principal investigator met the participants and they met each other. The psychosocial and emotional aspects of all the unknowns demanded great skill on the part of the investigator to create a trusting atmosphere in a sacred space. The principal investigator also had to spend the entire day without a break with the participants and supervise them from the moment they were dropped off at the location until the last person was picked up by the parent/guardian. That created a long and intense nine-hour day, filled with teaching, supplying snacks, watching the schedule, minding the space and generally interacting with the participants as well as their parents/guardians at drop-off and pick-up time.

One of the biggest limitations of this study was the fact that the intervention was offered as a one-day workshop. Although it did make scheduling easier for the participants and appeared to be the only possible way to attract the sample size needed to conduct the research, too much information was provided in one day without providing for gestation, allowing time for the seeds to germinate, grow and flower. As some of the

participants indicated, the day was too long and contained too much information.

Delivering the programme in at least two half-days or possibly as a multi-week programme would seem methodologically sounder and possibly more effective, as at least one of the two pilot studies suggests.

The principal investigator must be considered the most significant limitation of this study for several reasons. 1) The professional background of the principal investigator shaped the design and the delivery of the GUS™ programme. As a former high school teacher of many years, who worked very closely with hundreds of adolescents in curricular and extra-curricular activities, she has gained deep knowledge of many aspects of teenage life and has maintained a keen interest in this particular age group, which allows her to bond naturally and easily with many adolescents. 2) The principal investigator also has spent at least a decade studying energy medicine and spiritual healing techniques. She studied each component included in the curriculum extensively and intensively, in some cases for many years. 3) She also taught, mostly informally and by example, many of the principles of spiritual healing and energy medicine to her students during her career as a high school teacher. 4) She currently uses these techniques in her private practice as a practitioner of subtle energy medicine and intuitive and spiritual counsellor as well. 5) The principal investigator herself uses and practises these techniques daily by having incorporated them very effectively into all aspects of her daily life. 6) Perhaps the most crucial aspect of the principal investigator that shapes this study is her unshakable belief in the limitless creative potential and goodness of each individual, in this case of each adolescent participating in the study. 7) Lastly, the innate intuitive and healing gifts of the investigator must play a role in

producing the results. These may be very difficult to assess and compare between various investigators, perhaps influencing replications of the study.

Therefore, in order to replicate the study, not only is the proper training required but also, at the very least, another investigator must share a similar belief system and a strong affinity to the adolescent population. Ultimately, the impact of the personality of the principal investigator on the participants remains an uncontrollable variable and is therefore not replicable. Any interactions that took place in the course of the day are in essence teachable moments and as such complex and unpredictable with regards to the effects these interactions might entail.

Despite these limitations, due to good controls that were implemented in order to control any identified threats the overall design of the study appears to provide high internal validity.

Comparison with Pilot Studies

Two pilot studies were conducted prior to the design of this research study, both of which are briefly described in the Methodology chapter. Both pilot studies were conducted over several weeks, with one instructional session per week. Neither of them included a control group.

Pilot I contained a very select group of participants (n=13), with an average mean age of 16.15 years, who were drawn from an enrichment programme at a local high school and were identified as gifted students. They all expressed a keen interest to participate in the study.

Pilot II recruited participants (n=14), with an average mean age of 15.9 years of age, from a wider range of sources and two geographic locations. Contrary to the first pilot study, 42.8% of the participants (n=6) only participated because they could earn community service hours, which form a mandatory requirement for graduation from high school in the province of Ontario, Canada. Both Pilot studies were identical to each other and differed in curriculum content in only one component (R. Assagioli's 'Dis-identification exercise) from the research study, where this component was omitted.

Pilot I

The results of the scores of the dependent measures provide evidence to support all three hypotheses stated for the pilot study, which are identical to those of the research study, and thus answer the research question affirmatively. The exposure to the GUS™ programme does appear to improve the well-being of adolescents. Using paired t-tests, statistical significance was found comparing pre- and post-intervention points in trait anxiety, locus of control and eight of the twelve categories of self-concept, including Total Self-Concept, whereas the baseline and post-intervention scores in four of the twelve categories of self-concept and state anxiety did not indicate statistically significant differences across time. The anecdotal questionnaires also support these findings.

Pilot II

The results of the scores of the dependent measures do not provide evidence to support all three hypotheses stated for the pilot study, which are identical to those of the

research study, and thus answer the research question negatively. The exposure to the GUS™ programme does not appear to improve the well-being of adolescents. Using one-way repeated measures ANOVAs comparing the three data collection points (baseline, post-intervention and 8-week follow-up) indicated statistical significance for only two sub-scales of self-concept, the Verbal and General School self-concept with no clear indication of where the actual change took place. No post-hoc comparisons were conducted because of the minimal findings in the initial analysis. It is interesting to note that the means dropped between baseline test and follow-up for all dependent measures but not to statistical significance. The anecdotal questionnaires, on the other hand, contradict these findings.

The most important difference between the two groups, both of whom showed baseline means in the normative range for high school students, was selection bias, since even the mean age difference was almost identical. All of the participants in Pilot I volunteered and were interested. They also originated from a very select group of students at the school, namely the gifted population. Therefore, the results of this pilot study cannot be generalized to any other segment of the population.

Possible Implications of Findings from Pilot Studies for Research Study

The results of the pilot studies must be treated with caution because of the small sample size in both instances. However, the results from Pilot I suggest that perhaps the impact of GUS™ may vary depending on the type of personality that is exposed to the programme. The participants of Pilot II compare more closely to the participants in the

research study in three respects: 1) multiple geographic locations; 2) drawn from a broader spectrum of the population; and 3) included a substantial portion of participants who did not volunteer for the study and were not interested in the content.

Two questions arise here: First, in the case of Pilot II, is it simply a question of insufficient numbers in the sample for the lack of statistically significant findings? Second, if indeed the sample includes participants who are disinterested in the content, does a one-time intense exposure perhaps increase the impact of the programme as opposed to extended exposure over time? It could be an indication of order effect, which poses a threat to internal validity.

What does that imply for this research study? It highlights even more the many findings of statistical significance in the research study, supplying further evidence that the GUS™ programme may indeed improve the adolescents' well-being. It also suggests that out of the four dependent measures, self-concept was the only one that appeared to improve consistently (to various degrees) in all three studies. And yet, as has been pointed out, it is considered stable across time.

Implications of the Results, Recommendations and Directions for GUS™

In this section, the greater implications of the results from this research study will be examined; further research options, and possible directions for the GUS™ programme will be explored and suggested.

Implications of the Results within the Context of the Field of Energy Medicine and Spiritual Healing

The GUS™ programme is an innovative concept in the field of energy medicine and spiritual healing. As the literature review revealed, no other research exists at this point that has taken a similar comprehensive, elaborate, and compact approach to adolescent well-being and would lend itself to a useful comparison of the GUS™ programme. Either individual techniques or a combination of two modalities have been used to improve certain aspects of adolescent well-being. However, no other programme uses the complex structure and balance of theoretical and practical experiences combined with the opportunity to create community and share experiences over the course of eight hours.

Two main implications of the results of this study will be emphasized. First, the results of the GUS™ programme suggest that self-healing™ can be taught effectively to adolescents within an eight-hour teaching session effecting changes in their self-concept, levels of state and trait anxieties and their locus of control and can possibly have stable effects over time. Adolescents so far have been a neglected group in the field of energy medicine and spiritual healing, with similar deficits in data also existing in the field of conventional medicine. Therefore, this research study can perhaps be used as a baseline for further studies in the field of energy medicine and spiritual healing.

The second point centres on the principal investigator and highlights again the experimenter effect. How much healing effect, if any, did the principal investigator have on the outcome of the study? This leads to the broader question of the role the energy practitioner, spiritual counsellor, or healer plays in the delivery of any intervention. Until

this research study has been replicated several times by other investigators, this question remains unanswered.

Recommendations for Future Research

Several aspects need to be considered for future research conducted on the GUS™ programme. First, allowing more time between data collection points and adding a two-months follow-up point would further strengthen the study. All observation points need to match each other in order to maximize the ability to analyze all data. As was mentioned before, the post-intervention data collection for the treatment group at T₃ was compared to the pre-intervention data collection for the control group. In order to eliminate possible Rosenthal effect at this point (removing the principal investigator from this data collection point), it is recommended to advance the data collection by one day and ask the participants to bring the completed questionnaires to the workshop.

Second, one of the strengths of the design is the fact that both groups receive the intervention and yet serve as treatment and control group. Since it is difficult to attract adolescents to participate in research, an incentive must be offered for participation. The intervention, which offered training in stress reduction, served as the incentive, either for the participants themselves or for the parents/guardians who were looking for help for their children. It is highly recommended to maintain this incentive in future research.

Third, it would be useful to conduct this study with different population samples, both as generalized as possible and as rather defined groups with specific characteristics, as was the case in Pilot I. That means the baseline data would most likely be outside of the normative range. A ranking of the participants according to their range outside the

normative range in this research study revealed the following fascinating information. It appears that those participants whose baseline data fell outside of the normative range, experienced much more significant changes due to their participation in the GUS™ programme. (See [Appendix D.3](#) for more detailed information). This holds true even in those instances, where overall the findings did not indicate statistically significant change. Therefore, observing the behaviour of groups, such as the gifted or needy students, or teenagers with eating disorders or any other defined characteristic that places them outside of the normative data at baseline, will certainly add extremely important insights to understanding the possible impact of the GUS™ programme on the adolescent population. The results with varied populations will thus most likely shed more light on the particular strengths and weaknesses of the programme.

Fourth, the sample size ought to be larger in order to obtain more robust results, in particular with regards to more specific sub-groupings testing. For instance, it would be helpful to compare the male to the female sample, or one age group versus another.

Fifth, it would be advisable to also run the GUS™ programme in the multi-week format as it had been done with the two pilot studies to compare the possible differences in effect.

Sixth, in order to avoid potential information overload, a lack of gestation time due to the one-day format, and also the problem of selection order effect due to boredom and losing interest because of the multi-week format, the principal investigator suggests offering the programme as a two-part sequentially structured series at four hours each, two weeks apart from each other, splitting the programme in half. Once again, this would provide further insights into the effectiveness of this programme on teenagers. It is quite

conceivable as well that each format suits particular types of adolescent personalities. More studies of this nature would certainly help reveal the many facets the GUS™ programme entails.

Directions for the GUS™ Programme

The principal investigator envisions several possible routes for the direction of GUS™. A parallel programme for younger children needs to be developed. Both those versions of GUS™ would have great potential in educational settings. The cost effectiveness of this programme and minimal requirements with regards to teaching space and materials could make this programme attractive to schools. Once more research has been conducted by the principal investigator as well as other researchers on the scientific as well as the social validity of the programme, either GUS™ in its current form or a version thereof, could be introduced into the curriculum. Giving children and adolescents the opportunity to learn how to help themselves to improve their well-being on multiple levels may have many positive implications for their future and the future of society as well.

Another direction the GUS™ programme addresses is the need to educate teachers and other professionals who are working with children and adolescents. Therefore, the principal investigator would like to develop a course in which professionals learn to teach this programme. This course would consist of both theory and practice, providing the participants with the background as well as the opportunity to apply the learned materials to their daily lives. This would make the GUS™ programme available to many children and adolescents.

Lastly, the GUS™ programme as it is conceived now can be delivered to adults. The principal investigator envisions offering this programme to adult groups, however, not in the one-day format. Adults tend to need more time to address the concerns of the analytical brain in order to feel safe to experiment open-mindedly. More lecture time and time for questions and answers would need to be built in. However, the curriculum content and the sequential structure of the programme would remain intact.

Return to the Future: GUS™ as a Step towards Wholeness

The principal investigator began the research part of her journey with the desire to develop a cost-efficient, self-reliant, safe, effective, and wholistic approach to teaching adolescents effective techniques, through which they can cope with daily life and stress in a healthy and soulful manner. She hypothesized that such an experience of wholeness and empowerment from within might improve the adolescents' overall sense of well-being. She found that because of the complex multi-dimensional nature of well-being, research is often limited to the discussion of a sole indicator in a single domain. Such isolation provides very clear research results but tends to eliminate necessary links with perhaps less obvious facets of well-being. Therefore, the multi-modal aspect of the GUS™ programme was determined as essential. Its wholistic character addresses the whole person in oneness with the universe and aims at effecting change through achieving greater awareness and connectedness, which results from a sense of deep empowerment from within.

The principal investigator set out to ask the question if a one-day programme could possibly convey to adolescents the meaning of balance, inner power, wisdom, and wholeness. The results from the research study suggest a confirmation of this possibility. Measures of both statistical and clinical significance showed how the GUS™ programme might positively affect the well-being of the adolescent participants by lowering anxiety levels, creating a shift towards a more internal locus of control and a more positive self-concept, in short an improved sense of well-being on multiple levels, including the spiritual component.

As discussed in the Literature Review, a growing number of researchers in education around the world are emphasizing the need for and see the possibility to have soulful learning in the schools, which involves both inner and outer work and must address teachers and students alike. The GUS™ programme presents the adolescents with the opportunity to become intentional participants in the creative process. The qualitative data constitute proof of how readily and quickly many of the teenagers can become conscious co-creators in their lives. Many adolescents are searching to fill the spiritual void—often termed as lack of connectedness—and are keen to find a meaningful way to do so. The GUS™ programme offers a feasible option for them, tailored to their needs, filled with many techniques, and structured to facilitate self-healing on the adolescents' journey back to wholeness.

‘Return to the Future: GUS™ as a step towards wholeness’ expresses the principal investigator’s wish and sincere belief that this programme does indeed have great potential for many different applications, leading the facilitators of the programme as well as the participants at least one step closer to experiencing wholeness. The long-term

effects can only be imagined. We are whole when we become human beings and unlearn wholeness. Therefore, relearning wholeness resembles a return to the future where our souls reside. May the GUS™ programme serve as one of many means to learn to return to wholeness!

Learning has the power of changing the world, but in unknown ways, producing unpredictable outcomes. All learning tells a story of the world and produces images of what the world is like in its action. True learning sets one free because it sets the world free, acknowledges the world's own voice, allows it to speak, making incessant change.⁷

These words by Robert Sardello verbalize this principal investigator's vision: helping the individuals in this world to become free to just be. The GUS™ programme carries the potential to make this dream a reality.

Thy will be done

Thy will be done
Means so much more than ever understood before
All my will needs to be gone
Not erased but changed
Into what seems to be strange
Yet all the while true—
Letting go of all my will
And yet have a goal
That can only be reached
By caring for the soul

Whose soul—yours and mine

Thy will be done
Even if I don't understand
Guide me, show me, lend me your hand
Thy will be done
I might be confused and blow all kinds of fuses
Ready to implode, angry or sad
And yet you know how to direct the flow of tears
So I can breathe and laugh and love
And realize the reason
Even though I do not see why
When I look up into the sky
I accept and simply trust
Thy will be done
For the good of all.

(©Martina Steiger, August 22, 2002)

¹ Charles Spielberger, *State-Trait Anxiety Inventory, Form Y* (Redwood City: Mind Garden, 1983), 5; Herbert Marsh, *Self Description Questionnaire II (SDQII): Manual* (Macarthur: University of Western Sydney, 1990), 7.

² S. Nowicki, Jr. and B. R. Strickland, B, "A Locus of Control Scale for Children," *Journal of Consulting and Clinical Psychology* 40 (1973), 150.

³ Spielberger, 32.

⁴ *Ibid.*, 13; 22.

⁵ Marsh, 85.

⁶ *Ibid.*, 23.

⁷ Robert Sardello, *Facing the World with Soul* (Great Barrington: Lindisfarne Books, 1991), 73.

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APPENDIX A: **Participants**

A.1 Phone Message to Four Local School Boards in September 2003

Hello,

My name is Martina Steiger. I am a student at Holos University Graduate Seminary and in the process of setting up the research study for my dissertation. As a former high school teacher with 13 years of experience in the local district, I am interested in conducting research with the adolescent population. The topic of the research project is as follows: 'The effects of a wholistic multi-modal programme on the well-being of adolescents.' The study is designed to teach the students various means to improve well-being on multiple levels so they are learning coping mechanisms to deal with the stress in their lives perhaps in a more balanced and healthy way.

I am interested in conducting this research during the school year of 2003/04 over the course of two ten-week periods at two different, yet comparable high schools interested in participating in this research study. I ran a pilot study in the spring of 2003 in one of the local high schools and am willing to share the exciting results with you as well.

Thank you very much for your time. I am looking forward to hearing from you.

You can reach me by phone at 519-572-9789 or send me an E-mail message to the following address: martinasteiger@earthlink.net.

Thank you so much again.

A.2 Phone Message to Private Schools in January and February 2004

My name is Martina Steiger. I am a student at Holos University Graduate Seminary and in the process of setting up the research study for my dissertation. As a former high school teacher with over two decades of teaching experience, I am interested in conducting research with the adolescent population. The topic of the research project is as follows: 'The effects of a wholistic multi-modal programme on the well-being of adolescents.' The study is designed to teach the students various means to improve well-being on multiple levels so they are learning coping mechanisms to deal with the stress in their lives perhaps in a more balanced and healthy way.

I am interested in conducting this research during the school year of 2003/04. I ran a pilot study in the spring of 2003 in one of the local high schools and am willing to share the exciting results with you as well.

Thank you so much for your time. I am very much looking forward to hearing from you.

Please feel free to ask questions or share comments. I am willing to provide you with as much information as necessary. You can reach me by phone at 519-572-9789 or send me an E-mail message to the following address: martinasteiger@earthlink.net.

Thank you again.

Self-Help Research Study Just for Adolescents!!

Page 1 of 3

Would you like to

- strengthen your own intuition?
- access your inner wisdom?
- explore and direct your personal process of becoming a unique, whole, independently thinking, fully grounded, and highly creative individual?!

Come to a **one-day session** to learn tools to help you do this!

These incredibly powerful tools

- are **easy** to use either by one individual or in a group scenario.
- **No cost** is involved and amazing personal insights may be gained.

The exciting array of empowering techniques includes

- muscle testing
- guided imagery and visualizations
- relaxation and meditation techniques
- Inner Counsellor
- Autogenic training
- breath work
- Therapeutic Touch

Results from previous participants are ranging from sleeping better to feeling better physically, from working through stress, anxiety, and pain to the ability to focus the mind, from learning to recognize behaviour patterns to actually changing unhealthy ones. Acquiring these tools and integrating them into daily life is believed to be of assistance in making sound, grounded, and creative choices, both academically and personally.

See the attached letter for more information!!

Act today! Don't delay! **Only the first 80** adolescents are accepted!

***An Invitation to Participate in an Exciting Self-Help Research Study
Addressed to Adolescents and Their Parents/ Guardians***

My name is Martina Steiger and I am a student in an *Energy Medicine and Spiritual Healing* graduate programme. I am currently inviting interested teenagers to participate in the research study for my dissertation. The title of the study is: “The Effects of a Holistic Multi-modal Programme on the Well-Being of Adolescents.” The adolescents’ (age 13-19) overall well-being will be measured with regards to certain emotional and psychological parameters.

This study is designed to teach the participants various means to improve personal well-being on multiple levels as a self-help programme. Through a comprehensive curriculum that addresses the individual as a whole being, the students will learn a series of tools they can employ in order to strengthen their own intuition and access their inner wisdom, to explore and direct their personal process of becoming unique, whole, independently thinking, fully grounded, and highly creative individuals. The incredible power of these tools also resides in the fact that they are easy to use either by one individual or in a group scenario. No cost is involved and amazing personal insights may be gained. The exciting array of techniques includes muscle testing, guided imagery and visualizations, relaxation and meditation techniques, Inner Counsellor, autogenic training, affirmations, breath work, and Therapeutic Touch, all of which can be truly empowering. They can assist the individual on all levels, with results from previous participants ranging from sleeping better to feeling better physically, from working through stress, anxiety, and pain to the ability to focus the mind, from learning to recognize behaviour patterns to actually changing unhealthy ones. Acquiring these tools and integrating them into daily life is believed to be of assistance in making sound, grounded, and creative choices, both academically and personally.

This study will be conducted over the course of the winter and spring 2004 as a doctoral research programme. I am an experienced former high school teacher and in that capacity, I have over twenty years of experience dealing with adolescents. All procedures for this programme have been approved by an advisor in the Energy Medicine and Spiritual Healing programme, and by the Executive Committee of Holos University.

This is my invitation to you, the teenagers and the parents or guardians. I am looking for a minimum of eighty adolescents who are keen to participate and willing to commit to this exciting and innovative study, which is open to anyone between the ages of 13 and 19. If you are interested in participating in this unique and free experience, *which may count toward your community service hours*, here are the expectations regarding your commitment as participants in the study.

1) As teenage participants, you will commit to attending and participating in **one** full day workshop from 9:30 – 5:30 (30-minute lunch break; must bring own lunch).

- 2) As participants, you will complete several assessments (between 25-35 minutes in length). You will commit to completing assessments prior to, during, and after the workshop. The assessments before and after will be sent and returned by mail (stamped and self-addressed envelopes will be provided). Parents/guardians have the option of accessing the testing material before committing to the research study.
- 3) As teenage participants under the age of 18, you will sign an assent form agreeing to the terms of participation in the study.
- 4) As parents/guardians of a teenage participant under the age of 18, you will sign a consent form agreeing to your child's participation in the study.
- 5) As parents/guardians, you will commit to providing the necessary transportation to and from the research site, as well as lunch for the participant.
- 6) I will randomly assign the participants to either group A or B, both of which receive the same programme. That means each participant must be available on both workshop days even though attendance is only required on one of the days. The only difference will be the actual date when the teenager receives the instructional workshop.

The workshops will be conducted in Hamilton, Kitchener and Guelph. Check the dates carefully. You must be available for both dates in the workshop option you are assigned to. Please check off all the dates that work for you. If you are limited in possible dates, select your best option(s) by numbering them in order of preference. If only one set of dates works for you, please mark it with an X on the line. I will assign you to one of the two dates for the actual workshop (you are only committing to a ONE-day workshop). If you are interested in this particular research project and you feel comfortable with the commitment, here is what you need to do. E-mail me or call me (If you prefer to call, please call me any time between 8 AM and 8 PM), express your interest and tell me on which dates you can attend the workshop, and leave your mailing address and phone number with me. I will send you all the necessary paper work with the instruction by mail.

Here are your choices:

- | | | | |
|-------|----------------------|----------------------------|---|
| _____ | 1: Hamilton: | Feb 22 / March 7 | [Deadline for sign-up: Feb. 7, 2004] |
| _____ | 2: Guelph: | April 3 / April 17 | [Deadline for sign-up: March 8, 2004] |
| _____ | 3: Kitchener: | March 27 / April 10 | [Deadline for sign-up: March 8, 2004] |
| _____ | 4: Kitchener: | April 18 / May 2 | [Deadline for sign-up: March 28, 2004] |
| _____ | 5: Kitchener: | April 24 / May 8 | [Deadline for sign-up: March 28, 2004] |

I will gladly provide further explanations about any aspect of the study or the schedule either per e-mail or per phone during the times indicated above.

Sincerely,

Martina Steiger, M.A., B.Ed.
 104 Water Street South
 Kitchener, ON N2G 1Z5
 (519) 572-9789
martinasteiger@earthlink.net

A.4 Cover Letter to Accompany Information Package for Private Schools

Martina C. Steiger
104 Water Street South
Kitchener, ON
N2G 1Z5
519-572-9789
martinasteiger@earthlink.net

[date]

Dear [name of person who expressed interest],

As per our telephone conversation on [date], I am sending you the informational material, which all interested parties receive regarding the research study I am conducting. Please note that I am perfectly able and willing to conduct a set of workshops at other locations and on additional dates. The ones provided are set at this point and are open to any interested adolescent. However, if you feel there is enough interest in your school, we can certainly find a way to accommodate your and your students' needs.

Please feel free to post the information by duplicating the poster. I would certainly be very happy to drop off posters and information packages at your school any time at your convenience.

I will gladly provide any assistance I can to promote your students' participation in this study. I am readily available by phone or e-mail. I am looking forward to hearing from you soon.

Thank you so much for your time and attention to this research study. It is a unique opportunity indeed for your students.

Kindest regards,

Martina Steiger

For more background information on the university I am attending, please check the following URL:
<http://www.hugs-edu.org>

A.5 Morning Announcement

Good morning, students,

As we are just getting ready for exams, we have the perfect solution for you. How about checking out a fascinating research study that will provide you with tools to help you deal with stress in your life? It's completely free!!! It is a unique opportunity to participate in this kind of research—and you might learn how to deal with your stress! How about that?

Would you like to know more? There are two things you can do. First, next Tuesday during Chapel Time, you will have the chance to meet a former teacher who is running this fascinating study for adolescents only. Second, just drop into the Guidance Office and pick up an information package or talk to your guidance counsellor about it.

Hope to see lots of you soon.

A.6 Attendance of the Morning Assembly at Private School

Page 1 of 2

I. Introduction by Guidance Counsellor to the Assembly of Students and Teachers

Good morning to all of you!

As you can see, we have a guest here this morning. I would like to introduce to you Martina Steiger, a former high school teacher here in town. Two years ago she resigned her job and decided to go back to school. She is currently a student at Holos University Graduate Seminary working towards a Doctorate of Theology. She has a wonderful project worked out for teenagers and would like to propose it to you. So, without further ado, let's welcome Martina now.

II. The Address to the Students by the Principal Investigator

Good morning,

I want to thank your two guidance counsellors who invited me and all of you present for the opportunity to be here with you this morning. As Phil just said, I taught for over two decades, mainly high school students. And the last 11 years of my teaching career I spent at Eastwood, just across the road from you, where I also was heavily involved with the arts and ran the annual musical. I know your school has quite a reputation for its wonderful arts and music programmes and I also heard your wrestling team is unbeaten!!

For the last three semesters, I have been a student in a doctoral programme, studying Energy Medicine and Spiritual Healing, which I am enjoying very much. I have now reached the stage where I want to conduct my research. When I left my teaching job at Eastwood a year and a half ago, I voiced very clearly that I am not leaving teaching; I am just leaving a particular job. I love to teach and I love working with young people, especially adolescents. That's why I decided to conduct a research study that would potentially benefit adolescents, the age group I care about so much and that often remains rather neglected. So here is what my research is about and where you come in.

I have put together a programme in the form of a one-day workshop for adolescents only, from age 13 to 19. This programme consists of a series of teaching modules, in which you will learn techniques that may help you to cope more efficiently and healthily with the stress in your life. It is a programme that is intended to be very practical so you can use the skills immediately and you are self-reliant. The idea for the programme originated in my personal experience as a teacher working with stressed-out teens. A

number of years ago, the students I was working with at the time asked if I could lead a club to teach them more of the techniques they identified as helpful. We called it GUS—getting unstressed.

Now you have the unique opportunity to participate in the research study I designed for your age group. Participation is absolutely for free. All that is required of you is a full one-day commitment to attend the workshop and two half-hour slots apart from that day, during which you are expected to complete a set of questionnaires. These two half-hour slots happen on your own time on certain dates that will be given to you when you sign up for the study. The questionnaires have nothing to do with skills or knowledge—there is no right or wrong—isn't that refreshing for a change?!

I will be available right here for ten more minutes after the assembly in case there are any questions. I also have a whole stack of information packages with me for anyone who is entertaining the idea of participating in the study. Feel free to come and pick up the information package. I welcome your questions and comments.

Thank you so very much for giving me your time and attention. I feel truly honoured to have been given the opportunity to speak with you. I am looking forward to meeting some of you and to getting to know you a little. Thank you, Phil, once again for inviting me to be here today. Have a wonderfully exciting, joyful and peaceful day.

A.7 Basic Phone Call Script Asking Permission to Advertise the Study

Hello. My name is Martina Steiger. I am a student at Holos University Graduate Seminary, working towards a doctorate in Energy Medicine and Spiritual Healing. I am currently in the process of setting up the research study for my dissertation. As a former high school teacher with over two decades of teaching experience, I have decided to address some of the anxieties and the stress the adolescents are facing on a daily basis. I have therefore designed a programme that is designed to teach the students various means to improve their well-being on multiple levels so they are learning coping mechanisms to deal with the stress in their lives perhaps in a more balanced and healthy way. The topic of the research project is as follows: 'The effects of a holistic multi-modal programme on the well-being of adolescents.'

I am calling you because I need your help in recruiting adolescents for this research study. I will be conducting the research over the winter and spring 2004.

I have a small poster you could display in your office perhaps that is addressing the teenage population as well as information packages that contain all pertinent information regarding the research. These packages are ready for distribution to interested teenagers or their parents/guardians. Please let me know if you can support this research project in any way. Feel free to ask further questions or share comments. I am willing to provide you with as much information as necessary. You can reach me by phone at 519-572-9789 or send me an E-mail message to the following address: martinasteiger@earthlink.net.

Thank you again.

Self-Help Research Study Just for Adolescents!!

Would you like to

- strengthen your own intuition?
- access your inner wisdom?
- explore and direct your personal process of becoming a unique, whole, independently thinking, fully grounded, and highly creative individual?!

Come to a **one-day session** to learn tools to help you do this!

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The exciting array of empowering techniques includes

- Muscle testing
- Guided imagery and visualizations
- Relaxation and meditation techniques
- Inner Counsellor
- Autogenic training
- Breath work
- Therapeutic Touch

Results from previous participants are ranging from sleeping better to feeling better physically, from working through stress, anxiety, and pain to the ability to focus the mind, from learning to recognize behaviour patterns to actually changing unhealthy ones. Acquiring these tools and integrating them into daily life is believed to be of assistance in making sound, grounded, and creative choices, both academically and personally.

For more information call (519)572-9789

or E-mail martinasteiger@earthlink.net!!

Act today! Don't delay! **Only the first 80** adolescents are accepted!

A.9 Cover Letter to Accompany All Posters and Information Packages

Martina C. Steiger
104 Water Street South
Kitchener, ON
N2G 1Z5
519-572-9789
martinasteiger@earthlink.net

[date]

Dear [name of person who expressed interest],

As per our telephone conversation on [date], I am sending you (x) posters and/ or (x) information packages on the subject of the unique and exciting research study I am conducting.

I am very grateful for the opportunity to advertise my study through [name of establishment]. Please feel free to direct any interested person directly to me for more information. I am readily available by phone or e-mail—the information is provided above, as well as on the poster and in the package. If you require more posters or information packages, please feel free to call or e-mail me and I will drop off any materials you need.

Thank you so much for your time and attention to this research study. I appreciate your support. It is a unique opportunity indeed for all adolescents.

Kindest regards,

Martina Steiger

P.S. For more background information on the university I am attending, I have attached the following URL:

<http://www.hugs-edu.org>

A.10 Letter to Friends, Colleagues, Clients, Former Students

Martina Steiger, M.A., B.Ed.

104 Water Street South
Kitchener, Ontario, Canada, N2G 1Z5
Telephone: (519) 572-9789
E-mail: martinasteiger@earthlink.net

[date]

Hello to Every One of You!

The very best wishes to all of you at this very special time of the year. I hope you will find the time to simply 'be' even at this rather busy time.

You may be wondering why you are receiving this letter from me right now. I am writing to you in my role as a graduate student in the Energy Medicine and Spiritual Healing Programme at Holos University. As some of you know already, I am approaching the research phase and am ready to run my research study for which I require participants. I put together an *exciting* and *inspiring* programme, in which I offer invaluable and practical techniques to **teenagers**, age 13-19. These techniques, which were tested this spring in a pilot project I ran at Eastwood Collegiate Institute in Kitchener, and their potential benefits, are further described in the information package you will find attached to this e-mail message. Participation is completely *free* and only available for the first *eighty* teenagers who sign up. Any adolescent within the designated age range and with reasonable English language skills may participate. Community service hours may be available for participation.

Please read the *attached information package* for further details about this unique programme, the time commitment, and expectations involved, and how to contact me, including my E-mail address and phone number. Feel free to pass on the information to anyone who might need or may be interested in such a unique opportunity. Many of you are familiar with some of the techniques I incorporated into the programme and I am grateful you have shared with me in the past how you are benefiting from that knowledge. I very much appreciate your continued support and this time in particular your support for this research study and will gladly share the results with you.

All the very best to you, your family, and friends. Keep in touch.

Love and Light

Martina

A.11 Newspaper Articles about Research Study

Page 1 of 2

The first article appeared in *The Record* on Tuesday, April 6, 2004. The article was highlighted on the front page with a small picture of the principal investigator under the heading *Life: Ex-teacher studies teenagers*. Page C1.

This is the exact text from the article, which was accompanied by a larger version of the picture, with the caption: “Former teacher Martina Steiger is researching how teenagers can benefit from emotional wellness.” The article was on the front page of the Life section of the paper. (The picture was taken by a Record staff member.)

“Project educates teens from inside out”

By Valerie Hill

Martina Steiger has long had a soft spot for teenagers.

Now the former Eastwood Collegiate Institute teacher hopes to alleviate some of their problems using techniques she picked up for dealing with everything from bullying to stress relief.

It began after a life-altering event in August 2001. Steiger’s husband died unexpectedly and she did “a lot of soul-searching that year (about) what life meant.

“I decided I cared too much about humanity in general, especially teenagers. But was there something I could do to make a genuine impact?”

Steiger who emigrated from Germany in 1989, decided teaching didn’t provide enough flexibility to help students beyond their academic courses, whereas she thought education should deal with the whole person, including emotional wellness.

Teens, she said, rarely ask for help with stress, and may not see their headache or stomachache as a symptom.

Initially she offered relaxation techniques as part of Eastwood’s enrichment program. “You can influence what your body does,” Steiger said. “I ran some clubs called Getting Unstressed. That sparked me to think, “Why don’t I put a program together?”

Steiger left her teaching job and is now a PhD student at Missouri’s Holos University, which specializes in spiritual healing and theology. It seemed logical to make her self-help program part of her doctoral dissertation. It would be the perfect marriage: she would complete the needed research while young people benefited from the program. The first sessions had 13 students each, between the ages of 14 and 19, spread over 10 weeks. Now she offers a streamlined one-day version.

The programs are free, and Steiger offers them in community centres in Kitchener and Guelph. Participants are required to complete questionnaires before, during and after the program.

“I started with how your breathing influences the way you’re thinking,” Steiger said. “When anyone gets nervous, breathing rises, there is less oxygen getting to the brain.

“We talk about gut feelings—what is that? How do we access intuition?”

Lyndsay Wilson, a Grade 12 student at Cameron Heights Collegiate Institute in Kitchener, said she had always been interested in yoga and relaxation, but had little idea how to apply those techniques to her life.

In Steiger’s program, she learned about visualization and guided imagery meditation, therapeutic touch and how to call on her inner resources.

“It’s allowing yourself to be balanced,” Wilson said. “I learned to calm down, to meditate, think about why I’m acting the way I am. I don’t have to run everywhere. I get there just as fast if I walk.

She also learned to consider other people’s feelings, and said her relationship with her mother is closer as a result.

After Steiger’s pilot research program is completed, she hopes to see her ideas at work in school curriculum. “We need to teach this to the teachers. There is a whole dimension of education we’ve been ignoring.”

(vhill@therecord.com)

A text box was inserted in the article, which carried the title: MORE INFO and contained the following information: “For information or to volunteer for a youth program, contact Martina Steiger at 572-9789 or e-mail martinasteiger@earthlink.net.”

A shortened version, leaving out the middle section of the original article, appeared the following day, Wednesday, April 7, 2004, in the *Metro*, a free Toronto newspaper, under the heading: “Teacher tries to heal”

A slightly shortened version was reprinted on the following Saturday, April 10, 2004, in the *Guelph Mercury* under the original heading: “Project educates teens from the inside out.”

ASSENT FORM

**The Effects of a Wholistic Multi-Modal Programme
on the Well-being of Adolescents**

Holos University Graduate Seminary supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study. Note that even if you agree to participate, you are free to withdraw at any time without penalty of any kind, and without affecting your opportunities for participation in other projects offered by this department.

This study is designed to examine the effects of a comprehensive curriculum on multiple aspects of personal well-being. Through a comprehensive curriculum that addresses the individual as a whole being, you will learn a series of tools you can employ in order to access your own intuition, to explore and direct your individuation and self-actualization process. This programme will examine the role of conscious will and intentionality. Kinesiology, biofeedback, guided imagery and visualizations, relaxation and meditation techniques, Inner Counsellor, Autogenic Training, affirmations, breath work, and Therapeutic Touch are the concepts that will be taught in order to access personal inner power and intuitive skills. It is believed that these tools may be of assistance in making sound, grounded, and creative choices, both academically and personally.

I will meet you one time for teaching and assessment purposes. Your overall well-being will be measured with regards to certain emotional and psychological parameters. These measurement tools will be administered a total of four times, two of which will take place on the day of the workshop. The other two times will be either before or after the workshop or both before, depending on the group to which you have been assigned. I will deliver a full-day teaching workshop, which requires attendance of all participants. You are expected to carefully complete the assessments each time and to return them to me as soon as possible by mail. I will also be available per e-mail for personal, and optional, consultation related to this study.

There are no known risks to participating in this study. The expected benefits associated with your participation include your receiving of practical tools to improve your well-being on multiple levels.

This study is being conducted in the winter and spring 2004 as a doctoral research programme by an experienced former high school teacher who is currently a graduate student at Holos University. All procedures for this programme have been approved by an advisor in the Energy Medicine and Spiritual Healing programme, and by the Executive Committee of Holos University. I do solicit your participation but it is strictly

voluntary. You remain free to request your discontinuation of the study at any time without penalty. Should you choose to participate in this study, be assured that confidentiality will be maintained throughout this project and your name, test scores, or any other identifying information will not be associated with the research findings in any way. Names will be deleted from all research data before use. All findings will be presented as averages from all scores, as opposed to information on individual students.

If you would like additional information concerning this study before, during, or after its completion, please feel free to contact me by phone, mail, or e-mail. I appreciate your assistance and commitment. If you have any concerns or questions about your rights as a research participant, you may contact the Holos University Graduate Seminary, Dean of Faculty and Academic Affairs at (888) 722-6109.

Sincerely,

(Martina Steiger)

Martina Steiger, M.A., B.Ed.
Principal Investigator
104 Water Street South
Kitchener, ON N2G 1Z5
(519) 572-9789
Canada
martinasteiger@earthlink.net

David Eichler, Ph.D.
Chair of Dissertation Committee
Holos University Graduate Seminary
5607 S. 222nd Rd
Fair Grove, MO 65648
USA
david4847@sbcglobal.net

Print Name of Participant

Signature of Adolescent Agreeing to Participate

Date

With my signature, I acknowledge that I have received a copy of the assent form to keep.

CONSENT FORM

**The Effects of a Wholistic Multi-Modal Programme
on the Well-being of Adolescents**

Holos University Graduate Seminary supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish your child to participate in the present study. Note that even if you agree to your child's participation in the study, your child is free to withdraw at any time without penalty of any kind, and without affecting your child's opportunities for participation in other projects offered by this department.

This study is designed to examine the effects of a comprehensive curriculum on multiple aspects of personal well-being. Through a comprehensive curriculum that addresses the individual as a whole being, the students will learn a series of tools they can employ in order to access their own intuition, to explore and direct their individuation and self-actualization process. This programme will examine the role of conscious will and intentionality. Kinesiology, biofeedback, guided imagery and visualization, relaxation and meditation techniques, Inner Counsellor, Autogenic Training, affirmations, breath work, and Therapeutic Touch are the concepts that will be taught in order to access personal inner power and intuitive skills. It is believed that these tools may be of assistance in making sound, grounded, and creative choices, both academically and personally.

I will meet the adolescents one time for teaching and assessment purposes. The students' overall well-being will be measured with regards to certain emotional and psychological parameters. These measurement tools will be administered a total of four times, two of which will take place on the day of the workshop. The other two times will be either before or after the workshop or both before, depending on the group to which the teenager has been assigned. I will deliver a full-day teaching workshop, which requires attendance of all participants. The teenagers are expected to carefully complete the assessments each time and to return them to me as soon as possible by mail. I will also be available per e-mail for personal, and optional, consultation related to this study.

There are no known risks to participating in this study. The expected benefits associated with the students' participation include practical tools to improve their personal well-being on multiple levels.

This study is being conducted during the winter and spring of 2004 as a doctoral research programme by an experienced former high school teacher who is currently a graduate student at Holos University. All procedures for this programme have been approved by an advisor in the Energy Medicine and Spiritual Healing programme, and by the Executive Committee of Holos University. I do solicit your participation but it is strictly

voluntary. You remain free to request your child discontinue participation in the study at any time without any penalty. Should your child choose to participate in this study, be assured though that confidentiality will be maintained throughout this project and names, test scores, or any other identifying information will not be associated with the research findings in any way. Names will be deleted from all research data before use. All findings will be presented as averages from all scores, as opposed to information on individual adolescent.

If you would like additional information concerning this study before, during, or after its completion, please feel free to contact me by phone, mail, or e-mail. I appreciate your assistance, support, and commitment. If you have any concerns or questions about the rights of a research participant in this study, you may contact the Holos University Graduate Seminary, Dean of Faculty and Academic Affairs at (888) 722-6109.

Sincerely,

(Martina Steiger)

Martina Steiger, M.A., B.Ed.
Principal Investigator
104 Water Street South
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martinasteiger@earthlink.net

David Eichler, Ph.D.
Chair of Dissertation Committee
Holos University Graduate Seminary
5607 S. 222nd Rd
Fair Grove, MO 65648
USA
david4847@sbcglobal.net

Print Name of Participating Subject

Print Name of Parent/Guardian

Signature of Parent/ Guardian of Subject

Date

With my signature I acknowledge that I am providing consent for my child, named above, to participate in this research study and I have received a copy of the consent form to keep.

A.14 Initial Letter of Instruction

Page 1 of 2

[date]

Dear Participant and Parents/ Guardians,

Thank you very much for your interest in the research study I am conducting. This is the first of two mailings you will be receiving. The purpose of this letter is to summarize and hopefully clarify for you the commitments and expectations of all involved with this study.

A) As the principal investigator of the study, I will supply all materials needed. That includes postage, photocopies or any other materials used for assessment and for teaching purposes. I will provide a safe and quiet teaching space and cookies, fruit and carrots for morning and afternoon snacks during the workshop as well as water. I am available per e-mail or by phone (from 8 AM to 8 PM) to answer any questions you might have, now or even after the completion of the research study.

B) As parents/guardians, you must sign the attached *Consent form*, which must be returned to me before the workshop with the first set of assessments. You are responsible for transportation of the teenager to and from the research site. Since lunch will not be provided, please ensure your teenager brings lunch and juice/water.

C) As participating teenager, you must sign the attached *Assent form*, which must be returned to me before the workshop with the first set of assessments. You must also complete the three parts of the assessment package each time you receive them in the mail. **It is important you read and follow the instructions very carefully**—I also highlighted some information. **Respect the dates below for completion of the assessment and return all forms by mail to me** (self-addressed and stamped envelopes are provided). Be assured that there are no right or wrong answers. Please answer the question as spontaneously and truthfully as possible. Do not think about them or ask anyone for explanations, except to clarify vocabulary if necessary. Use your own best judgement. The three tests should not take more than 25-35 minutes to complete in total. ***ALWAYS check each test to verify you answered EVERY question.*** If you are not sure about the answer, check off the one that is the most likely one. Please do not leave any questions unanswered.

You are expected to attend the one-day workshop from 9:30 to 5:30—no early dismissal possible. Make sure you bring your lunch and water/juice as well as a pillow and a blanket.

The highlighted group is yours. Please be mindful of the important dates listed below.

	By [date]	On [date]	On [date]	On [date]
Group A	Sign up	Complete assessments and return them by mail	Attend the one-day workshop	Complete assessments and return them by mail
Group B	Sign up	Complete assessments and return them by mail	Complete assessments and return them by mail	Attend the one-day workshop

The workshop will be conducted at [location of workshop with complete address], from 9:30 am -5:30 pm.

Warmest regards,

(Martina Steiger)

Martina Steiger, M.A., B.Ed.
 Principal Investigator
 104 Water Street South
 Kitchener, ON N2G 1Z5 Canada
 (519) 572-9789
 martinasteiger@earthlink.net

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APPENDIX B:
Instruments

B.1 Nowicki-Strickland Locus of Control Scale

Page 1 of 2

Name: _____ Date: _____ Age: _____

Gender: M F

Circle the most appropriate answer for you at this time.

1.	Do you believe that most problems will solve themselves if you just don't fool with them?	yes	no
2.	Do you believe that you can stop yourself from catching a cold?	yes	no
3.	Are some people born lucky?	yes	no
4.	Most of the time, do you feel that getting good grades means a great deal to you?	yes	no
5.	Are you often blamed for things that aren't your fault?	yes	no
6.	Do you believe that if somebody studies hard enough he or she can pass any subject?	yes	no
7.	Do you feel that most of the time it doesn't pay to try hard because things never turn out right anyway?	yes	no
8.	Do you feel that if things start out well in the morning that it's going to be a good day no matter what you do?	yes	no
9.	Do you feel that most of the time parents listen to what their children have to say?	yes	no
10.	Do you believe that wishing can make good things happen?	yes	no
11.	When you get punished, does it usually seem it's for no good reason at all?	yes	no
12.	Most of the time do you find it hard to change a friend's (mind) opinion?	yes	no
13.	Do you think that cheering more than luck helps a team to win?	yes	no
14.	Do you feel that it's nearly impossible to change your parent's mind about anything?	yes	no
15.	Do you believe that your parents should allow you to make most of your own decisions?	yes	no
16.	Do you feel that when you do something wrong there's very little you can do to make it right?	yes	no
17.	Do you believe that most people are just born good at sports?	yes	no

18.	Are most of the other people your age stronger than you are?	yes	no
19.	Do you feel that one of the best ways to handle most problems is just not to think about them?	yes	no
20.	Do you feel that you have a lot of choice in deciding who your friends are?	yes	no
21.	If you find a four-leaf clover do you believe that it might bring you good luck?	yes	no
22.	Do you often feel that whether you do your homework has much to do with what grades you get?	yes	no
23.	Do you feel that when a person your age decides to hit you, there's little you can do to stop him or her?	yes	no
24.	Have you ever had a good luck charm?	yes	no
25.	Do you believe that whether or not people like you depends on how you act?	yes	no
26.	Will your parents usually help you if you ask them to?	yes	no
27.	Have you felt that when people were mean to you it was usually for no reason at all?	yes	no
28.	Most of the time, do you feel that you can change what might happen tomorrow by what you do today?	yes	no
29.	Do you believe that when bad things are bound to happen they are just going to happen no matter what you try to do to stop them?	yes	no
30.	Do you think that people can get their own way if they just keep trying?	yes	no
31.	Most of the time, do you find it useless to try to get your own way at home?	yes	no
32.	Do you feel that when good things happen they happen because of hard work?	yes	no
33.	Do you feel that when somebody your age wants to be your enemy there's little you can do to change matters?	yes	no
34.	Do you feel that it's easy to get friends to do what you want them to?	yes	no
35.	Do you usually feel that you have little to say about what you get to eat at home?	yes	no
36.	Do you feel that when someone doesn't like you there's little you can do about it?	yes	no
37.	Do you usually feel that it's almost useless to try in school because most other people are just plain smarter than you are?	yes	no
38.	Are you the kind of person who believes that planning ahead makes things turn out better?	yes	no
39.	Most of the time, do you feel that you have little to say about what your family decides to do?	yes	no
40.	Do you think it's better to be smart than to be lucky?	yes	no

B.2 State-Trait Anxiety Inventory (STAI)

SELF-EVALUATION QUESTIONNAIRE

STAI Form Y-1

STAI Form Y-2

(One two-sided sheet with Y-1 on one side and Y-2 on the other side)

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Published by Mind Garden, In., 1690 Woodside Rd., Suite 202, Redwood City, CA 04061

STAIP-AD Test Form Y

www.mindgarden.com

B.3 Self-Description Questionnaire II (SDQ-II)

SELF DESCRIPTION QUESTIONNAIRE - II

SDQ II

(Seven pages on four double-sided sheets, stapled together)

©H. W. Marsh, 1999
Self-concept Enhancement and Learning Facilitation (SELF) Research Centre, University
of Western Sydney.

B.4 Anecdotal Questionnaire

Final Questionnaire

*Please answer these questions as truthfully and completely as possible. **You are not required to write your name on this questionnaire.** However if you wish to do so, please go ahead. It will give me the opportunity later to ask for your permission to quote you in a testimonial. If there is anything missing here, feel free to add whatever you wish—you can use the back of this sheet. Your personal stories are an important component of the study and will be very helpful for future projects. I truly appreciate your efforts. Thank you for your participation and wonderful contributions.*

1. Do you have any suggestions regarding the scheduling of this study?

2. Was anything missing in the set-up of the workshop and/or the whole study?

3. Which aspect(s) of this study did you enjoy the least?

4. Which aspect(s) of this study did you enjoy the most?

5. What, if anything, did you learn from this experience?

6. Do you believe your participation in this study has made a permanent impression on you? If so, in which way?

7. Which technique(s) do you consider the most useful for yourself in the future? Why?

8. Do you believe you have changed through this experience? If so, how?

9. Do you have a personal success story you would like to share?

APPENDIX C: **Procedures**

C.1 Request for Conditioned Space in Morning Meditation/Prayer Ritual

“Mother, Father, God, Goddess, the One,
Dear Lord, Angels and Spirit Guides.

Please guide me and direct me to create a sacred space for the workshop I am conducting today. You know better than I our need for a safe, quiet, protected, and peaceful space where teaching and learning can occur in the best way possible that serves the highest good of all. Please guide, direct, and help me hold that perfect and sacred space for the duration of the workshop so all our minds, bodies, and spirits can work together in joyful harmony all day.

Thy will be done. Amen.”

C.2 Imprinting Crystal

“Mother, Father, God, Goddess, the One,
Angels and Spirit Guides,

I am asking you all
To focus your love and light,
Peace and joy into this crystal
So it will absorb and send into the light
Any sorrow, pain or darkness
That may be present or arise tomorrow during the course of the workshop.

May every aspect of all our beings
Fall into place and serve the highest good of all concerned.

Bless this crystal that will help us become and stay clear and focused,
Directing all that is not needed into your light and grace,
So we can feel safe and secure in your sacred space.

And so it is. Amen.”

C.3 Reference Materials

Page 1 of 2

- Assagioli, Roberto. *The Act of Will: A Guide to Self-Actualization and Self-Realization*. Knaphill: David Platts Publishing Company, 1998.
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Steiner, Rudolph. *How to Know Higher Worlds: A Modern Path of Initiation*. Gt. Barrington: Anthroposophic Press, 1994.

Tiller, William A., Walter E. Dibble, and Michael J. Kohane. *Conscious Acts of Creation: The Emergence of a New Physics*. Walnut Creek: Pavior Publishing, 2001.

Wauters, Ambika. *Chakras and Their Archetypes: Uniting Energy Awareness and Spiritual Growth*. Freedom: The Crossing Press, 1999.

Wills, Pauline. *Visualization: A Beginners Guide*. London: Hodder & Stoughton, 1995.

C.4 Music Listing

Five different CDs were used at various points throughout the workshop to help clear and hold the space.

1. Coxon, Robert Haig. *The Silent Path*. R.H.C. Productions, Inc., 1995. RHC-CD-5501.

This CD listed was used to condition the space in the morning and to set the atmosphere before each workshop. The principal investigator turned on the music 20 minutes prior to the start of each session.

2. Premal, Deva. *Embrace*. Prabhu Music, 2002. WS 0044 White Swan.

This CD was played during the morning break.

3. Campbell, Don. *Music for the Mozart Effect: Unlock the Creative Spirit*. Vol. 3. Spring Hill Music, 1997. SHM 6503.2.

This CD was used during the lunch hour, which the students spent together in the same environment together.

4. Nicol, Bruce. *Gentle Ecstasy: Music for Singing Bowls*. DDD, 1997. BNC 197.

This CD was played during the afternoon break.

5. Calverley. *Celtic Mysterie*. Oasis Productions Limited/Socan, 1997. OASCD 1003.

This CD was played during the completion of the second round of data collection towards the end of the workshop, beginning at 4:50, until the students had left.

C.5 Clearing Space

The prayer reads as follows:

“Dear Mother, Father, God, Goddess, the One,
Surely your presence is in this place.
Let us feel your power and your grace.
Allow us to clear this space
So we can see each eternal face.

May Love and Light envelope us and
Protect us in this quiet, peaceful, safe, and sacred space.

Thy will be done. Amen”

C.6 Cover Letter for Second Mailing Group B

[date]

Dear workshop participant,

Thank you for completing and returning the first round of questionnaires as well as the consent and assent forms. This is your second round of questionnaires, which I am asking you to **complete on [date] and return to me as soon as possible upon completion** (return envelopes are provided).

Just a reminder:

It is important you read and follow the instructions very carefully—I also highlighted some information. Be assured that there are no right or wrong answers. ***Please answer the questions as spontaneously and truthfully as possible.*** Do not think about them and do not ask anyone for explanations, except to clarify vocabulary if necessary. Use your own best judgement. The three tests should not take more than 25-35 minutes to complete in total. ALWAYS check each test to verify you answered every question. If you are not sure about the answer, check off the one that is the most likely one. Please do not leave any questions unanswered.

I am looking forward to seeing you on [date] at 9:30 AM (until 5:30 PM) at [workshop location]. Please make sure you bring your lunch, juice/water, a pillow and a blanket. I will provide snacks for the morning and afternoon breaks and an interesting workshop for you.

Once again thank you. I will see you on [date].

Warmest regards,

(Martina Steiger)

Martina Steiger, M.A., B.Ed.
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David Eichler, Ph.D.
Chair of Dissertation Committee
Holos University Graduate Seminary
5607 S. 222nd Rd
Fair Grove, MO 65648 USA
david4847@sbcglobal.net

C.7 Final Cover Letter for Group A

[date]

Dear Participants,

Well, this is it. Congratulations!!! You have made it to the last part of the research project, which hopefully has been an interesting and worthwhile learning experience for you. *I certainly enjoyed meeting all of you and feel very honoured I was able to spend a full day with you recently.*

******Please read the following important information:***

In addition to the assessments forms, with which you are well acquainted by now, I included a final questionnaire. I truly value any feedback you can give me. *No names are required on that questionnaire. You do have the option of adding your name to that questionnaire.* If you decide to include your name, please understand that you are giving me the opportunity to refer back to you at a later point in time and ask you for permission to quote you. If you think you might feel comfortable with that, check with you parents and then add your name to the final questionnaire. You have my assurance I will ask you directly for permission before quoting you. There is absolutely no expectation and no pressure—whichever decision you make will be just perfect.

Please complete the three assessment forms and the questionnaire on [date] and return them in the stamped and self-addressed envelope immediately afterwards.

Thank you again for your wonderful participation. Feel free to contact me per telephone or e-mail if you or your parents/ guardians have further questions, comments, or concerns.

Kindest regards,

(Martina Steiger)

Tel: (519) 572-9789 E-mail: martinasteiger@earthlink.net

C.8 Observations by Parents/Students after Completion of Study

Page 1 of 3

Mother of a 14-year old male participant (received 1 week after the workshop):

“I just wanted to thank you for last Sunday’s session you held in [location]. [My son] came home all fired up and very excited about what he had learned. He has been using some of his newly learned skills at school this week. His sister was bugging him the other day and he told her that she couldn’t penetrate his bubble! Wow, that nearly blew me away as normally he would have started a war with her.

Again, just wanted to let you know the kind of affect you have had on one 14 year old boy. Thanks again.”

Mother of a 15-year old male participant (received 10 days after the workshop):

“...Just wanted to thank you for the workshop that my son attended. He returned quite enthused and had much to tell. The visualization sounded quite interesting. Hey, he even let me give him some Bach Flower Remedies this weekend without any fuss. Sooooo, thanks again....”

Mother of a 17-year old female participant (received 10 days after the workshop):

“Thank you for a powerfully inspiring day for my daughter. While she reacted strongly to the two cats and may need any future contact in a cat-free environment, she was so ecstatic about what she’d learned. To quell her “almost asthma attack” she began to explain what the energy work, auras and meditation were all about. Within the shortest time we’ve seen, she had her asthma under control by slowly explaining the various techniques you’d shown and by using the deep breathing/energy breathing she had her voice and almost normal breathing returned in about 75 min. That is about the shortest time I’ve seen her prevent a trip to emergency; she was so passionate about the effects of the grounded breathing and talked me through the process.

Last night we did some meditation, again, using the language you taught. She and I found it enormously helpful. We also plan to try the dowsing (something we were taught when she was about 10 but seemed to have gotten away from) as another information tool.

Thank you so much for the effective day. I would be most interested in any further sessions you plan to offer locally in the future knowing that they’ll likely happen after your graduation and knowing that there’ll be a cost involved. You certainly have an important and niche market helping today’s overwhelmed teens. God Bless You! Thankfully, ...”

Mother of an 18-year old female participant (received 11 days after workshop):

“Hello Martina!! I wanted to tell you how much you were appreciated this week by myself and by [my daughter].

A few hours after she came home from your house on Sunday, she was alone in the house and our 16 year old beloved cat [name] had 2 grand mal seizures.....she was so upset and thought he was dying before her eyes as most of us think when faced

with seizures before our eyes, we brought him to emergency and stabilized him - later that night, she practiced the techniques she learned by you that day which helped calm her. [Name of cat] had been diagnosed with brain cancer the previous Friday so we knew we had a sick cat on our hands. The vet and I convinced her to go to [name of city] for her school trip as planned, leaving Tuesday morning, somewhat assuring her that [the cat] will be OK ... and he would want her to go kind of thing (but say goodbye just in case kind of thing). Well it turned out [the cat] passed away on Wednesday morning. [My daughter] of course freaked out in [name of city] not being able to be there with him (she called in for reports on [the cat]) and hopefully has practiced what she learned from you once again. So I thank you - what you are teaching teens is great - as I am sure it has helped [my daughter] tremendously this past week....”

The daughter called three weeks after completion of the workshop and reported the same story in her own words, stating how surprised she was herself about the effects the workshop had on her.

Mother of a 15-year old female teenager, diagnosed with anxiety disorder (received 3 weeks after the workshop).

“...What I wanted to let you know, was that I am finding she is using the knowledge she has learned from your workshop to help herself disable the panic attack when it starts. The breathing and centering that she was taught is what she tends to rely on...I just wanted to thank you for giving her the opportunity to believe in herself...”

Comments from an 18-year old female participant (received 4 weeks after the workshop):

“Thank you once again for the beautiful experience I had at your workshop. It has helped me more than you will ever know! Lots of love ...”

Comments from an 18-year old male participant (received 2 months after the workshop). He had asked for further reference materials and had borrowed three books from the principal investigator:

“I would like to thank you a lot for making this available to me and other people. I (as I am sure a lot of other people that don't have access to this information) would truly like and need it. It has helped me already in life and I know as a soon to be University student it will greatly help me in my life. Not only have you helped me but I in turn have been talking to a lot of people about this and also have led them to books and tapes on it. They are very thankful, as am I too of having the teachings. So once again thank you for your teachings and thoughts. I will remember them and continually learn from them....I have no doubt that this is a critical part of school and should be in every class....”

Comments from the mother of a 17-year old female participant (received 2 months after completion of the workshop):

“i wanted to share with you [my daughter's] break through in regards to a friendship she needed to confront. she stayed grounded and in her power as she honestly

communicated her feelings towards her friend and her disappointment as to how things were going. she said in the past she would choose not to deal with it and remain detached until time would ease the pain. she shared with me how she realized it didn't matter so much if the friendship survived her honesty or not. what mattered was the feeling of peace at having dealt with something honestly and whatever comes of it, so be it. she actually did come to learn that the friendship wasn't mutually nurturing. [My daughter] is using applied kinesiology regularly and is learning to trust her "gut feelings" more and more. THANK-YOU for a very positive experience and life skills that will assist her in her growth."

Comment from the mother of a 14-year old male participant (received 9 weeks after completion of the workshop):

"He was inspired by your workshop and has since meditated and used his special place. I'm very pleased that he gained that pearl through your workshop. I can't say I've noticed a tangible difference with him - but he does seem empowered by having his own route to centre now. His comment however is that "nothing really happened"."

Comments from a 16-year old female participant (received 3 months after completion of the workshop):

"This course has helped my so much! It have noticed an improvement it my tests and ability to handle stress easier. I no longer break down with hard projects and I have been able to sleep easier because I meditate every night! Thank you again!"

Mother of a 15-year old male participant (received 3 months after completion of the workshop):

"When [my son] and I talked about the workshop he spoke very favourably, and for him that was HUGE. He's a guy ya know, and a teen; and all that amounts to ATTITUDE! He used TT to help cure my, I can't remember? headache or tight muscle, ? He talked about the visualization exercises and sounded quite intrigued by that. Where I truly noticed a shift in thinking was his receptivity to my administering Bach Flower Remedies. In the past he always refused and dismissed it as Mom's flakey stuff. The weekend returning from the workshop, a situation came up and I wanted to give him a remedy. For the first time ever he willingly took it. Ever since then he will take a remedy if I suggest it."

Comment from the mother of an 18-year old male participant (received 4 months after completion of the workshop):

"I'd like to comment that I feel [my son] and I communicate better since his involvement in the study. He seemed to be quite 'moody' and very argumentative before. I'm crediting the study!"

C.9 Format of Workshop/Lesson Plan

One-day Workshop: Lesson Plan

1.	Opening Circle—Introductions: Adjective + Name		9:30-9:40
2.	Questionnaires	Pens and clipboards; sequence	9:40-10:10
3.	Workshop Notes Sheet	Explain plan for the day	10:10-10:15
4.	Dowsing Rod Demonstration & Whole Self Model	Show HO	10:15-10:30
5.	<ul style="list-style-type: none"> • Discussion about Stress • Breathing • Grounding, Centring: • Balancing Brain 	Diaphragmatic Breathing Captain's Hook CN Tower Alternate Nostril Breathing	10:30-10:55
6.	Air Meditation	Text	10:55-11:10
7.	Short Break	Cookies/ Fruit/Carrots	11:10-11:20
8.	Relaxation Response	Text	11:25-11:40
9.	5-Step Meditation	Text	11:40-11:55
10.	Place of Peace Discussion & Guided Imagery	Text	11:55-12:20
11.	Muscle Testing/Dowsing: Protocol—Permission; Highest good of all/ Best interest of all	Surrogate; self; pendulum	12:20-1:00
12.	Lunch		1:00-1:30
13.	Biofeedback	Thermometer: with AT	1:35-1:45
14.	Autogenic Training	Tape	1:45-2:05
15.	Chakra Balancing: Discussion & Guided Imagery	Text; show Grey's book	2:05-2:25
16.	Review: Breathing, Centring, Grounding		2:25-2:30
17.	Higher Self Discussion & Guided Imagery	Text	2:30-2:50
18.	Review: Balance	Lazy 8s	2:50-3:00
19.	Therapeutic Touch™	Demo/ practice/ Brennan	3:00-3:35
20.	Short Break	Cookies/Fruit/Carrots	3:35-3:45
21.	Finding Guide Discussion & Guided Imagery	Text	3:50-4:05
22.	Inner Counselor Process™	HO; demo; practice	4:05-4:50
23.	Dowsing Rod Demo	Redo 1 st demo	4:50-5:00
24.	Questionnaires	All 3 tests; for A also anecdotal	5:00-5:25
25.	Closing Circle Exercise	Closing Circle Exercise	5:25-5:30

C.10 Workshop Summary and Notes Sheet

One-day Workshop

Dowsing Rod Demonstration & Whole Self Model	
Discussion about Stress Grounding, Centring: Breathing, Balancing Brain, Emptying Mind	
Air Meditation	
Progressive Muscle Relaxation	
5-Step Meditation	
Place of Peace Discussion & Guided Imagery	
Muscle Testing/Dowsing: Protocol—Permission; Highest good of all/ Best interest of all	
Biofeedback	
Autogenic Training	
Chakras: Discussion & Guided Imagery	
Review: Breathing, Centring, Grounding	
Higher Self Discussion & Guided Imagery	
Review: Balance	
Therapeutic Touch™	
Finding Guide Discussion & Guided Imagery	
Inner Counselor Process™	
Dowsing Rod Demo & Closing Circle Exercise	

C.11 Dowsing Rod Demonstration

This is a description of the demonstration.

It is important to note here that the person holding the dowsing rods be grounded and centred and remain so during the demonstration. Detachment from outcome, meaning what the ego-personality might want to happen, is really important here as well.

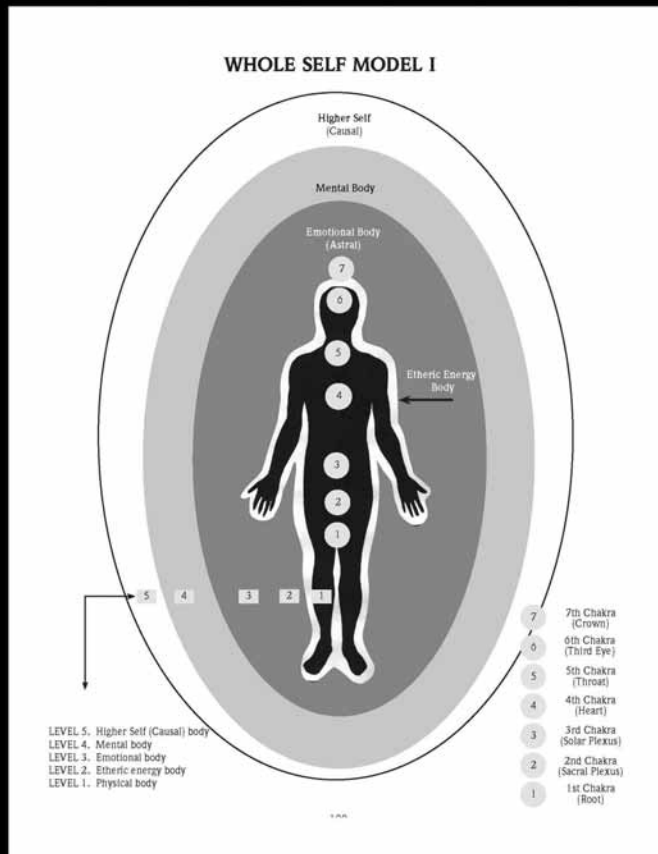
The principal investigator asked for a volunteer to step forward. That volunteer stood up, stepping just in front of her/his chair. The principal investigator moved 10 feet away from the volunteer, facing the person. She was holding the small dowsing rods (made of copper and 6 inches in length) straight ahead of her, directly pointing at the volunteer. She instructed the rest of the group to watch the dowsing rods. She then invited the volunteer to walk towards her. The dowsing rods crossed, indicating the edge of the person's energy field, when the volunteer was on average between 2-3 feet away from the end of the dowsing rods the principal investigator was holding. The same volunteer was then asked to return to the same starting point. The group received the instruction once again to watch the dowsing rods, whereas the volunteer was told to think of a sad or angry moment and to hold that in mind, while walking towards the dowsing rods. This time, the dowsing rods only crossed when the adolescent almost came in contact with them. The third step of this demonstration then proceeded as follows: The volunteer returned again to the original starting point, this time being asked to hold a happy moment in mind. The group's instructions remained the same as before. In this part of the demonstration, the dowsing rods usually crossed when the volunteer was still 4-5 feet away. All the participants were then asked to voice their opinions on what they thought was happening in that demo. The principal investigator just listened, and from time to time rephrased a comment or a question. Generally, the participants as a group explained very well what they had just witnessed, even though many of them were taken by utter surprise. A common statement was: "If this is what happens, then I have no personal space when I am upset. Perhaps that's why I get even angrier when people try to calm me down, being really close." Another conclusion the participants tended to draw was this: "I can see that I have a lot more protection around me when I am in a good mood and everybody else is too. But I have no protection when I am sad, angry or upset. No wonder I get myself deeper and deeper into trouble then."

For the second major aspect to this demo, a different volunteer was used. This time the volunteer was sent out of the room. The principal investigator asked the group to think of a sad moment in their lives and a happy moment. She also instructed the group that for the demo, she would raise one finger as a cue for the group to hold the sad moment in their minds, and two fingers to hold the happy moment. Each participant was asked to indicate with a nod of the head as soon as they were holding their thought in mind. When the volunteer re-entered the room, the principal investigator checked the energy field of the teenager the same way as she had done in the first half of the demo, always with a very similar result of the volunteer standing about 2-3 feet away from the dowsing rods when they started crossing. Then the principal investigator raised one finger to cue the group and asked the volunteer to repeat exactly what she/he had just done. The surprise on all sides, in particular on the part of the volunteer, was enormous when the dowsing rods did not move until the volunteer came close enough to almost

touch them with his/her body. The principal investigator assured the volunteer that he/she was doing a great job and need not worry about doing anything wrong. The third experiment involved the same procedure, except that this time the principal investigator raised two fingers. When every participant had nodded, the volunteer was asked once again to repeat her/his walk again. This time though, the dowsing rods started crossing at a distance of approximately 5-6 feet from the volunteer. For the final demo, all the participants, including the volunteer, were asked to think of a happy or content moment and hold that thought while the volunteer was walking towards the dowsing rods. The energy field was so big at that point that the dowsing rods crossed at approximately 7-8 feet away from the volunteer. At this point, all the participants and the principal investigator returned to their seats.

C.12 Whole Self Model

From the INNER COUNSELOR © Ann Nunley



C.13 Discussion about Stress

The principal investigator asked the questions, soliciting responses from the participants. The explanations and comments in square brackets were inserted somewhere within the five minutes by the principal investigator.

What is stress?

Are you sometimes stressed out? And, if so, how do you know you are stressed out?

What happens to your breathing when you are stressed out (angry, sad, anxious, nervous, mad)?

What happens when we stop breathing?

What happens when we breathe?

[Breathing is the most basic function of our body, a perfectly balanced exchange of carbon dioxide and oxygen.]

What are the different ways of breathing and what does it tell us about ourselves?

[Breathing is a barometer for our physical and emotional state and the first stress indicator].

What happens to your voice when you are stressed, anxious or nervous?

Where in your body do you feel the stress?

What happens when you get nervous during a test, presentation, game, show etc?

Have you ever wondered why you know certain information before a test but cannot recall it during a test and yet, as soon as you hand in the test you remember the answer?

What happens to the brain and the mind? [Oxygenated blood gets sent to the brain and allows for optimal thinking, remaining clear and calm, allowing access to whatever is there].

Who knows what diaphragmatic breathing is?

[The most simple solution and one of the most basic steps in dealing with a stressful event is to BREATHE. Even and deep diaphragmatic breathing leads to relaxation even under great emotional distress]

C.14 Breathing, Grounding, Centring

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The principal investigator followed this script as closely as possible, deviating only due to questions or comments from the participants.

After the discussion on stress, remember this: Breathe!!! Always remember to breathe. If you get stressed out, feel emotional in any way, feel pain—remember to breathe. Start focusing on breathing and when you have that under control then perhaps you can start dealing with the actual problem. And by the way, that problem might not present itself exactly the same any more once you breathe properly again.

So let's start with the basics:

Lie on the floor with your head on the pillow. Your legs are either extended straight ahead of you or in semi-supine position.

[The principal investigator generally used one of the participants who automatically assumed the position as an example for the rest of the group.]

Put one hand on your abdomen. Take a long deep breath in through the nose, if at all possible, as deep as you can. Direct your attention to your hand and see and feel if your hand moves when you inhale. Exhale slowly through the mouth. On the next inhalation, do your best to push your hand out—make your belly move. Exhale fully, pushing as much air out of your lungs as possible. On the next inhalation, move your hand a little closer to the pubic bone and see if you can still feel your hand moving up when you breathe in. Adjust the position to the place where you can still feel the movement and take three more breaths in and out. Now put one hand on either side of your rib cage and feel if your inhalation can push the hands out as well. Exhale and repeat two more times.

[The principal investigator monitored the participants before continuing].

Now slide one hand into the dip in your lower back and move your hand up just a little. See if you can feel your hand being pressed against the floor as you are inhaling. Exhale and repeat two more times.

Next, pick the one area that you found the most difficult and focus your attention on directing your breath right into that spot.

Everybody roll over on your side. Bring your knees up towards your face and push yourself slowly into a sitting position. Then stand up, placing your feet shoulder-width apart. Plant your feet solidly on the ground and balance your weight evenly on both feet. Shift your weight forward and then back in order to find the mid-point for the balanced distribution of your weight. Feel your feet connecting with the ground and imagine roots at the bottom of your feet extending deep down into the earth. Breathe deeply, imagining the breath coming up through the roots, through the soles of your feet.

Let the breath travel up the back of your legs, up the spine, right up to the top of your head. Now imagine the universal light energy descending through the crown of your head. Allow the universal light energy to merge with the earth energy as the breath travels down the front of your body, all the way down the front of your legs, through the roots into the ground. Take a few deep breaths in through your nose, if you can, and out through your mouth, following the same breath pattern.

Let's do it one more time together. Feel your feet connecting with the ground and imagine the roots at the bottom of your feet extending deep down into the earth. Imagine the breath coming up through the roots, through the soles of your feet. Let the breath travel up the back of your legs, up the spine, right up to the top of your head. Now imagine the universal light energy descending through the crown of your head. Allow the universal light energy to merge with the earth energy as the breath travels down the front of your body, all the way down the front of your legs, through the roots into the ground. On your exhale, empty your lungs as much as possible. Feel yourself anchored deep into the ground through the roots and also anchored into and connected with the universe through the universal light energy.

This is the start to the grounding and centring technique, which you can do while you are sitting, standing, or lying down.

Now let's continue:

Why do we need to ground and centre, do you think?

[The principal investigator usually received answers such as 'to calm down,' 'to focus better,' 'to breathe better.' At this point the principal investigator expanded the responses:]

The idea of centring comes from pottery, where the clay needs to be centered on the pottery wheel because otherwise, the product becomes distorted due to the wobbly action of the wheel. It's a really good metaphor to remember. If we learn to centre and stay centred as much as possible, we can take the feedback from the wobbly wheel of life—when things don't go right—and adjust accordingly in a healthy way, coming from the heart. The poet T.S. Eliot, whom some of you may have encountered, especially his famous poem 'The Wasteland,' refers to it as the "still point of the turning world." We can all reach this still point when we learn how to balance ourselves. Then we can start to live our lives from that point without absorbing all the stress and the aggravation around us.

C.15 Balancing the Brain

The principal investigator followed this script as closely as possible. The only deviations occurred when there were questions or a participant experienced some difficulties.

Breathing and grounding leads us to balancing our brains.

There are four exercises, apart from the breathing we did at the beginning, which will help you to do just that, some of which you can easily do sitting at your desk at school, before or even during a test. Others would perhaps be good to incorporate into your morning or evening routine, which you will hopefully establish after this workshop. I will teach you the first three now, the fourth one we will practise this afternoon.

Exercise 1: CN Tower Exercise

This is an exercise that my high school students enjoyed very much. I did not have a name for it and they decided, about 8 years ago, to call it the 'CN Tower' exercise. It is a physical exercise that works well to improve co-ordination, and improve physical and mental balance.

Here is what you need to do. First of all you need to stand up. Then crouch down and shift your weight onto your left leg. Put your left hand on your right knee. Breathe out. Think of the second chakra, about 5 cm down from your belly button, as your physical powerhouse. It is the physical centre of your body, as it is taught in many martial arts classes and also in Pilates. Straighten yourself out into a standing position, balancing yourself on your left leg, with your right knee raised and your right arm extended straight into the air and breathe in. Breathe out, remaining balanced with your focus on your second chakra, the powerhouse. Breathe in and crouch down again. This time we will just switch sides. Since we always attempt to achieve balance, everything is done in sets of two.

Crouch down and shift your weight onto your right leg. Put your right hand on your left knee. Breathe out. Think of the second chakra, about 5 cm down from your belly button as your physical powerhouse. It is the physical centre of your body, as it is taught in many martial arts classes and also in Pilates. Straighten yourself out into a standing position, balancing yourself on your right leg, with your left knee raised and your left arm extended straight into the air and breathe in. Breathe out, remaining balanced with your focus on your second chakra, the powerhouse. Breathe in and crouch down again.

Let's repeat the set one more time together.

Crouch down and shift your weight onto your left leg. Put your left hand on your right knee. Breathe out. Think of the second chakra, about 5 cm down from your belly button as your physical powerhouse. It is the physical centre of your body, as it is taught in many martial arts classes and also in Pilates. Straighten yourself out into a standing position, balancing yourself on your left leg, with your right knee raised and your right arm

extended straight into the air and breathe in. Breathe out, remaining balanced with your focus on your second chakra, the powerhouse. Breathe in and crouch down again. This time we will just switch sides. Since we always attempt to achieve balance, everything is done in sets of two.

Crouch down and shift your weight onto your right leg. Put your right hand on your left knee. Breathe out. Think of the second chakra, about 5 cm down from your belly button as your physical powerhouse. It is the physical centre of your body, as it is taught in many martial arts classes and also in Pilates. Straighten yourself out into a standing position, balancing yourself on your right leg, with your left knee raised and your left arm extended straight into the air and breathe in. Breathe out, remaining balanced with your focus on your second chakra, the powerhouse. Breathe in and crouch down again.

Now do the set one more time on your own. You can do it as fast or as slowly as it feels comfortable to you.

[The principal investigator usually inserted a few encouraging comments here, especially intended for those adolescents who felt visibly uncomfortable having to move or who felt very self-conscious].

Exercise 2: Alternate Nostril Breathing

Now let's sit down again. The second exercise is known as 'Alternate Nostril Breathing,' and is taught in many Yoga and Tai Chi classes, as well as other martial arts classes. The reason why this exercise is important, is the fact that the air we take in through the right nostril is thought to feed the left side of our brain, which in turn is responsible for the right side of our body. That means, of course, the air taken in through the left nostril feeds the right side of the brain, which in turn controls the left side of the body. Most of us favour one side over the other over the course of the day. Alternate Nostril Breathing relieves nervous tension and stress, bringing a sense of peace and quietness to the body, mind and spirit.

Here is what you do. Just watch me and follow the instructions.

Sit in a balanced and comfortable position with your spine straight and your body relaxed. Place your right thumb lightly against your right nostril; your index or middle finger against your left nostril. Exhale deeply through both nostrils. Press the right nostril closed with the thumb and quietly inhale deeply through the left nostril to a count of four. Keeping the right nostril closed, press the left nostril closed with your index or middle finger and retain the breath for a count of four. Open the right nostril and exhale deeply through it to a count of four. Without pausing, inhale through the right nostril to a rhythmic count of four. Press the right nostril closed with your thumb and hold for a count of four. Open the left nostril and exhale deeply through it. Without pausing, inhale through your left nostril to a count of four.

[For the second round, the principal investigator just read the following summary and watched the participants.]

[Summary:]

Inhale through left nostril for a count of eight.
Hold both nostrils closed for a count of four.
Exhale through right nostril for a count of eight.
Without pause:
Inhale through right nostril for a count of eight.
Hold both nostrils closed for a count of four.
Exhale through left nostril for a count of eight.

Let's do it two more times together.

[The principal investigator read the summary two more times and then proceeded to suggest that completing up to ten rounds of this breathing technique on a daily basis would be extremely beneficial, also challenging the participants to extend the counts to a count of 8 for the inhalation and exhalation.]

Exercise 3: Captain's Hook

The next exercise is Captain's Hook—a Brain Gym® exercise which some of you will be familiar with. This exercise helps in particular when feeling sad, confused, or angry because it helps to balance the emotions and deepens your capacity to become centred and listen to your heart. You do this exercise in a sitting position, whereby you sit with your weight balanced and your spine as straight as possible. Your breath extends deep into the diaphragm.

First, cross your left ankle over the right one. Next, extend your arms and cross the right wrist over the left. Then interlace your fingers and draw your hands up toward your chest. Hold this position for 60 seconds, breathing deeply into the diaphragm, grounding yourself, with your eyes closed or unfocused, your tongue resting on the roof of your mouth, lips slightly parted. Uncross your arms and your legs and do the opposite movement. Cross your right ankle over the left one. Extend your arms and cross the left wrist over the right. Then interlace your fingers and draw your hands up toward your heart chakra. Hold this position for 60 seconds, breathing deeply into the diaphragm, grounding yourself, with your eyes closed or unfocused, your tongue resting on the roof of your mouth, lips slightly parted. Uncross your legs and put your fingertips together across your heart chakra. Ground and centre in this position for another 60 seconds, breathing the earth energy up the back of your spine and bringing it down the front with the universal light energy, right down into the ground. Then open your eyes and assume a normal position again.

C.16 Air Meditation

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Adapted by Martina Steiger (2003) from “Air Meditation,” in Mike George, *Learn to Relax: A Practical Guide to Easing Tension and Conquering Stress* (San Francisco: Chronicle Books, 1998), 49.

This script was read verbatim each time by the principal investigator.

Sit comfortably either with your eyes closed if that feels all right to you or just with your eyes unfocused, looking at the floor ahead of you. Make sure your weight is evenly distributed on both sides. Ground and centre yourself. Feel your feet connecting with the ground and imagine the roots at the bottom of your feet extending deep down into the earth. Imagine the breath coming up through the roots, through the soles of your feet. Let the breath travel up the back of your legs, up the spine, right up to the top of your head. Now imagine the universal light energy descending through the crown of your head. Allow the universal light energy to merge with the earth energy as the breath travels down the front of your body, all the way down the front of your legs, through the roots into the ground. Take a few deep breaths in through your nose, if you can, and out through your mouth, following the same breath pattern.

Let's do it one more time together. Feel your feet connecting with the ground and imagine the roots at the bottom of your feet extending deep down into the earth. Imagine the breath coming up through the roots, through the soles of your feet. Let the breath travel up the back of your legs, up the spine, right up to the top of your head. Now imagine the universal light energy descending through the crown of your head. Allow the universal light energy to merge with the earth energy as the breath travels down the front of your body, all the way down the front of your legs, through the roots into the ground. On your exhale, empty your lungs as much as possible.

Now breathe the same breath pattern two more times, this time without my instruction, though. You are on your own. Begin by becoming aware of your grounding and centering. ...

[Pause for at least two minutes; then provide the cue]—

Direct the breath as low into your abdomen as you can.

Now pay attention to your thoughts. Visualize, sense, imagine, or feel each thought as a bubble or a balloon (and feel free to imagine them in different colours if that helps) and then picture or imagine all of your thoughts as a mass of bubbles or balloons. As you do so, imagine all of these thought-bubbles are being blown away and notice how your body and mind react to this....

[Pause for at least 90 seconds].

Direct your attention now to your nostrils, breathing in and out through your nose at this point. Breathe in and out and observe the air as it passes through your nostrils. Feel, visualize or sense that air as you wilfully change the flow of air—speed, quantity and evenness of the breath. Now focus your attention on producing a long and smooth exhalation, emptying the lungs as much as possible, letting the inhalation take care of itself. ...

[Pause for one minute].

Has your mind stayed focused or has it begun to wander? If it has, allow the thoughts to become bubbles or balloons. Imagine blowing them away. Then simply redirect your attention on your nostrils and let the sensation of breathing fill your conscious mind.

Always make sure you stay fully grounded, with your roots firmly fastened in the ground. [Pause for 20 seconds]. Take a few more breaths and then bring your attention back to the present moment in this room, feeling refreshed, alert and in the NOW moment.

[Pause for 30 seconds].

If you practice this a few minutes each day, you will feel yourself breathing deeply most of the time.

C.17 Progressive Muscle Relaxation

Script written by Martina Steiger (2003).

The principal investigator always followed the script verbatim.

Sit comfortably either with your eyes closed—if that feels all right to you—or just with your eyes unfocused, looking at the floor ahead of you. Make sure your weight is evenly distributed on both sides. Ground and centre yourself. Feel your feet connecting with the ground and imagine the roots at the bottom of your feet extending deep down into the earth. Imagine the breath coming up through the roots, through the soles of your feet. Let the breath travel up the back of your legs, up the spine, right up to the top of your head. Now imagine the universal light energy descending through the crown of your head. Allow the universal light energy to merge with the earth energy as the breath travels down the front of your body, all the way down the front of your legs, through the roots into the ground. Take a few deep breaths in through your nose, if you can, and out through your mouth, following the same breath pattern.

Now clench your right fist, making it tighter and tighter. Study the tension as you do so. Keep it clenched and notice the tension first in your fist, then traveling through your hand into your forearm. Clench the muscles. ...Breathe into the tension... Now relax. Feel the looseness in your right hand, as you straighten out the fingers and notice the contrast with the tension. Concentrate on the feeling of relaxation. Breathe into the relaxation... Repeat this procedure with your right fist, always breathing into the tension. So, clench your right fist, making it tighter and tighter. Study the tension as you do so. Keep it clenched and notice the tension first in your fist, then traveling through your hand into your forearm. Really clench the muscles. ...Breathe into the tension... Now relax. Feel the looseness in your right hand, as you straighten out the fingers and notice the contrast with the tension. Concentrate on the feeling of relaxation... Breathe into the relaxation... Repeat the entire procedure with your left fist. Clench your left fist, tighter and tighter, studying the tension as you do so. Keep it clenched and notice the tension first in your fist, then traveling through your hand into your forearm. Clench the muscles. Breathe into the tension... Now relax. Feel the looseness in your left hand as you straighten out your fingers, and notice the contrast with the tension. Concentrate on the feeling of relaxation... Now clench both fists at once; clench them tighter and tighter. Study the tension as you do so. Keep the fists clenched and notice the tension in your fists, as it travels through your hands into your forearms. Keep the muscles clenched and breathe into the tension... Now relax... Feel the looseness in your hands as all of your fingers are relaxing and notice the contrast with the tension. Concentrate on the feeling of relaxation.

Now bend your elbows and tense your biceps. Tense them as hard as you can and observe the feeling of tautness. ... Breathe into that tension... Now relax. ...Straighten out your arms... Let the relaxation develop and feel that difference. ... Let's repeat this. Bend your elbows and tense your biceps. Tense them as hard as you can and observe the feeling of tautness. ... Breathe into the tension... Relax again... Straighten out your arms and let the relaxation develop and feel that difference. ...

Now turn your attention to your head. Wrinkle your forehead as tightly as you can. Imagine directing your breath right into that tension... Now relax and smooth it out. Let yourself imagine your entire forehead and scalp becoming smooth and at rest... Now frown and notice the strain spreading throughout your forehead. Breathe into the frown and let go of the tension... Allow your brow to become smooth again. Next, squint your eyes shut tightly. Look for the tension and breathe into it... Relax your eyes until they're just lightly closed. Now clench your jaw. Bite hard and notice the tension throughout your jaw—a lot of tension can build up in your jaw muscles—and imagine breathing right into that tension... Now relax your jaw. When it's relaxed your lips will be slightly parted. Let yourself really appreciate the contrast between the tension and relaxation... Now press your tongue against the roof of your mouth. Feel the ache in the back of your mouth and down into your throat. Relax. Press your lips forward now and purse them into an 'O'. Relax your lips. Notice how your forehead, scalp, eyes, jaw, tongue and lips are all relaxed at this point.

Next, press your head back as far as it can comfortably go and observe the tension in your neck—a lot of people carry tension around in their tight neck muscles—and breathe into the tension... Now roll your head to the right and feel how the stress shifts to a different place and breathe into the tension... Roll your head to the left. Observe how the stress shifts and breathe into the tension... Straighten your head and bring it forward, pressing your chin against your chest. Feel the tension in your throat and the back of your neck as you do so. Breathe into that tension... Then relax, allowing your head to return to a comfortable position. Let the relaxation deepen and focus on your breath for a moment... Now shrug your shoulders. Bring your shoulders right up to your ears. Keep the tension as you hunch your head down between your shoulders. Breathe right into that tension and then drop your shoulders. Let the shoulder blades glide down your back and breathe. Feel the relaxation spreading through your neck, throat, and shoulders—pure relaxation, deeper and deeper.

Now you are giving your entire body a chance to relax. Feel the comfort and the heaviness. Breathe in and fill your lungs completely with air. Then breathe in a bit more and hold your breath. Notice the tension as it builds up in your chest. Now exhale, letting the air hiss out, and allow your chest to become loose. Continue relaxing, letting your breath come freely and gently. Repeat this two more times, noticing the tension draining from your body as you exhale... [1] Breathe in and fill your lungs completely with air. Then breathe in a bit more and hold your breath. Notice the tension as it builds up in your chest. Now exhale, letting the air hiss out, and allow your chest to become loose. Continue relaxing, letting your breath come freely and gently. [2] Breathe in and fill your lungs completely with air. Then breathe in a bit more and hold your breath. Notice the tension as it builds up in your chest. Now exhale, letting the air hiss out, and allow your chest to become loose. Continue relaxing, letting your breath come freely and gently. Excellent. Now focus on your stomach. Tighten it and hold it tight. Note the tension; then relax. Now place your hand on your stomach. Breathe deeply into your stomach, pushing your hand out as you breathe in. Hold the tension and then relax... Feel the contrast between the tension and the state of relaxation as the air rushes out.

Now arch your back, without straining—only go as far as you can without hurting yourself. Don't tense your back muscles. Just concentrate on letting tension drain from them. Keep the rest of your body as relaxed as possible. Focus on the tension in your lower back and direct your breath right into that tension... Now relax, deeper and deeper. Tighten your buttocks and thighs. Flex your thighs by pressing your heels downward as hard as you can. Once again, direct your breath into the tension. Then relax and feel the difference. Now curl your toes downward to make your calves tense. Do this gradually, since this procedure can cause cramps in the sole of the foot. Study the tension, then breathe into it... Relax... Now bend your toes back toward your face, creating tension in your shins. Breathe right into that tension and then relax again.

Feel the heaviness throughout your lower body as the relaxation deepens. Relax your feet, ankles, calves, shins, knees, thighs, and buttocks... Breathe... Now let the relaxation spread to your stomach, lower back, and chest... Breathe... Let go more and more of any tension that might still be present... Experience the relaxation deepening in your shoulders, arms, and hands—deeper and deeper. Notice the feeling of looseness and relaxation in your neck, jaws, and all your facial muscles. Breathe...

Now scan your entire body on your own. As you are scanning your body, you may still feel tension in some areas. Take note of where your might still be carrying some tension and go back to that area. Isolate the tense muscles in your imagination and repeat the procedure on your own, by simply tensing the muscle, breathing right into the tension and then relaxing the tense muscle.

[*Check the group and when everybody appears to be done, cue them further*]. Now refocus on your breathing, grounding and centering. Become aware of your physical body in this room. Within the next three inhalations, open your eyes and bring your attention back to this room, feeling relaxed, refreshed and energized, right here and in this NOW moment.

C.18 Five-Step Meditation: Peaceful Soul

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Adapted by Martina Steiger (2004) from Mike George, “A Five-Step Meditation,” in *Learn to Relax: A Practical Guide to Easing Tension and Conquering Stress* (San Francisco: Chronicle Books, 1998), 127.

The principal investigator always read the script verbatim.

Sit comfortably either with your eyes closed if that feels all right to you or simply with your eyes unfocused, looking at the floor ahead of you. Make sure your weight is evenly distributed on both sides. Ground and centre yourself. Feel your feet connecting with the ground and imagine the roots at the bottom of your feet extending deep down into the earth. Imagine the breath coming up through the roots, through the soles of your feet. Let the breath travel up the back of your legs, up the spine, right up to the top of your head. Now imagine the universal light energy descending through the crown of your head. Allow the universal light energy to merge with the earth energy as the breath travels down the front of your body, all the way down the front of your legs, through the roots into the ground. Take a few deep breaths in through your nose, if you can, and out through your mouth, following the same breath pattern.

As you are focusing on your breathing, breathing deeply into the diaphragm, withdraw your energy mentally from everything around you except for the sound of my voice. Withdraw—not to resist or reject, but to turn your attention inward. You might think of how a tortoise withdraws into its shell to detach itself from the outside world. At the same time it carries the experience of the world with it inside its shelter.

Now you create a point of consciousness. Focus on the centre of your forehead from the inside. Imagine this point as a radiant star, right there in the centre of your forehead. This radiant star transmits positive energy, making you feel good about yourself.

Affirm this positive energy through positive thoughts and images about yourself, such as ‘I am joyful, safe, content.’ At this moment, centre your attention on the following statement: “I am a peaceful soul.”

Now focus your energy on peace and let this become the object of your meditation. As you focus, you will give peace life, turning a thought into a feeling. If any other thoughts arise, just put them in a bubble or balloon and blow them away. Redirect your focus on your breathing and then return your focus on peace, repeating to yourself ‘I am a peaceful soul.’ Sense the thought becoming a feeling.

Experience this feeling as you are giving it your full attention. Feel it being absorbed through every pore of your body as it washes down your entire body. Every cell of your body is receptive to this feeling. Experience yourself becoming and being that peaceful soul.

Within the next three inhalations, direct your attention to being fully grounded and centred, with your roots firmly fastened in the ground. Gently open your eyes, bringing your attention back to the present moment in this room, feeling refreshed, alert and present right here and in the NOW moment.

C.19 Place of Peace

The principal investigator read this script verbatim each time.

Sit comfortably either with your eyes closed— if that feels all right to you—or just with your eyes unfocused, looking at the floor ahead of you. For those of you lying down, make sure you lie on your back with your legs stretched out, uncrossed, or in semi-supine position. Make sure your weight is evenly distributed on both sides. Ground and centre yourself. Feel your feet connecting with the ground and imagine the roots at the bottom of your feet extending deep down into the earth. Imagine the breath coming up through the roots, through the soles of your feet. Let the breath travel up the back of your legs, up the spine, right up to the top of your head. Now imagine the universal light energy descending through the crown of your head. Allow the universal light energy to merge with the earth energy as the breath travels down the front of your body, all the way down the front of your legs, through the roots into the ground. With each breath, allow your body to release tension. Put any thoughts or feelings that are running through your mind into bubbles or balloons and blow them away. Gently acknowledge each thought as you let it go, one after the other. Your mind and body are becoming quiet and still.

This guided imagery is taking you to a place of peace for yourself. You may have several places you can access whenever you need them. Remember that each place of peace will be comfortable, safe, secure, quiet, and peaceful. It may be an inside or an outside place, not too warm or too cold. It will allow you to look out into the distance. It will have a comfortable place for you to sit or lie down in. It will also provide an opening or a door that will lead somewhere else or allow someone else to appear. These are mechanisms by which your subconscious mind can send you messages. Make this place real for you by including details, and a prominent spot or a treasure chest for any gifts you may wish to store or display there. Include a mirror or some sort of reflective surface, such as a pond, that allows for further self-exploration and discovery.

Now take another deep breath and imagine a path anywhere you want. Imagine you are standing on that path, looking down at it. Observe the surface of this path as you are walking on it. As you stroll along the path, look up, and notice your surroundings. Listen to the sounds, possibly the birds, the water, the wind, and also your footsteps. Take in the peace around you. Smell the fresh air. Breathe in the smells of the earth, perhaps the water, the trees, the flowers and anything else that may be in your surrounding. Feel the pleasant sunshine and a gentle breeze on your skin. Continue down the path until you come to some sort of semi-enclosed area. This will be your special place. If it doesn't feel inviting, change those aspects you don't like, or go a little further down the path until you find the perfect spot.

This is your special place for you alone. You can come here any time you wish. No one else can come unless you invite them. It's safe and secure: a quiet place of relaxation and peace. Walk around your special place and create it exactly as you wish; the intensity of the light, the colours, the temperature, and your spot to rest. Find the opening or the door through which someone or something may enter. Find the prominent spot you asked for or the treasure chest where you will house all your honoured gifts. Look around further and find the reflective surface that allows you to see your face. Smell, touch, taste, sense and simply know all the colours, textures, objects and possibly animals that make up this very special place. It is yours to create and to recreate whenever and however you wish it to be. Now raise your eyes and fill in the middle distance, then look out as far as you can. Observe all things near and far. Turning around one more time, you finally notice a very comfortable spot that invites you to sit or lie down. Look around. What do you notice when you look up? Take in all the perfection of this place. It is peaceful and serene, a safe refuge. Here you are relaxed, content, creative, fully alive and perfect.

If you wish to explore another space, simply open the door or go through the opening that is present and you will find it right there. Perhaps this time it is an inside place. Explore it just the same way. Take your time to absorb the details with all your senses. Pay particular attention to the size and the colours of this interior space. Listen to the sounds. Find the mirror or some other reflective surface. Perhaps it is a crystal or a window. Remember that this is your perfect place, a safe and secure place, peaceful and serene.

Take a last look around as you are inhaling deeply through the nose. As you are exhaling, you are leaving this special place, knowing that it is always there for you. Remind yourself that this is your place. You are leaving it the same way you came, which will make it more real for you. Inhale again and stop walking on the path. When you are ready—before opening your eyes—take a deep breath in through the nose and exhale through the mouth. Connect your feet with the earth. Imagine the breath coming up through the roots, through the soles of your feet. Let the breath travel up the back of your legs, up the spine, right up to the top of your head. Now imagine the universal light energy descending through the crown of your head. Allow the universal light energy to merge with the earth energy as the breath travels down the front of your body, all the way down the front of your legs, through the roots into the ground. Take a few more deep and grounding breaths.

Gently wiggle your fingers and your toes. For those of you who are lying down, gently roll over to one side, bring up your legs up to your chin into a fetal position, and very slowly bring yourself to a sitting position. And all of you now: bring your attention back to this room. Breathe deeply, ground yourself and within the next three inhalations, slowly open your eyes, feeling refreshed, alert and very present here in this room and in this Now moment.

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C.20 Muscle-Testing/Dowsing

This is the description of the various demonstrations carried out and of the explanations the principal investigator the principal investigator provided.

I. Full Arm

Without providing an introductory explanation, the principal investigator asked for a volunteer. She asked the volunteer to stand facing the group with the right arm stretched out at a right angle to the body. The principal investigator stood to the right of the volunteer, facing the volunteer's profile. She then told the volunteer to lock the elbow. She also asked if she could place her left hand on the volunteer's right shoulder blade for support. Getting permission to do so, she instructed the volunteer to resist the pressure as the principal investigator's index and middle finger pushed down on the forearm of the volunteer, just about 2 inches in from the wrist. She gave further instructions to the volunteer to state the name, e.g. "My name is X," and to the rest of the participants to watch what was happening. In each case, the muscle locked as the volunteer stated the name and the principal investigator attempted to push the arm down. The second part to this demo consisted of the volunteer inventing a name. As the above procedure was repeated, the arm of the volunteer suddenly weakened and gave way, when the principal investigator pushed on the arm as the volunteer was stating the fake name. Usually, a perplexed facial expression occurred on the part of the volunteer and the group wanted to know what had happened. The volunteer generally answered that the arm just could not stay up even though he/she tried hard to do so.

Since this statement met quite some disbelief, the principal investigator thanked this volunteer and asked for another one to step forward. The procedure was repeated with one change: This time the principal investigator asked out loud, "Show me a 'Yes,' and "Show me a 'No' instead of having the person state their name. The same sense of disbelief became apparent again. The principal investigator then thanked the volunteer and requested a third volunteer for the next part. This time, the principal investigator put a bottle of vitamin C in this person's left hand and repeated the procedure, while asking the following question: Is it in the best interest of [name of volunteer] to take Vitamin C today? With one exception, the muscle always stayed strong, indicating a Yes. It turned out the adolescent who was the one exception had taken 3000 mg of vitamin C in the morning already. The principal investigator continued then by asking the volunteer how many units the volunteer might need to take. Usually the response equalled an admission that the volunteer really did not know. The principal investigator then proceeded by stating that the volunteer did know at some level even if the conscious awareness was not present at the moment. She then asked out loud: "Is it in the best interest of all involved for [name of volunteer] to take, one, two three... tablets a day?" The principal investigator stopped counting when the volunteer's arm muscle gave way, indicating the number of tablets needed. The principal investigator then posed one more question, asking "Is it in the best interest of all concerned for [name of volunteer] to take [number of tablets that had tested] of Vitamin C?" The arm stayed strong in each case.

II. Self-Muscle Testing

The principal investigator then proceeded to show and teach the participants various forms of self-muscle testing. The first version uses two hands: 1) “Make a circle with the middle finger and the thumb of the left hand, then interlocking a circle with the middle finger and thumb of the right hand; ask a straight forward yes/no question while attempting to pull the circle of the right hand through the locked fingers of the left hand, while observing what is happening when you ask a yes-question as opposed to a no-question.” About half the students reported they clearly felt the difference between the Yes and No response. “Another variation works as follows: Lock the index finger of one hand against the tip of the thumb of the same hand. Insert the thumb and index finger of the other hand into the opening created and then attempt to pry the muscles open as you are asking your questions. See what happens.” 2) The second group of tests uses only one hand (no right or left hand preference) for muscle testing. The principal investigator asked the participants to follow her instructions and test each version by simply requesting, ‘Show me a Yes and Show me a No,’ or by asking straightforward yes/no questions. Instructions: “A) Rub the index finger across the nail of the thumb; ask your questions and see what happens. B) Rest the tip of the middle finger on the thumb; ask your questions and see what happens. C) Rub the tip of the middle finger across the tip of your thumb; ask your questions and see what happens.”

III. Dowsing: Use of Pendulum

The principal investigator had two store-bought pendulums in her possession; one metal and one clear quartz crystal. She had made 10 more pendulums: 5 of them were made by using a silver chain (varying from 16-20 inches) with a small to medium size pendant hanging from it; the other 5 were made by using a piece of string and an old ring instead of a pendulum. The string (16 inches in length) was tied together to hold the ring. The principal investigator deliberately chose to use all three versions so the participants could see that they did not need to purchase anything in order to use a pendulum. They already had all the necessary materials in their possession.

The principal investigator handed a pendulum to each person, requesting the adolescents to exchange pendulums later on so that everybody could experiment with all three versions. She then asked the participants to follow her instructions and demo: “Give the pendulum some momentum by swinging it in a circle. Then state: ‘Show me a Yes.’ Wait and watch what happens. Then go back to the original movement of circling the pendulum and state: ‘Show me a No.’ Wait and watch what happens.

If your Yes and No are not as clearly distinguishable as you wish, just determine what you would like your yes and no to be and make that agreement with your Higher Self. Then try it out.”

C.21 Script for Biofeedback Explanation

The principal investigator followed this script for each workshop as closely as possible. Minor deviations only occurred when the participants posed questions or inserted comments.

There are three types of biofeedback that are effective treatment modalities for stress and pain, in particular headaches and migraines but also for many other aches and pains: thermal (temperature), muscular (EMG) and brain wave (EEG). Through the technique of biofeedback, a person can regulate physiological responses to internal and external stressors. Research indicates that thermal biofeedback helps 70% of pain-patients reduce their pain by 50% or more. The average finger temperature is 85 degrees Fahrenheit. The lower the finger temperature, the more stress the body is holding. The goal is to raise the finger temperature to 96 degrees F or the toe temperature to 93 degrees Fahrenheit.

How do you achieve that? Through relaxation, meditation, prayer, yoga, or any activity that calms and integrates the body, mind, and spirit. You could use any of the meditations we have studied so far. However, for today, we will use the Autogenic Training tape. So, check the temperature right now and right it down for yourself. *[In three groups, some participant's had reached already 96 degrees Fahrenheit. The principal investigator asked those participants to tape the thermometer to their toe, which generally has a significantly lower temperature and raise the temperature to 93 degrees Fahrenheit].* Then set the intent to raise the temperature in the index/middle finger to 96 degrees Fahrenheit, 93 degrees Fahrenheit for the toes respectively. Then find a comfortable spot to sit or lie down. Make sure the thermometer does not touch any other body parts as you get comfortable. Now go to your Place of Peace, focus on your breathing, ground and centre. And when you are ready, I will run the tape of the Autogenic Training exercise. Once the exercise is completed, I will ask you to check your temperature again.”

C.22 Balancing the Chakras

Adapted by Martina Steiger (2003) from Pauline Wills' *Visualisation: A Beginner's Guide* (London: Hodder & Stoughton, 1999)

The principal investigator followed this script verbatim each time.

Sit comfortably either with your eyes closed if that feels all right to you or just with your eyes unfocused, looking at the floor ahead of you. For those of you lying down, make sure you lie on your back with your legs stretched out, uncrossed, or in semi-supine position. Make sure your weight is evenly distributed on both sides. Ground and centre yourself. Feel your feet connecting with the ground and imagine the roots at the bottom of your feet extending deep down into the earth. Imagine the breath coming up through the roots, through the soles of your feet. Let the breath travel up the back of your legs, up the spine, right up to the top of your head. Now imagine the universal light energy descending through the crown of your head. Allow the universal light energy to merge with the earth energy as the breath travels down the front of your body, all the way down the front of your legs, through the roots into the ground. With each breath, allow your body to release tension. Put any thoughts or feelings that are running through your mind into bubbles or balloons and blow them away. Gently acknowledge each thought as you let it go, one after the other. Tense and release any muscle that may feel tight and breathe into that area of your body. Your mind and body are becoming quiet and still.

Bring your concentration into the base chakra. On the next inhalation, imagine a beam of pure red light coming through the soles of your feet, and imagine how it grounds you to this earth. As you exhale, let this colour radiate out into your aura. Imagine, visualize, sense, feel, or just know where it starts building your bubble that surrounds and protects you.

Move your attention now up into the sacral chakra. As you inhale, imagine a beam of pure orange light coming through the soles of your feet, up through your legs and into this centre. Feel the joy and energy of this colour filling the whole of your being. As you exhale, let it flow out into your aura, where it joins the red that is already present.

Bring your concentration now into the solar plexus chakra, the gut. On the next inhalation, imagine a beam of pure yellow light coming through the soles of your feet, up through your legs, and into this centre. Feel this colour releasing any tension or blockages in this part of your body. As you exhale, watch the orange as it flows out into your aura to join the orange and the red that are already present in your aura. Imagine how it forms the bubble that is surrounding you.

Next, focus on your heart chakra. As you inhale, imagine a beam of pure green light, this time though horizontally entering this centre. Feel it balancing the energies below and above it. As you exhale, watch the green flow out into your aura, where it joins the yellow, the orange, and the red that are already present. Picture your bubble building and changing.

Shift your concentration now to the throat chakra. As you inhale, bring a beam of clear blue light, this time through the top of your head into this centre. Feel the peace and tranquility that this colour brings you. Allow it to release any tension that you may have found difficult to release. Exhale and allow the blue to flow out into your aura where it joins the green, the yellow, the orange, and the red that are already present. Imagine and feel your bubble extending all around you.

Bring your attention now to the brow chakra. As you inhale, imagine a beam of pure clear indigo light descending through the top of your head into this centre. Allow this colour to give you a clearer insight into any path that you may be following and the work, which you have chosen to do in this life. Exhale and allow the indigo light to radiate out into your aura where it joins the blue, the green, the yellow, the orange, and the red that are already present. Continue to picture and sense the bubble that is surrounding and protecting you.

Finally, bring your concentration into the crown chakra. As you inhale, imagine a beam of pure violet light entering this centre. Feel this colour giving you the dignity that you possess as a human being and your connections to the universe. Exhale and allow the violet to radiate out into your aura. As it radiates out, it flows upwards and in so doing, changes into a pale magenta and then into pure white light. Remember that this is the centre that allows us, whenever we are ready, to be in touch with the spiritual aspect of our being.

Now focus your attention on the aura that surrounds you. Feel that bubble vibrating in harmony and filled with all the clear, pure colours of the spectrum. Get a sense of the dominant colour or colours. Picture the bubble or feel it or just know it is there in whichever way feels comfortable to you. Feel, sense, see, or imagine all the colours in your bubble and know they bring you health, vitality, and well-being into your physical, emotional, mental and spiritual bodies.

Now take another deep breath. Ground and centre yourself and feel yourself deeply anchored into the earth and into the universe. Imagine your breath coming up through the roots, through the soles of your feet. Let the breath travel up the back of your legs, up the spine, right up to the top of your head. Now imagine the universal light energy descending through the crown of your head. Allow the universal light energy to merge with the earth energy as the breath travels down the front of your body, all the way down the front of your legs, through the roots into the ground. Take a few more deep, grounding and centring breaths.

Gently wiggle your fingers and your toes. For those of you who are lying down, gently roll over to your side, bring up your legs to your chin into a fetal position, and very slowly bring yourself to a sitting position. And to all of you: bring your attention back to this room. Breathe and on the next three breaths, slowly open your eyes, feeling refreshed, alert and very present here in this room and in this Now moment.

C.23 Encountering Your Higher Self

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Adapted by Martina Steiger (2003) from Pauline Wills' *Visualisation: A Beginner's Guide* (London: Hodder & Stoughton, 1999).

The principal investigator read this script verbatim each time.

Sit comfortably either with your eyes closed—if that feels all right to you—or just with your eyes unfocused, looking at the floor ahead of you. Make sure your weight is evenly distributed on both sides. Ground and centre yourself. Feel your feet connecting with the ground and imagine the roots at the bottom of your feet extending deep down into the earth. Imagine the breath coming up through the roots, through the soles of your feet. Let the breath travel up the back of your legs, up the spine, right up to the top of your head. Now imagine the universal light energy descending through the crown of your head. Allow the universal light energy to merge with the earth energy as the breath travels down the front of your body, all the way down the front of your legs, through the roots into the ground. Take a few deep breaths, in through your nose, out through your mouth, if possible, and go to your Place of Peace. Allow the breath to travel up the back of your spine, and as you exhale, allow the breath to descend the front of your body into the earth. With each breath, breathe out a thought or a feeling that may have entered your mind. Take a few more deep breaths and allow your body to relax, scan your body and release all tension. Allow your mind to be quiet and still. Now imagine a path that leads from your place of peace to the sea. Imagine and feel yourself standing in a rock alcove by the sea. You are alone except for the seagulls that cry and swoop overhead. Around you tower massive grey cliffs, indented by the pressure of the sea and covered with ferns and wild grasses that grow from their crevices.

As you wander over the soft, silvery surface of the high grey cliffs, you discover an opening in one of the rocks. Walking through the opening brings you into a narrow passage. It appears very dark after the brilliance of the daylight. When your eyes become accustomed to the dark, you are able to see, from the small amount of light emitted through the opening, a winding passage. The walls, floor, and ceiling are composed of rock and there are small puddles of water created by the sea at high tide. As you walk down the passage, you notice the damp, musk smell of the air.

Following the winding passageway, you note that it starts to widen. The light from the opening has faded but is replaced by candles set at intervals along the wall. On reaching the end of the passageway, you find that it has opened into a circular room.

Around the walls of the room are more candles whose flames dance in the circular pond that is residing at the room's centre. Around the pond are benches. You are alone: all is quiet and still.

Sitting down on one of the benches, you survey the reflected light from the candles swaying in synchronisation with the movement of the air. In so doing, you notice that the centre of the pond appears to be radiating more light; a concentrated golden-white light, which projects up towards the ceiling of the room.

As you watch, the light turns into a beautiful presence, a being or a shape, which greets you before inviting you to ask any questions that you are seeking the answer to. In the silence that follows you are told that the answers to your questions may or may not be given immediately. They may indeed come through unexpected and wondrous ways. They may be given through a book you read, through a friend, or in the silence of your own heart. What you are assured of is this: when the time is right, the answer will be given. On asking who the being is, you are told that it is your own Higher Self, your glorious potential self, your energetic twin.

Before descending back into the water, this being radiates love and peace into your heart and tells you that you may approach this being any time you wish. It affirms it is always with you. If ever you question the presence of this being in your life, simply know to return to this place and reconnect.

Thanking this being, your Higher Self, and carrying the blessing of peace and love that you have been given, stand up and walk back to the passageway that brought you here. Walking back along this passage brings you to the opening in the rock. From the rock, find your way back to your Place of Peace. Go to the spot, which contains the reflective surface, and invite your Higher Self to join you now in your Place of Peace. Spend a few moments there with your Higher Self. Then say thank you to your Higher Self.

When you are ready—before opening your eyes—take a deep breath in through the nose and exhale through the mouth. Connect your feet with the earth. Imagine the breath coming up through the roots, through the soles of your feet. Let the breath travel up the back of your legs, up the spine, right up to the top of your head. Now imagine the universal light energy descending through the crown of your head. Allow the universal light energy to merge with the earth energy as your breath travels down the front of your body, all the way down the front of your legs, through the roots into the ground. Take a few more deep and grounding breaths.

Gently wiggle your fingers and your toes. For those of you who are lying down, gently roll over to your side, bring up your legs up to your chin into a fetal position, and very slowly bring yourself to a sitting position. All of you: bring your attention back to this room. Breathe and on the next three breaths, slowly open your eyes, feeling refreshed, alert and very present here in this room and in this now moment.

C.24 Balance Exercise: Lazy 8's

The principal investigator followed this script as closely as possibly, deviating only to allow for questions or comments from the participants.

This particular exercise also originates in the Brain Gym® series and belongs to the so-called mid-line movements, which aid in harmonizing both hemispheres of the brain, not just right and left but also frontal and occipital (the back) parts of your brain.

So here is what you need to do. Just listen to the instructions. I will do the actions with you. Extend the left arm in front of you with your thumb pointing straight up. Glue your eyes to your thumbnail. Then paint a big figure 8 in front of you, large enough that your hand has to cross from left to right and right to left in front of your body.

[Once everybody caught on—or at least after 3 figures, the principal investigator continued].

Now change direction and paint the same figure 8 the opposite way. Your head stays still, only your eyes are moving.

[The principal investigator checked that each person was on track and had drawn at least 3 figures, then gave the next cue.]

Thank you to your left arm, now let's do the same with the right arm. Extend the right arm in front of you with your thumb pointing straight up. Glue your eyes to your thumbnail. Then paint a big figure 8 in front of you, large enough that your hand has to cross from left to right and right to left in front of your body.

[Once everybody caught on and had drawn at least 3 figures, the principal investigator continued].

Now change direction and paint the same figure 8 the opposite way. Your head stays still, only your eyes are moving.

[The principal investigator checked that each person was on track, having drawn at least 3 figures, and then gave the next cue.]

Excellent. Now extend both arms in front of you and glue your eyes to the space between the two thumbs. Draw the figure 8 at least 3 times in both directions and remember to breathe. ... Well done!

Now comes the challenge. Extend both arms, this time position one hand above the other, both thumbs up. Stare with your eyes unfocused ahead of you and paint a figure 8 with each hand—in opposite directions, however, and then reverse.

Quite a challenge, right?! And an excellent practice to do in the mornings and during the day at school!

C.25 Therapeutic Touch™

The principal investigator followed this basic script as closely as possible.

I will be teaching you three steps in which to use Therapeutic Touch™. You need to remember though that this modality is taught over several days and therefore goes much more into depth than what I will be presenting and teaching you. And yet, you will see that even this short version of Therapeutic Touch™ will work and may be very useful to you. As with any activity that I have suggested to you, from meditation to imagery to muscle testing or biofeedback, what do we always do first?

[At this point the principal investigator always received, collectively, the expected answer: breathe, ground and centre yourself in the Place of Peace, or, as the participants referred to it, the 'Happy Place'.]

That is absolutely perfect. And now that we know more about the Higher Self, let's invite our Higher Selves also to be present with us. So let's all do that as our basic preparation.

[The principal investigator provided approximately 60-90 seconds of quiet time, checking how the participants were doing.]

Step I:

This step is only needed if you give a therapeutic touch treatment to someone else and the treatment is not just intended for an acute ache or pain. I will show it to you, though, because it will provide you with a better picture of what TT™ is and also enable you to work with another person if you so wish. As always, you do not have to engage in this activity if you have any hesitations about it.

As I mentioned before, usually no physical contact occurs in TT™, except for the grounding activity at the end of each segment. Therefore, before you start working with another person, always ask if you may touch their shoulders or feet. Then ask your partner to ground and centre (and if they don't know what that means, ask them to focus on breathing deeply into the diaphragm, with their feet firmly planted on the ground), either with their eyes closed or looking ahead with their eyes unfocused.

Then rub your hands together as we did before to feel the energy between your hands and start scanning the partner's energy field, starting on the back from the head down in slow gliding movements, always gently moving the hands down and out, simply sensing how balanced the field feels to you. You are only noting where the field feels out of balance to you, different from the rest of the body. Your hands give you cues to determine the nature of this very dynamic field. Once you are done on the back, go to the front of your partner and then start again at the head, always spending very little time around the head, moving down the arms, and then down the torso, and the legs, always in down and out, slow and gentle movements. Then tell your partner you will touch their feet now. Simply think of the energy going deep into the ground as you very lightly touch the feet with your hands.

Then share with your partner where you found the imbalances. Your partner may or may not have any insights into what you have discovered.

[At this point, the principal investigator asked the volunteer if it was all right to share with the rest of the group what she had found in the scanning. The answer was always affirmative and generally, there was amazement expressed both by the volunteer and the group that the imbalance that was found always corresponded to a pain or an ailment the adolescent was experiencing at the moment].

Step II:

So now let's go to the next part. This is the step where you attend to the areas of imbalance if you did Step I. Or, if your friend, for instance, has just hurt herself, you can start right here. Also, if you work on yourself, you might want to begin right here. This is called the 'Clearing and Unruffling.' Through symmetrical and rhythmic movements of your hands, allowing yourself to be guided by your Higher Self and the energy you feel in your hands, you get the energy in and around the imbalanced area to flow and become more balanced. That's all you are looking for—creating balance. Allow yourself to be guided to achieve that balance or get the energy field to be closer to that balance than before. Your hands and your intention and attention help guide the downward flow of the energy into the ground. Depending on where you work, you may finish by grounding through the feet or shoulders. Remember to tell your partner that you will now touch their shoulders or feet—just rest your fingers gently on the shoulders or feet.

[The principal investigator thanked the volunteer and asked if they wanted to share what was going on for them at this time. They always did and expressed sheer surprise about the changes they were feeling].

Step III:

Let's move on to the last step now, the 'modulation' of energy. If you work with a partner, ask what colour pops up that might be helpful to her or him when dealing with the problem she or he is experiencing. Tell your partner to pick and name the first colour that comes to mind.

[The principal investigator encouraged the volunteer at this point to do just that].

Then ask your partner what that colours means to him or her. Just ask for a few descriptors, which will give you a sense of what they are looking for at this point. Then tell your partner to picture a wide ribbon in that colour and to wrap this ribbon gently around the area that needs the healing.

[The principal investigator asked the volunteer for the colour and the descriptors].

During that time, you will simply continue to balance the energy—holding in mind the descriptors you were given—as you direct and modulate the energy in that area, assisting to re-establish the balance that is needed in the person's energy field. You will get a sense how long you will need to do this for—just stay grounded and centred, in your Place of Peace and connected to your Higher Self. As the last step, what do we always do?

[The principal investigator solicited the 'grounding' response from the participants].

Remember to tell your partner first that you will touch [the feet/shoulders] now for the grounding and choose the spot that's closest. Then thank your partner.

And that is really it. As for the question how long you spend on each step, truly depends on each scenario. Learn to listen to your intuition and you will do just fine. Otherwise, spend a maximum of 5 minutes on each area you are working on, except for the head—there only do 1 minute at a time because the head is so incredibly sensitive.

[The principal investigator thanked the volunteer at this point].

C.26 Finding Your Guide

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Adapted by Martina Steiger (2003) from Patrick Fanning. *Visualization for Change* (Oakland: New Harbinger Publications, Inc., 1998)

The principal investigator read this script verbatim each time.

For this exercise go to your place of peace and find the spot there that allows you to look out into the distance. Sit down or lie down and make yourself comfortable. Ground and centre yourself there in this quiet, safe, and secure place. Breathe deeply—inhaling through the nose, exhaling through the mouth if possible—letting go of all the old stale air—and fill your lungs with the wonderful air of your place of peace. Notice all the details of sight and sound, touch, taste, and smell that define your place of peace and make it real to you. Allow that information to come to you in whichever form and shape it presents itself; words, images, sensations, or simply a sense of knowing. Invite your Higher Self to be there with you.

From your chosen spot in your place of peace look off into the distance. See, sense, or imagine a tiny figure there. It's so far away that you can only see it as a speck moving in the haze. Imagine that this figure is one of your guides, approaching very slowly, getting larger very slowly. Soon you will be able to make out some details. By now you notice the general shape of the figure. Is it a person, an animal or some other being? Wait a little longer until you can observe enough. Then try to tell if it is a man or a woman, or what kind of animal or being it is. As the figure gets closer, determine more and more details. How is the figure dressed? What textures can you make out? What colours do you notice, for instance? Now you perceive small details; the colour of the eyes, the texture of the skin, the shape of the mouth and nose, chin and brow, or some other interesting features. You can possibly hear the figure's steps. Let this being, this possible guide, get closer, right up to the edge of your special place, and then stop.

Does this figure look friendly? This is an important question. If the figure you've called up looks angry or dangerous, there's no need to invite it into your special place. Thank it for its efforts, turn it around, and have it walk into the distance and disappear. If you are confronting an animal figure, determine if you feel afraid. If you do, thank the animal figure for its efforts and send it away. If you have several figures in turn approach from the distance, keep sending away the unfriendly ones until you do find a friendly one that you like. Careful though! Don't send away a possible guide just because he or she does not meet your expectations. You may find the same seemingly weird figure return over and over. This is an indication that you have the right figure, even though it seems odd to your conscious mind.

When you're satisfied that your guide is friendly, invite the guide into your special place, verbally, through gesture, or through thought, whichever way suits you. Greet your guide in an appropriate way. Stand in front of your guide and look deep into the figure's eyes if that is possible, if not connect otherwise. Then ask the question: 'Are you my guide?' Your guide will say yes, or nod or indicate in some other way that he or she is indeed your guide. If the answer is ambiguous, ask again until you get a clear answer. Once you are satisfied that you are in the presence of your authentic guide, take a little walk together and notice your surroundings. Show your guide around your special place as if you were showing off a garden or a new apartment.

Ask for a gift from your guide or gift something to your guide. If a simple question pops into your head, ask it. Tell your guide that you trust him or her, and are glad to have your guide in your special place. Before saying your final good-bye, promise your guide to keep in touch. Have your guide promise to visit you when he or she is invited—the details are up to you. Suggest to your guide that he or she may drop in on you whenever you need it. Always remember that your guide is wise, all knowing, and has only your best interests at heart.

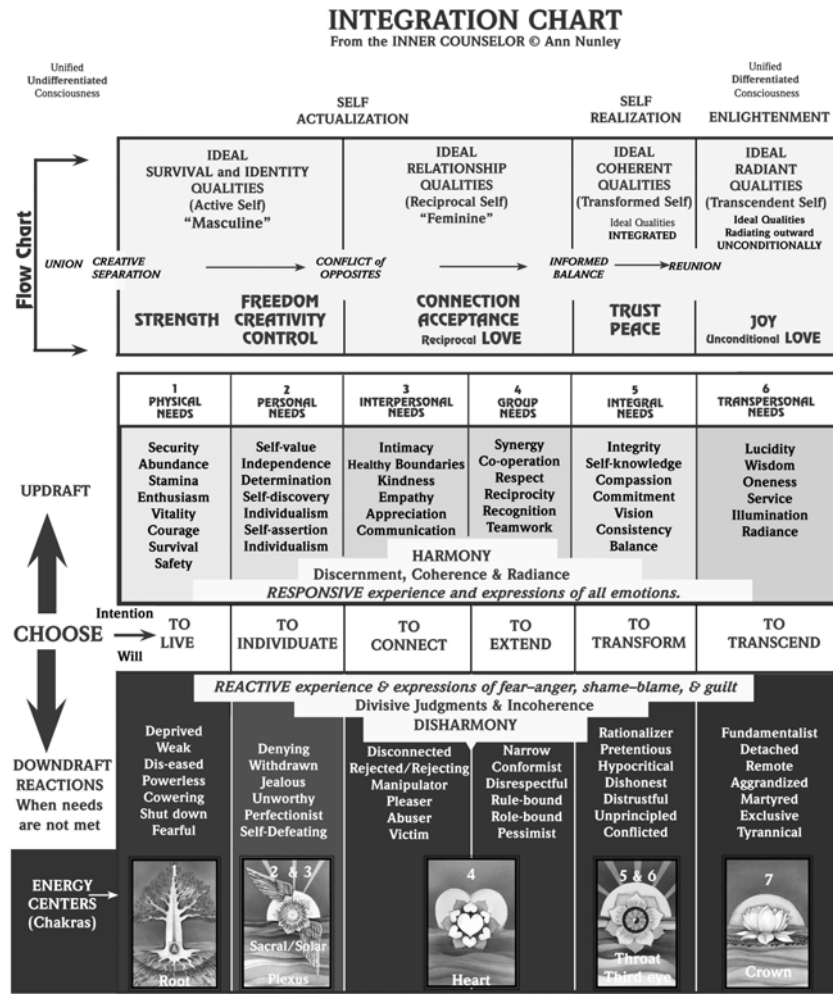
When you are ready—before opening your eyes—take a deep breath in through the nose and exhale through the mouth. Connect your feet with the earth. Imagine the breath coming up through the roots, through the soles of your feet. Let the breath travel up the back of your legs, up the spine, right up to the top of your head. Now imagine the universal light energy descending through the crown of your head. Allow the universal light energy to merge with the earth energy as the breath travels down the front of your body, all the way down the front of your legs, through the roots into the ground. Take a few more deep and grounding breaths.

Gently wiggle your fingers and your toes. For those of you who are lying down, gently roll over to your side, bring up your legs to your chin into a fetal position, and very slowly bring yourself to a sitting position. And to all of you: bring your attention back to this room. Breathe and within the next three inhalations, slowly open your eyes, feeling refreshed, alert and very present here in this room and in this Now moment.

C.27 Inner Counselor Process™—Script

- 1. BEGIN IN YOUR PLACE OF PEACE.** Feel yourself totally there. • See the colors ••• Hear the sounds ••• Smell the fragrances. • In this place you feel calm and safe. ••• Invite your Higher Self to be there.
- 2. WHAT IS THE ISSUE OR FEELING** you wish to explore? ••• *No long details.*
- 3. IS THERE A WISE AND LOVING GUIDE** who would like to help you with this issue? •• If not, your Higher Self will be your guide.
- 4. EXPERIENCE THE FEELING.** • How do you feel? • Describe the sensations of this feeling? ••• Where, in your body, are the sensations the strongest?
- 5. LET THE FEELING CARRY YOU** to a recent time when you felt the same. ••• Where are you? • What is happening? ••• Stay with the feeling and let it carry you back to an earlier time when you had the same feeling and sensations. Gently ride the feeling back through time. ••• **What do you see or hear?** • How old are you? • What is happening? *Brief, no dialog. We're after recognition, not detailed information.* • **HOW DO YOU FEEL?**
- 6. SENSE THE FEELING FULLY** • Imagine pulling it out of your body so it can take form and you can see it. • What shape does it take? • Does it have a color? • **WHEN THIS** (*old symbol*) first made itself felt as (*state feeling*), it had a helpful intention. How did that form and its (*state feeling*) **help you survive?** • Let yourself see all the ways the (*old symbol*) has helped you. • **Thank** the (*old symbol*) for helping you. • **Stay with the feeling.**
- 7. WHAT DO YOU REALLY NEED?*** •• Say what you **truly wanted** then, and still want now. *If the need is not a basic need, dialogue until the SUBJECT arrives at a basic need.*
- 8. IS THE** (*old symbol*) **WILLING FOR YOU TO FIND A NEW WAY to get what you want** — a way that provides the same protection and *also* fulfills your **TRUE NEED?** • *Address any fears that the old symbol has. Assure it that it will not be asked to change until it feels that the SUBJECT will be safe.*
- 9. ASK YOU HIGHER SELF FOR A NEW SYMBOL** — **someone or something that will provide all the protection of the** (*old symbol*) **and also fulfill your true need. Who or what would that be?**
- 10. DESCRIBE YOUR SYMBOL.** Will (*new symbol*) **commit to help you with this issue?**
- 11. BRING THE TWO SYMBOLS TOGETHER.** Have the (*new symbol*) demonstrate its energy, and power. • Have it demonstrate how it will protect you and fulfill your **true need.** ••• *Ask the (*old symbol*) if it is **willing to be absorbed within the** (*new symbol*).
- 12. EXPERIENCE the (New symbol) COMPLETELY ABSORBING** the (*old symbol*). As all of the (*old symbol's*) protective energy is given to the (*new symbol*), it is totally absorbed. **Through transformation, the (new symbol) includes and transcends the (old symbol).** *If problems: address any fears the old symbol has by asking, "What are you afraid will happen?" You can also say: Ask the (new symbol) to demonstrate its power and ability to deal with this fear. Describe how your new symbol looks now. If it has changed and now incorporates aspects of the old symbol, ask: Is the old symbol completely absorbed and transformed so that it can serve your true need? If not, continue to work until the answer to that question is "yes".*
- 13. WHAT SPECIAL ADVICE** does the (*new symbol*) have for you that you need to hear at this time? • Put the advice in words and speak it out loud as best you can.
- 14. GIVE THE** (*new symbol*) **AN ASSIGNMENT.** How can it help you in the next few days so that you will know that **its energy** is now in charge of the part of your life that was being governed by the (*old symbol*)? Make the assignment specific.
- 15. TAKE** the (*new symbol*) to your Place of Peace. Give it a place of honor. **THANK your GUIDE and YOUR HIGHER SELF. • THANK YOURSELF.**

C.28 Inner Counselor Process™ —Personality Integration Chart



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APPENDIX D: **Discussion**

D.1 Anecdotal Questionnaire

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This anecdotal questionnaire was designed by the principal administrator (see [Appendix B.4](#)). The participants completed it as part of the final step of the research study. The answers tabulated below are direct quotations from the questionnaires the participants submitted. Questions 5,6,8, and 9 are organized as they relate to each of the three hypothesis stated for this study. One must keep in mind that such categorization obviously is a subjective approach, which does not undermine the validity of the answers themselves. Many of the answers could fit into more than one category. However, it is important to note that ALL answers are included here and not a single response was omitted.

Question # 1: “Do you have any suggestions regarding the scheduling of this study?”

Sixty-six participants responded with the following answers:

- 40% (n=20): *no suggestions*
- 18% (n=9): *“more shorter sessions needed”; “needed to be stretched out over two days but personal schedule would not allow that either”; “the day was too long”.*
- 42% (n=21): *“perfectly planned”, “comfortable”; “effective”; “easy to follow”; “weekend is good”; “felt short”; “timing could not have been better”; “lunch was perfect length”; “breaks perfectly timed”; “good planning”.*

Question # 2: “Was anything missing in the set-up of the workshop and/or the whole study?”

94% (n=62) of the 66 participants answered the question:

- 47% (n=31): *“no ”;” nope ”; “nothing was missing ”*
- 47% (n=31) added at least one of the following comments: *“well done ”; ”each item tied into the other ”; ”everything was well done ”; “more switching of seating needed ”; ”well- done-simplified ”; ”personalized ”; ”interesting ”; “a more*

- *secluded room would have been better*"; *set-up was great*"; *comfortable and relaxing*"; *more scientific background information*"; *more eating time*"; *more breaks*"; *a self-confidence meditation*"; *more dowsing rod practice*"

Question # 3: "Which aspect(s) of the study did you enjoy the least?"

94% (n=62) of the 66 participants answered the question:

- 6% (n=4): *"it was all cool"*, *"interesting"*, *"helpful"*
- 4.5% (n=3): *"nothing"*
- 21% (n=14) critiqued the number of times they had to complete the questionnaires
- 9% (n=6) critiqued the following: *introduction*; *having to wake up early*, *having to get too close to people we did not know*, *length (2x)*, and *some scenarios were conducted too quickly*.

The rest of the answers covered every curriculum component of the workshop. Each of the following items was mentioned once: *muscle testing*, *dowsing rods*, *guided imagery*, *Place of Peace*, *breathing exercises*, *biofeedback*, *Finding Your Guide*. *Meditation*, *Autogenic Training*, *Higher Self discussion*, and *Therapeutic Touch* were mentioned twice. *Brain Gym* 3 times, *chakras* 4 times and *Inner Counselor* 8 times, whereby 4 participants only wanted to have more time with it.

Question # 4: "Which aspect(s) of the study did you enjoy the most?"

97% (n=64) of the 66 participants answered the question:

- 10.6% (n=7): *"everything"*; *"all of it"*
- Every curriculum component was mentioned at least twice.
- *Muscle testing/ pendulum*, *dowsing rods*, *breathing/grounding/centering exercises*, *meditations/guided imagery*, *chakras*, *Therapeutic Touch* and *Place of Peace* were mentioned between 5 and 10 times each.
- Additional comments made: *"talking about the experiences"*; *"sharing"*; *"learning new things"*; *"sharing"*; *"all hands-on things"*; *"all interactive aspects"*; *"being able to meet new people"*; *"how to relax"*; *"how to deal with stress"*

Question # 5: "What, if anything, did you learn from this experience?"

94% (n=62) provided answers; 6% (n=4) of the participants, all from Group B, left a blank.

Ad A) Locus of Control

"How to breathe, ground, centre, balance, focusing"; *"I can control my mind better"*; *"I can control my emotions better and my pain"*; *"I am in control of everything that has to do with me"*; *"can deal with my own problems"*; *"I know I have a choice"*; *"I am in charge of my bubble and how I feel"*

Ad B) State and Trait Anxieties

“I learned to relax”, “to become/stay calm”, “to meditate”, “to go to my Place of Peace”; “not letting myself get stressed out”, “learn how to cope differently”, “knowing there are other ways to deal with stress”; “know many very positive ways of dealing with stress and anxiety”, “know I don’t need to get stressed out”

Ad C) Self-Concept

“I can be in touch with my own Higher Self”; “feel more confident”; “learn about me”; “to hang out with ‘me’ more”; “I am willing to keep an open mind now”; “I’m recognizing the difference in energy field/ aura/ personal space depending on my mood and that of others”; “the way I feel and act always affects others”

Question # 6: “Do you believe your participation in this study has made a permanent impression on you? If so, in which way?”

85% (n=56) provided answers; 15% (n=10) of the participants left a blank, 5 from each group; 12.5% (n=9) answered negatively; 5.5% (n=4) were unsure; 8.3% (n=6) answered affirmatively without further elaboration; 51% (n=37) provided the following answers.

Ad A) Locus of Control

“I feel I can face things that I couldn’t before—more ready for life”; “feel more in control”; “name calling etc by others doesn’t affect me now because of my bubble”; “balancing and grounding has made my everyday life easier”; “help myself and stay healthy in everyday life”; “it’s helped me stay out of trouble at school and at my home”; “don’t get upset or angry as easily or over things that don’t matter”

Ad B) State and Trait Anxieties

“I can calm myself down and cheer myself up more easily”; “I can apply the techniques in real life situations and feel a lot better”; “when feeling stressed I can always go to my Place of Peace because it is always in my head”; “I stay calm more easily”; “I am not so much afraid to go outside and be around people and it’s not so hard to deal with them”; “able to relax more easily”

Ad C) Self-Concept

“I learned to be one with myself”; “I’m starting to get in touch with myself and my spiritual side”; “what I have experienced is now a part of me”; “I have realized how many wonderful talents all of us have and I have become grateful for that new knowledge”; “I now believe in a higher power”; “feel more of a purpose for life”; “how I look at life or anything else is different”; “a whole new world to think and to live”; “I am changing my attitude towards life”; “I feel I have become a better person”; “I meditate now”; “I use all most of the techniques and teach them to others as well so they can help themselves”

Question # 7: “Which technique(s) do you consider the most useful for yourself in the future? And why?”

Three participants made general comments: *“Anti-stressing’ myself to get ready for tests etc...”*; *“Although I do believe some will be useful—I doubt I’d use any.”* *“I am not sure because all techniques are equally important in many different ways.”*

The majority of participants tended to mention specific techniques and often provided an explanation. These responses are grouped below in arbitrary sequence.

“Therapeutic Touch. *I consider the Therapeutic Touch—scan body really important.”* *“Therapeutic Touch seemed to have a large effect on me. This could help me with any sports injuries I may have in the future.”* *“The healing touch because I can help cure a wound.”* *“Therapeutic Touch. It was very interesting to see how it worked on my knee.”*

“Biofeedback *simply because I find it interesting; and muscle testing. Being able to ask my upper self questions and being calm and relaxing while meditating.”*
“Biofeedback”

“Chakras/bubbles”. *“The chakras and my own bubble.”* *“I feel making the energy bundle will help me in the future—I don’t know why but I feel it just will.”* *“I can look at my chakras depending on how I’m feeling that day.”* *“The bubble techniques.”*
Chakras-be connected with myself better.”

“The Autogenic Training. *The Autogenic Training because I get headaches sometimes.”* *“The Autogenic training will be useful for me to help me feel at peace & without pain.”*

“Brain Gym—*to easily get focused.”* *“I find for myself the ‘hook-up’ the most useful—to calm myself with.”*

“The breathing, grounding, centering, and balancing techniques *because it made me feel calm.”* *“Grounding will be most important to me because it helps me calm down when I have a bad day.”* *“Grounding and centering, learning to relax.”*
“Grounding helps relax.” *“To ground myself, be aware and confident. I chose these ones because it has helped me on tests.”* *“The breathing exercises were great. I was able to enter into a totally relaxed state. I also enjoyed the dowsing. It made me feel more confident in myself.”* *“I find the grounding and calming techniques the most useful and also breathing and getting rid of headaches are very useful as well.”* *“Breathing-calms me right down.”* *“Breathing—before tests when stressed out and at athletic events (coming down from exertion)”*. *“Breathing-so I don’t lose control.”*

*“The **muscle testing** because I can use it to tell what I need.” “Muscle testing because I can use it day to day and it seems very effective.” “The **pendulum** because I can use it as a guide.” “Muscle testing—answers a lot of questions with moving or having to make an appointment.” “Muscle testing—Helps with everyday life”; “helps you choose in life what to do/not to do.” “Muscle testing because if I am unsure about something I will have another source to check with.”*

*“The **Muscle Relaxation** because it really helped my body feel at ease.” “Tensing muscles, then relaxing,” “muscle relaxation—to relax me from busy days.”*

*“**Meditation.**” “Meditation and asking of the higher self will be useful for tests in high school.” “Meditation to get through exams.” “Meditation, it will help me keep in touch with my non-image/body related self.” “Meditation to help with relaxation.” “I’d consider air meditation most useful because then I can concentrate on a test, or be at peace when making an important decision.” “Meditation.” “Meditation because it could help me to stay calm.” “Meditation because it will help me deal with stress and emotions both as a young adult and an adult.”*

*“The **Place of Peace** because I love it there.” “Just going to my peaceful place lets me feel relaxed and recentered.” “Going to my place of peace, I think is very helpful and will be in the future.” “Also the breathing exercises really help me.” “My place of peace because I always go there.” “Special place because it helps you escape reality to calm down. Stress will be a big thing in my future.” “Going to peaceful place—because it calms me down.” “Going to my special quiet place and clearing my mind.” “The place of peace because it helps me sleep and I feel rested when I wake up. It also helps me deal with pain.” “It would probably be the place of peace because it can look anyway I want it to and I feel so calm, peaceful and energized when I’m in my place.” “My happy Place is the best or most useful.” “Going to my place of peace because it is a really comfortable thought and helps calm me down.” “The place of peace because it’s relaxing and soothing.” “Probably the special place.” “Finding a happy place (going to my happy place) just to relax.” “I consider the Place of Peace to be useful because I can go there to escape the pressures of life.” “Happy Place because it helps me sleep.” “Place of Peace—perfect place.” “Grounding and balancing—gain back centre.”*

Question # 8: “Do you believe you have changed through this experience? If so, how?”

94% (n=62) provided answers; 6% (n=3) of the participants left a blank; 1 from Group A and 2 from Group B; 18% (n=12) answered negatively; 5.5% (n=4) were unsure; 12.5% (n=9) answered affirmatively without further elaboration; 62% (n=41) provided the following answers.

Ad A) Locus of Control

“It made me want to change what I don’t like about myself; can protect myself from other people’s toxic feelings.”

Ad B) State and Trait Anxieties

“I am calm”; “calmer”; “less stressed”; “more confident”; “can help myself”; “chillax”; “I have found my Place of Peace”; “go to my Place of Peace before I fall asleep”; “meditate”; “have become mentally peaceful”; “feel more secure in life”; “not so nervous any more around others”; “I know how to protect myself from others’ emotions”; “I cope better.”

Ad C) Self-Concept

“I gained a wider perspective on certain concepts of life”; “feel more open-minded”; “wiser”; “more self-aware”; “I think more positively”; “have become more spiritually aware/open”; “more aware of myself”; “more aware of others”; “more in tune/touch with myself”; “feel blessed”; “I know I’m not alone and never will be”; “I feel I have grown”; “I get better grades”; “keeps me out of trouble”; “I believe in myself more”; “I am beginning to understand what’s inside of me”; “how what I give out affects everyone else”; “I understand better what is happening with me and others”; “I don’t need to feel guilty for other people’s feelings.”

One participant reported the following: *“I learned a lot but it didn’t stick—it was temporary.”*

Question # 9: “Do you have a personal success story you would like to share?”

77.2% (n=51) provided responses; 22.7% (n=15) of the participants left a blank; 3% (n=2) answered “no;” 36.6% (n=22) “not yet;” 3% (n=2) wrote “thank-you;” 38% (n=25) provided the following answers. Since many of the answers cut across the three hypotheses, the assignment to a particular hypothesis is therefore based on a rather subjective decision by the principal investigator, simply for the sake of providing a useful structure.

Ad A) Locus of Control

“I have become aware that nothing is out of my control-I have a choice what to do and say and how to react.” “These techniques are helping me not to blow up at my brother.” “I like making the energy bundles.” “Balancing the chakras and TT have been a benefit to me.” “I enjoy the TT.” “TT is making my knees feel better.” “Autogenic Training helps my headaches.”

Ad B) State and Trait Anxieties

“Through learning TT and other relaxation techniques I have been able to control and deal with my anxiety and panic attacks. Before learning these techniques I could barely function. I am very pleased with the results and couldn’t imagine a time without these tools.” “I found a Happy Place!!!” “I love my Happy Place!” “The Place of Peace because it’s relaxing and soothing.” “I just feel calmer and less stressed and if I ever feel stressed again I can always do the exercises.” “I try to just meditate and ground myself each night before I go to bed and I have been improving my breathing. I

also have used techniques to ease headaches, which have worked very well and I always try to clear my mind instead of stressing out or worrying. And I always feel more relaxed or can at least quickly relax myself.”

Ad C) Self-Concept

“Actually taking this class and enjoying it”; “actually taking this class”; (3 times); “grounding myself”; “being aware and confident—I chose these ones because it has helped me on tests”; “During Math I breathed and did the leg/arm cross. I almost got perfect because I remained calm.” “Our school put on a huge production and I was in four transition scenes. I used the breathing techniques before I went on stage and I didn’t feel any stress. I felt confident and everyone in the audience loved the production.” “After getting the script [Inner Counselor] at the end, I believe the symbol I made will continue to help me remind me of how I want to react in that situation.” “My cat was dying of brain cancer and after the workshop I worked on his energy fields. Although he inevitably died, he became a lot less distressed, as I did, through our meditation together. It has helped me to be at peace with his passing.”

D.2 O₂ Data for Treatment Group

In this section, the mean and standard deviation of the O₂ data collection point is reported. For the sake of comparison, the O₁ data, which was the baseline point two weeks prior to the intervention, and the O₃ data, which was the immediate post-intervention data point, have also been included.

Just for clarification: a decrease in mean in the case of the N-S and the STAI indicates a shift towards a more internal locus of control and lower state and trait anxieties. The higher the self-concept scores, the more positive an image the participant holds in this particular scale.

Locus of Control:

	Mean	SD
O ₁	14.53	5.14
O₂	12.75	4.98
O ₃	11.59	5.25

State Anxiety

	Mean	SD
O ₁	49.06	9.48
O₂	47.87	9.24
O ₃	42.19	9.81

Trait Anxiety

	Mean	SD
O ₁	52.53	10.37
O₂	50.63	9.51
O ₃	49.03	10.81

Self-Concept

		Mean	SD
Physical Abilities	O ₁	46.5	13.64
	O₂	47.34	13.38
	O ₃	49.13	14.25
Physical Appearance	O ₁	51.91	10.09
	O₂	53.03	9.74
	O ₃	54.84	10.27
Opposite Sex Relations	O ₁	52.41	9.62
	O₂	53.22	10.02
	O ₃	54.41	10.16
Parental Relations	O ₁	45.88	9.93
	O₂	47.72	9.62
	O ₃	49.47	9.65
Same Sex Relations	O ₁	52.81	11.59
	O₂	53.12	11.69
	O ₃	54.41	11.41
Honesty/Trustworthiness	O ₁	51.91	8.65
	O₂	52.69	8.37
	O ₃	54.66	9.04
Emotional Stability	O ₁	48.19	10.44
	O₂	50.31	9.45
	O ₃	50.91	10.16
Math	O ₁	51.56	11.83
	O₂	51.44	12.46
	O ₃	53.47	11.73
Verbal*	O ₁	51.97	11.38
	O₂	53.53	10.43
	O ₃	55.09	10.59
General School	O ₁	49.28	11.32
	O₂	49.87	12.42
	O ₃	52.00	10.80
General Self*	O ₁	47.89	10.36
	O₂	48.97	10.70
	O ₃	51.53	10.03
Total Self-Concept*	O ₁	50.00	11.48
	O₂	51.69	11.73
	O ₃	54.38	11.67

D.3 Data outside of Normative Range

It is evident that the data shown in this section can only indicate possible assumptions and connections that need much more research. Due to the small numbers, no definitive statements can be made. However, the general tendency that appears in all the dependent measures, is rather intriguing and provides food for thought. The raw score for each one of the three data collection points is given.

Locus of Control

Out of the 13 participants in the treatment group who scored significantly above the norm for this age group, i.e. more than 17 points, only 2 did show a shift towards a more internal locus of control at the immediate post-intervention point. For 9 of the 13 participants, a more internal locus of control appeared to remain even at the two-week follow-up.

#	T1	T2	T3
11	17.00	10.00	13.00
16	17.00	11.00	17.00
32	18.00	16.00	17.00
13	19.00	21.00	15.00
15	19.00	12.00	10.00
17	19.00	16.00	19.00
1	20.00	16.00	23.00
7	20.00	23.00	23.00
8	20.00	15.00	18.00
25	20.00	20.00	16.00
29	21.00	8.00	7.00
19	23.00	16.00	14.00
31	25.00	14.00	16.00

State Anxiety

In the treatment group, only 6 participants ranked in the 60 and higher range. Five out of the 6 achieved an enormous drop in state anxiety that also remained stable over the two-week follow-up period.

#	T1	T2	T3
4	60.00	74.00	41.00
29	62.00	41.00	41.00
13	63.00	45.00	58.00
15	67.00	39.00	52.00
31	68.00	70.00	74.00
25	75.00	50.00	47.00

Trait Anxiety

Similarly, only 7 participants from the treatment group scored 60 points or higher, with 5 of them achieving a reduction in trait anxiety at the immediate post-intervention point. It is interesting to note that for 3 of the 7 participants a drastic drop in trait anxiety occurred in the two-week follow-up period, perhaps indicating the more long-term effects of the intervention.

#	T1	T2	T3
4	65.00	61.00	66.00
15	66.00	70.00	32.00
23	67.00	57.00	34.00
29	68.00	62.00	35.00
31	69.00	74.00	81.00
13	70.00	65.00	56.00
25	73.00	64.00	61.00

Self-Concept

A) Total self-concept

Ten participants in the treatment group began at a baseline significantly below the expected norm (i.e., 40 or below). In 8 out of the 10 cases, the Total self-concept scores improved at the immediate post-intervention point, with 5 of them experiencing further increases or remaining stable over the two-week follow-up period.

#	T1	T2	T3
25	27.00	31.00	32.00
31	33.00	40.00	32.00
4	35.00	39.00	40.00
13	36.00	40.00	35.00
17	37.00	42.00	47.00
19	37.00	56.00	58.00
30	38.00	36.00	36.00
1	39.00	38.00	36.00
3	39.00	38.00	36.00
15	39.00	48.00	47.00

B) General self-concept

Nine participants in the treatment group began at a baseline significantly below the expected norm (i.e., 40 or below). In 6 out of the 9 cases, the General self-concept scores improved at the immediate post-intervention point, with 5 of them experiencing further increases over the two-week follow-up period.

#	T1	T2	T3
17	28.00	38.00	45.00
13	30.00	28.00	33.00
19	30.00	54.00	55.00
15	31.00	48.00	42.00
30	36.00	34.00	33.00
31	38.00	36.00	37.00
4	38.00	42.00	44.00
7	38.00	45.00	45.00
29	40.00	57.00	62.00

C) Verbal

Only 4 participants in the treatment group began at a baseline significantly below the expected norm (i.e., 40 or below). In 3 out of the 4 cases, the Verbal self-concept scores improved at the immediate post-intervention point, with all 3 of them indicating further increases over the two-week follow-up period.

#	T1	T2	T3
17	27.00	27.00	27.00
32	36.00	41.00	44.00
25	36.00	41.00	44.00
4	37.00	44.00	44.00