ASTHMA AND SELF-HEALING: 
A HOLISTIC ART THERAPY APPROACH

by

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A thesis submitted in conformity with the requirements for the degree of 
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Abstract

This study explores the role of a holistic art therapy program in the self-healing of asthma, with nine asthmatic high school students as the subjects. While modern medicine provides drugs to help control the disease, the researcher believes there are other means of conquering asthma, as she was able to do for herself via this holistic art therapy program. Journal writing, visual art and visualization exercises provided outlets for self-expression and tools for relaxation.

Data consisted of the subjects' journals, researcher's field notes, and in-depth interviews conducted at the end of the twelve-week program, and was subjected to a qualitative methodology, Strauss and Corbin's Grounded Theory. The research indicated that for those subjects who believed they could take a measure of responsibility for their own wellness, empowering self-healing occurred. This phenomenon was made possible by varying degrees of relaxation, stress-relief, a renewed sense of self, and disease control in the subjects.
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Chapter One: Introduction

General Statement of the Problematic

In 1873, *Smith's Family Physician*, the household medical guide of the era, claimed that the treatment for asthma consisted of "a gentle laxative ... the use of Antispasmodics and Sedatives: such as ... Ether ... and Opium ... smoking Thornapple and ... Tobacco." (Smith, 1873, p.96) It stated that after an attack, by way of prevention, "the patient should live ... on boiled mutton, poultry and light puddings ... coffee ... taken very strong." (Smith, 1873, p.97)

Modern medicine is inclined to disagree. Today asthma is relieved by catecholamines (adrenaline) and corticosteroids (anti-inflammatories), drugs which directly affect the central nervous system in an effort to prevent the patient from suffocating to death. These methods are fast, effective and permit asthma sufferers to live with a degree of security.

Smith's found the instigators of asthma to be many and varied, such as "sudden change from cold to warm weather ... severe exercise ... increased bulk of the stomach ... violent passions of the mind ... irritations of smoke, dust and other subtile [sic] particles floating in the air." (Smith, 1873, p.95) Modern medicine is inclined to agree with most of these, citing asthma as a "serious, occasionally fatal, allergic disease that often is precipitated by stress." (Morse and Furst, 1979, p.110) Asthma, therefore, has long been linked with the psyche, given its associations with "violent passions of the mind" in 1873, and "stress" today.

Unfortunately, however, modern medicine relies on drugs to combat asthma. Despite a proven connection to stress, asthma is treated as an infliction separate and distinct from
lifestyle and state of mind. While the immediate benefits of various inhalers and drugs are indisputable -- no one could successfully argue a case to eradicate the benefits of modern technologies -- they are not the only means by which to combat this potentially fatal affliction, and they do not satisfactorily address prevention of attacks. Generally, modern medicine tends to view itself not as a healer of the entire human condition, rather as a systematic and scientific general in the ongoing war specifically against illness and disease. The war is won if the disease is cured, and lost if it is not, virtually personifying the illness itself as an enemy. This mentality eliminates the healing potential of the patient's mind, and, to continue the metaphor, disregards the patient entirely as a soldier in the battle. Gone is the essential link between the psychological and the physical, and thus the patient's role in the healing process.

The Purpose of the Study

The purpose of this study was to examine the effects of a holistic art therapy-based, self-healing program on ten asthmatic secondary school students over a 12-week period. Its intent was to discover whether or not control of the psyche could translate into control over asthma attacks. If this study resulted in an affirmation that indeed asthma could be controlled by the mind, the implications were vast. Firstly, it would become part of a group of many other studies of this very nature (please see Chapter Two: Literature Review) which examined the effects of mental healing on other diseases such as cancer. As this group enlarges, people are more easily convinced that indeed they have power over illness and
disease, and that ultimately, they are responsible for their own well-being. People could stop seeing themselves as vehicles transporting disease to the doctor's office; rather they could perceive themselves as co-pilots with the doctors in the flight to health. This approach to health care which envisions the patient as partner is fiscally responsible because of an increased ownership on the part of patients for their own well-being. Simply, the state spends less on health care when the people know how to help heal themselves, and how to keep themselves well in the first place--a further implication of this type of study.

Implicitly, this study aimed to further validate the role of holistic art therapies, a concept formed by Dr. Joyce Wilkinson, advisor to the researcher of this study, in emotional and physical healing. Also, in engaging secondary-level students as subjects, this study endeavoured to validate holistic art therapies as part of the school curriculum should the students perceive benefits from the program. We, as teachers particularly, would receive full marks for our ability to place stress on students, but would fail miserably for our lack of ability to help them cope with that stress. This program could perhaps give some guidance in this area. Furthermore, as Arts budgets continue to be slashed in most schools and school boards, perhaps this study with students could provide ammunition for teachers and parents who believe in the incredible healing and growth tools which are the Arts.

**Researcher's Background Preparation Relative to the Study**

This area of study fascinates me due to my own experience with holism. I have virtually cured myself of chronic asthma through a self-healing process which started quite
subconsciously, but evolved into a conscious and very spiritual journey. Through forgiveness, self-expression and becoming truly happy with the person I had become, I had no more need for the asthma—it found no welcome mat anymore in my body, for there was no reason for it to be there. I wanted to verify that this process, or a variation thereof, could work for others as well, and, in doing so, help bring them faith in self and positivity, and do my part to bring credibility to an area of healing which has altered my life.

**The Thesis Question**

As a child, I suffered allergic reactions which manifested themselves in acute eczema. As I became a teenager, I began to experience acute, seasonal hay fever. When I reached my early twenties, I developed asthma, a common occurrence among childhood sufferers of eczema. My asthma was cured—not through the use of various drugs, rather through a self-healing program with its foundations in the arts. At that point I wanted to explore this area: Could a holistic art therapy self-healing program help control asthma in other chronic asthma sufferers?

**The Sub-Questions**

This question implied a myriad of others:

- What were the expectations of candidates entering this process?
- Would the same healing plan work for all members of the treatment group?
- Would the age of the subject have an impact on the program's effectiveness?
- Subsequently, of what would potential personal modifications consist?
- Should the healing plan not control the asthma, or at least significantly reduce the number of attacks, was it a failure? Was the individual the cause?
- What constituted failure/success of the plan?
- What were their definitions of being healed?
- Should the plan fail for the majority of candidates, what were the implications?
- Should the plan work for the majority of candidates, what were the implications?
- Did candidates with emotional damage who healed this damage notice a physical change when this occurred?
- Did candidates who focused on de-stressing meet with success in healing?
- Did candidates become more aware of frames of mind which were more or less conducive to asthma attacks, and learn to cope?
- What did candidates feel was the key to prevention for them?

These questions' relevance became apparent when the research was completed.

Assumptions of the Study

I did and do hold certain hypotheses. These did not impair my research, however, because my research hinged on human experience. I was bound by what my subjects told me. My data was the experiences of the treatment group itself, and their interpretations thereof. I believe that:

- holistic arts therapies are effective in aiding self-expression and thus in aiding self-healing.
the same healing plan, with relatively minor alterations, should bear positive results in all candidates.

the psyche plays a major role in all healing. A change in perception of one's condition can bring about a change in the condition itself.

any individual is capable of self-healing with a positive outlook, even if this means he/she is not completely cured of illness.

a state of well-being will be achieved when the whole self (body and mind) is healed, and this, in turn, should help prevent and cure illness.

Limitations of the Study

The purpose of this study was not to malign modern medicine. Any self-healing program should be attempted in conjunction with modern medicine, the positive aspects thereof being indisputable. Nor was the study attempting to imply that all illness can be cured simply by willing it to be so. A potential weakness of this study was that readers might feel that should the candidates meet with success, the plan should automatically work for them, no matter what their frame of mind or physical condition upon entering, and then be disillusioned should the plan fail.

Background to the Problematic

The Educational Context

The power of mind over matter, and thus self-healing potential, are not new concepts in human experience. However, western civilizations have tended to ignore the power of the
individual in the battle against disease throughout this century. As we have become more dependent on our drugs and various other remedies, we have rendered ourselves impotent through capitulation. Literature supporting the human potential has been largely ignored until relatively recently. However, times are changing. Physicians such as Dr. Bernie Siegel (1990), Dr. Carolyn DeMarco (1994), and Dr. Richard Firshein (1996) are bringing credibility back through their seminars, books and their own practice. These authors and educators are creating self-help books with healing plans anyone could follow, as well as citing causes of disease, and human triumph stories for inspiration. (Please see bibliography.)

Barbara Jo Mellor wrote her thesis for OISE in 1991 on 10 individuals' journeys to wellness, all of which occurred through a change in mental outlook. Mellor found the work of Dr. John Travis, an MD. cum educator who focused on self-responsibility and prevention, to be of enormous value to her study. Lindsay Anderson's thesis of 1995 explored cancer survivors living with remission, wherein she discovered that "when cancer survivors experience a positive constitutional shift in perceptions, priorities, attitudes and behaviours ... (they) can best encourage and maintain their health." (Anderson, 1991, p.3) In Anderson (1995), Don Ardell, an expert on high-level wellness, reiterates Travis' belief that you are in charge of your health and that the body, mind and spirit are integrated and inseparable. These people are all educators, with the desire to teach others how to be well. Their work is becoming increasingly popular as people become increasingly dissatisfied with an overworked, understaffed medical profession.
The Art Therapy Context

Art therapy literature to support the concept of self-healing abounds; for, inherent in the arts is the crucial self-expression needed for self-healing. No longer are the creative arts considered some far-off land where "real" artists live; rather they are becoming so widely accepted as tools for healing, that now each of us "has an artist within". D. Harvey, in his article "Emergent Concepts in Art Therapy" emphasizes art therapy as a means of self expression, diagnosis, communication, and personal development. Visual art therapy is becoming more widely accepted in the education community, for example, as teachers are now expected to recognize and report "disturbing" works of art created in their classrooms by students. This view that the arts are a vehicle for the expression of inner experiences is shared by Brian Nichols in his article entitled "Children's Drawings as Indicators of Sexual Trauma", where he revealed that "early in the (Victim Counselling) program, the value of using children's drawings as a diagnostic indicator of stress became apparent." (Nichols, 1981, p.52) Certification programs for aspiring creative arts therapists are becoming more widespread, in direct proportion to the increased numbers interested in this field--a most tangible validation.

The literature surrounding arts therapies is invaluable to this study, as holistic art therapies are themselves the basis for the self-healing program the subjects will adopt. The literature overview for this study of these therapies will focus on the psyche-physical connection specifically, which can be made through arts therapies - they are the means to an end.
The Conceptual Frameworks of the Study

The theme of this study was to find a relationship between the variables of psychological well-being and physical well-being, and between a self-healing program and disease control in the body. Psychological and physical well-being should be directly proportional on a Cartesian graph, as should be the implementation of a self-healing program and control over the disease. Specifically, where general holistic healing programs exist and have become en vogue, and those specifically for cancer have received the most press, I wanted to focus solely on asthma. In addition, it was important to me that the arts provide the base for the healing program, as their benefits were certainly well-documented in research literature, but still had to be given more credence in a school setting and, hence, the choice of high-school asthmatic students as subjects.

Overview of the Literature Background of the Variables

Literature supporting the concept of the psyche directly affecting physical well-being, specifically in the case of asthma, is abundant. What is lacking is the next step: finding a way to control the disease using those mental powers which helped create the disease in the first place, by channelling them through a holistic art therapy program. The following experts help demonstrate the psychological nature of the disease, which must be proven before a psychological cure can be accepted.

All literature pertaining to disease concerns an area of medicine called pathology. Where pathology and psychology meet is where this study begins. Stress and Its Relationship to Health and Illness by Dr. Linus A. Bieliauskas describes the disease asthma
as a psychophysiological reaction to stress, and notes that some experts feel it is a "lack of development of appropriate emotional responses to daily conflicts in childhood."

(Bieliauskas, 1982, p.71) There are raging debates as to how to control asthma, as various studies seem to show an equally variable number of solutions. In Bieliauskas, Hock, Rodgers, Reddi and Kennard (1978) found relaxation techniques to be quite effective; yet Kinsman, Dirks, Jones, and Dahlem (1980) caution against buying into this. Neither found changing behavioural coping patterns to have much effect. This study hoped to prove the opposite.

Dr. Robert A. Anderson, in his book Stress Power!, considers asthma to be among many adaptive responses to stress. He discusses his encounters with asthmatic patients as he tries to work through the stressful situations which trigger attacks. He remarked a direct relationship between childhood asthma and tension-filled homes. He did not conduct any formal studies; rather he recounted what had been his observations throughout his practice.

Dr. Anita Stevens, in her book Your Mind Can Cure, points out the centrality of breathing among all other body functions, and how one's entire well-being is in jeopardy if breathing is not performed properly. She also informs that psychoanalysts discovered that asthmatic children show an unusually strong attachment to a mother from whom they cannot, or dare not, separate. The wheezing of the asthmatic has been compared to a 'cry for the mother". (Stevens, 1974, p.81) In Stevens, Dr. Eduardo Weiss hypothesized as early as the 1920's that "mental pain, in many, becomes converted into asthma, their unconscious choice of physical suffering." (Stevens, 1974, p.82) This physical suffering can be self-punishment or punishment of others who must worry over the asthmatic.
Dr. Donald Morse and Dr. Lawrence Furst, in their book *Stress For Success: A Holistic Approach to Stress and Its Management*, view remedies for asthma and other stress-related ills as proper nutrition, exercise, massage, sleep, hypnosis, meditation, biofeedback, and the right doctor/dentist for you. Drugs are encouraged only in emergency situations, and the book is largely preventative in nature. It is interesting that Morse and Furst view practically every known illness to man as a "consequence of distress" (Morse & Furst, 1979, p.xvi), from warts to cancer and cardiovascular diseases. Asthma is not given much specific treatment here; rather the focus is on a general cure for all stress-related disease.

Dr. Wolfgang Luthe, in the book *Autogenic Therapy*, discusses how to apply autogenic meditation, including visualization, to help control a wide variety of ills, including specifically bronchial asthma.

Dr. Sheila Pennington interviews survivors of cancer in her book *Healing Yourself: Understanding How Your Mind Can Heal Your Body*. Her doctoral thesis examined what factors in their lives, according to her subjects, contributed to survival. This book highlights the power of the mind and the spirit over foes as grave as cancer, so why not, I asked myself, help asthmatics find the same factors in their own personalities, allowing them to conquer also? Bernie Siegel's book, *Peace, Love and Healing*, also highlights the power of the human spirit, and provides a 5-part therapeutic program for self-healing, which contributed to that of this study.

Finally, Anees A. Sheikh edits a book entitled *Imagination and Healing* from the Imagery and Human Development series, promoting the use of imagery to alleviate
depression, phobic disorders, pain and even cancer. The closest reference to asthma is allergic reactions, and the suggested treatment is hypnosis, eliminating a need for powerful drugs.

The battery of books supporting the power of the psyche in the perpetrating of, and in the war against, disease, is vast and encouraging. Nevertheless, I saw a gap where a concrete study of a self-healing program on asthmatics, specifically holistic art therapy based, would fill a niche, for until now there was much lumping together with other afflictions, much conjecture as to how to heal. Experts agree that the psyche plays a role in producing asthma; perhaps that same psyche could play a role in controlling it.

**Significance of the Study**

*How it adds to the present knowledge in education*

This study hoped to further present knowledge in "Education" in a myriad of ways. It could aid in determining the role of the psyche in physical healing. It could extend the realms of current knowledge in self-healing to include asthma as a viable candidate for holistic art therapies. It could further verify that asthma, considered by many to be a stress-related illness, could be controlled by the individual; thus, education in self-healing could be proven to be a potentially vital part of life's curriculum. Given the demise of our public health care system as we know it, this type of study could be extremely valuable in the ongoing search to find more cost-effective methods of health care. The population has become accustomed to unlimited access to drug remedies and physicians, and this must change. Not only is there no more money to support this addiction, more importantly people
have reduced themselves to impotent pawns. For the sake of ourselves, holistic education and holistic medicine must form a united front with modern medicine in the fight against illness. This study hoped to further the cause.

How it adds to present knowledge in arts education

This study could have important implications for our educational system. As stated for a purpose of this study, we as educators must become better versed in providing our students with strategies to cope with stress, to cope with disease, and to believe in their own powers as self-healers on many levels. These lessons can no longer be counted on to come from elsewhere in a world where relationships divide sometimes more quickly than cancer cells, and children especially are left to their own devices. The arts are our best friends as educators, and often our salvation.

Therefore, we must find whatever means possible to protect the arts. Proving their worth on an ongoing basis is critical, as these tend to be the first budgets slashed when economic times are lean. Studies such as this one could provide valuable ammunition for supporters of the arts in education to bring to the trustees' or board of directors' tables.

Should this research produce results consistent with those I experienced for myself, then I feel I have the responsibility to continue research in this area in order that the message become more widespread. The next group to convince is the medical community on a more widespread basis, so that they may in turn convince those patients who will only believe MD's. Yet the next group to convince are the school board trustees who allocate monies toward various curriculum endeavours. Teachers need workshops and mentoring to become
more comfortable with the notion of the arts as tools to heal, and this will cost money.

However, if we can spend billions of dollars on computers in the classroom province-wide, then hopefully we can spend enough money to ensure we have enough healthy people to use them.
Introduction

The overview of the literature pertinent to this study of asthma and self-healing will encompass specifically six areas. In the first area, I will briefly summarize the role modern medicine has taken since its inception, versus that of "alternative" medical practices. Given that this study would be considered to rest in that latter realm, it is important to establish where it would fit in society's perception of healing. The next area is the psyche-soma, or mind-body, connection. Here, it is critical to establish that the literature supports a mind-body connection, not only in terms of establishing the link, but also in terms of its use in therapy/healing, for this is at the root of my study. The third area aims to establish asthma as a disease with some psychosomatic components: for if asthma can be triggered by, for example, emotion, then it should follow that the mind could be taught to control this trigger by coping with emotional response in an appropriate manner.

In the fourth and fifth areas, I review literature establishing creative art therapy as a veritable means of healing the psyche and the soma respectively. Given that the treatment program for my subjects is a holistic art therapy program, I wish to demonstrate support for this method of healing. This literature review will provide substantiation for conducting a study of this nature, while demonstrating the need for more specific research in the area of holistic art therapies as aids in controlling asthma. In the final area, I will tell my story. I am an asthmatic who has learned to control my disease without the habitual use of drugs, and wish to help others do the same.
Holistic verses Modern Medicine

The Reverend Dr. Norman Vincent Peale, in his book *The Power of Positive Thinking*—considered to be the greatest inspirational best-seller of our time—cited faith as a key component in healing: "Sadly the healing element in faith has suffered neglect. I am certain that faith can and does work what we call 'miracles' ..." (Peale, 1952, p.146) This was considered somewhat revolutionary in 1957 as modern medicine forged ahead, and those who dared to suggest a complementary alternative were considered at the very least anti-progressive. Some were regarded with great suspicion as to their motives, and still others were drummed out of doctor's offices (as the doctor or the patient), accusations of witchcraft hard on their heels.

It is difficult to fathom how we could have strayed so far from our human ancestral roots, where a holistic approach to medicine was the norm. Prayers (in broadest sense of the word), the healing touch of the medicine person, and herbal remedies all formed the basis for medical practice prior to the scientific age, at which onset the use of holistic medicine became inversely proportional to the rate of scientific discovery. The result of this shift is that modern medicine is technology and drug-based, and the human and spiritual elements have all but disappeared in our quest for knowledge rather than healing. The holistic approach, which includes the "art" in "medical arts", has been relegated to the status of "alternative": in other words, if modern medicine fails you and you are finally desperate enough to try anything, try the "new age" options. The marriage between all that was positive from whence we had come, and all exciting discoveries that were yet to come, never happened in our western civilization.
It is only within the last decade that modern medical practitioners have started to share with the public at large what they have been remarking in their work with patients all along: the incredible power to be tapped when mind and body are considered one entity, hence the "whole" of holistic, not separate and distinct from one another, as if the brain were a remote controller, and the body a toy car careening around. Practitioners such as Dr. Bernie Siegel (1990) and Dr. Andrew Weil (1995) have been pioneers in bringing the healing power of the psyche-soma connection to public attention, paving the way for others such as physicians interviewed in Bill Moyers' book *Healing and the Mind* (1993), Dr. Carolyn DeMarco (1994) and Dr. Richard Firshein (1996) to follow in their footsteps and specialize even further.

It has taken great courage and conviction for individuals like these to stand before colleagues who are cynical non-believers, for they do not have an abundance of "scientific" research on their side to convince those critics who would simply try to explain away patients' testimonies, discounting human experience outside of a laboratory. Although research has been conducted in this field, now termed psychoneuroimmunology, we still have far to go. Modern medicine stills knows relatively little about the human brain and its nervous system. But this is changing, and the preliminary research into the healing powers of the mind is most encouraging. This, along with the work of the aforementioned physicians, will be explored in greater depth in this chapter.

The tide is also starting to turn amongst the public in favour of "alternative" practices in health care. This is logical, for modern medicine has its limits, one being that it is not
holistic in its approach. It treats the symptom, not necessarily the underlying illness or problem. In the June, 1994 issue of *Wellness, MD* magazine Brian Berube reported:

... alternative medicines, including homeopathy, enjoy increasing popularity in North America as a growing number of patients have become disillusioned with mainstream medicine. A paper published last year in the *New England Journal of Medicine* showed that one in three people used alternative therapy in 1990. More than 80% of these people also used conventional medical care at the same time, but did not tell their physician they were using alternative therapies. (p.31)

This statistic of one in three patients in North America grows to a staggering 99% in Germany, as 95% of the doctors there practice some form of occasional alternative medicine. (Berube, 1994) Why should it be that our North American "white" culture is only now awakening to the benefits of looking elsewhere for complements to modern medicine?

There are some who would suggest that too many people make too much money from prescription drugs to ever allow competition to flourish. Regardless, the links are being made, even on our continent, and this bodes well for studies in alternative healing like this one, for those which have gone before it and perhaps not been given the attention they deserved, and for those yet to come.

In no way does this study refute the enormous benefits of modern medicine for humankind. As Dr. Dean Ornish, author of *Dr. Dean Ornish's Program for Reversing Heart Disease*, states:

I think we all have a lot to learn from each other. The problem is that so much of what we do is compartmentalized -- for example, we have science on one hand and
religion on the other ... learn from each other ... that's what mind/body medicine is trying to do ... in its best form. In its worst form, it also polarizes people by saying that drugs and surgery are bad, and only mind/body interventions are good. They both have their place. If somebody comes into the emergency room with crushing chest pain, I don't teach them to meditate and feed them broccoli. I use whatever drugs and surgery are needed to get that person through a life-threatening crisis. But once the person is stabilized, you have their full attention. Then you can say ... here is how you got into this situation. And here are some new choices that can not only help keep your health from getting worse, but maybe even cause it to improve.

(Moyers, 1993, p.98)

Likewise, it would never be suggested to subjects of this study that they throw away their prescribed medications. These exist to combat emergency situations. However, perhaps as the focus shifts from being a passive recipient of medical care to taking an active role in self-healing, the need for these drugs will diminish.

**The Psyche and the Soma**

Barbara Jo Mellor wrote a doctoral thesis in 1991 on ten individuals' journeys to wellness, all of which occurred through a change in mental outlook. Mellor found the work of Dr. John Travis, an MD cum educator who focused on self-responsibility and prevention, to be of enormous value to her study. Lindsay Anderson's master's thesis of 1995 explored cancer survivors living with remission, wherein she discovered that "when cancer survivors experience a positive constitutional shift in perceptions, priorities, attitudes and behaviours
... (they) can best encourage and maintain their health." (Anderson, 1991, p.3) In Anderson, Don Ardell, an expert on high-level wellness, reiterates Travis' belief that you are in charge of your health and that the body, mind and spirit are integrated and inseparable. These people are all educators, with the desire to teach others how to be well. Their work is becoming increasingly popular as people become increasingly dissatisfied with an overworked, understaffed medical profession. Popularity aside, their studies are grounded (as this study is) not only in the perceptions of their subjects; but also in a scientific base which is ever-widening.

The study of the mind-body healing connection is a new area of exploration in the field of medicine. According to Siegel (1990), it is called psychoneuroimmunology, which is the intersection of psychology, neurophysiology, endocrinology, and immunology. Karen Olness in Moyers (1993) states that some scientists refer to it as an aspect of cyberphysiology -- "cyber" from the Greek meaning "the steersman", and the resulting word meaning being in control of some aspect of one's physiology or body processes. Both expressions commence with how our body promotes communication between its composites. Dr. Bernie Siegel, author of Peace, Love and Healing, explains:

Body and mind are different expressions of the same information -- the information carried by the chemical transmitters known as peptides ... In man they make possible the move from perception or thought or feeling in the mind, to messages transmitted by the brain, to hormonal secretions and on down to cellular action in the body -- then back again to the mind and brain, in a never-ending feedback loop ... The key juncture in the loop, the place where body and mind meet and cross over through the
action of the peptides, is in the limbic/hypothalamic area of the brain ... However it is not just the brain that contains peptide receptor hotspots. Examples of other peptide-rich areas are the linings of the gut and stomach. This may be why people say they feel their emotions in those areas. You've heard of "gut reactions" ...

(Siegel, 1990, p.36)

Dr. Candace Pert, whose work is demonstrating that all the cells of the nervous system and endocrine system are functionally integrated by networks of peptides and their receptors, states: "Indeed, the more we know about neuropeptides, the harder it is to think in the traditional terms of a mind and a body. It makes more and more sense to speak of a single, integrated entity, a "bodymind"." (Siegel, 1990, p.36)

Currently, neurobiologists are studying a group of peptides known as growth factors, which stimulate exactly that: growth. Specifically, nerve growth factor (NGF) "affects cells in both the immune and central nervous systems, thus helping to account for the way the psychology of an individual could be related to immune function ... NGF is somewhat of a linking messenger." (Siegel, 1990, p.26) Some more familiar peptide molecules are endorphins, interleukins and interferon. These make emotions chemical, creating the link between psyche and soma. Endorphins, for example, are the body's painkillers, and are now thought to account for the placebo effect, where positive expectations stimulate endorphin production in the brain.

The brain signals the immune system with peptides when we experience an emotion, and whether the effect will be positive or negative on immunity has been proven to be linked to whether or not the individual feels in control of the situation, or feels lonely, according to
Dr. David Felton. (Moyers, 1993, p.216) More specifically, should that emotion be stress, and we are consistently subjecting ourselves to frequent bursts of stress hormones, according to Dr. Alice Domar, we can dampen our immune cells, weakening our immune system.

(Domar, 1996, p.13) The brain and the immune system form a continuous feedback loop, and, according to Dr. Richard Firshein, scientists speculate that the immune system is a kind of sixth sense, one that recognizes the substances we can't see, hear, touch, feel or taste, such as a virus. The immune system then signals the brain via hormones of what is transpiring in the body. (Firshein, 1996, p.314)

Dr. Andrew Weil (1995) explains the biology which explains body-mind connections, and hails research on the specifics as the frontier of medicine in the twenty-first century: Clearly, the life of the brain depends on the life of the body. Stoppage of the heart for more than a few minutes results in irreversible brain damage. A sudden drop in blood sugar is also a disaster for brain cells; they need constant supplies of glucose, the only nutrient they can use. At the same time, a strong case can be made for the brain as the reason for the existence of the body, since every system is directly concerned with maintaining or protecting the life of the central nervous system (or reproducing it in a new organism). In a developing embryo it is the nervous system that organizes the structures of the future body. Every organ, every cell of a human being is linked and held in service to the brain by the endless branching of the peripheral nerves.

Human consciousness, particularly ego consciousness associated with verbal thought and will, seems related to the activity of the cerebral cortex, the thin layer of
cells that covers the two hemispheres of the brain. The control centers of normally involuntary functions, of the endocrine glands and the immune system, of placebo responses and innate healing, seem to be located far from the cortex in deep, midline structures, such as the evolutionarily old brainstem, which connects the hemispheres to the spinal cord. These centers certainly respond to some suggestions and beliefs but not to purely cortical beliefs and voluntary commands. There appears to be some barrier to direct transmission of conscious thought from the cortex to the deep centers controlling the mechanisms of psychosomatic events, including healing. (p.252-253)

Perhaps, should we be unable to traverse this barrier with conscious thought, we would have more success with subconscious thought: hence the reason for the success of creative art therapies, which tap the subconscious.

Most research surrounding the body-mind connection centres on the placebo-nocebo effect. When subjects show rapid healing and pain relief after taking an inert substance, or following a sham procedure with no properties that would allow it to function as an agent of healing, then they have experienced a placebo effect. When the reverse happens and they suffer serious and unpleasant side-effects, they have experienced a nocebo effect. With both procedures, it is the expectations aroused that are ultimately responsible for the results. (Siegel, 1990) Unfortunately, this phenomenon has been much maligned by the medical profession, which relegates the patients' experiences to the pitiful category of "psychosomatic" -- a term which has come to represent, in popular culture, those who manufacture illness to get sympathy and attention. However, ironically, clinical trials on medications invariably include placebo study, for researchers must prove that the potential
new drug works more effectively than would a placebo. According to Siegel, "placebos can be useful, because as symbols of hope they activate expectations ... there is no false hope -- only false no hope --". (p.16)

Dr. Andrew Weil (1995) informs us that all illness is psychosomatic.

All it means is 'mind-body', nothing more. It does not mean 'unreal' or 'not serious' or 'not physical' or 'fake', just 'mind-body'. To say that all illness is psychosomatic is to say only that all illness has both physical and mental components. This is not to imply that the physical symptoms are directly caused by the mind. There is another word for that, psychogenic. (p.57)

He states that the only way mind and body can be separated is verbally, and speaks of how this has come to pass in the medical profession:

Materialistic doctors talk about the mind but do not really believe in it, or, at least, do not accord it the reality of a physical organ that can be measured, experimented upon, and removed. When such doctors refer to psychosomatic illness, they mean only some illness, like asthma or ulcer, and often they also mean illness that seems to them exaggerated or not very important. For good reason, patients resent the word, protesting, "My asthma is real!" if someone dismisses it as psychosomatic. All illness is psychosomatic because we are mind-bodies, not just bodies. That fact must influence therapeutic strategies in managing disease. (p.57)

"It's all in your head" is an expression much-used to denounce those we feel are perhaps manufacturing their ills, their fears. It is interesting how we subconsciously
acknowledge the power of the brain to "create" illness, but have much more difficulty acknowledging its same power to cure illness. As Dr. Siegel (1990) informs us:

"It is interesting that this point of view has been with us for so long, despite innumerable studies showing that placebos can alleviate problems ranging, as psychologist Robert Ornstein and Dr. David Sobel have tallied them, from 'post-operative wound pain; seasickness; headaches; coughs; anxiety and other disorders of nervousness [to] high blood pressure; angina; depression; acne; asthma; hay fever; colds; insomnia; arthritis; ulcers; gastric acidity; migraine; constipation; obesity; blood counts; lipoprotein levels; and more.'" (p.18)

In Siegel (1990), according to Ornstein and Sobel, "no system of the body appears immune to the effect". (p.19) Therefore, perhaps placebos demonstrate our potential to change what takes place in our bodies by changing our state of mind.

Studies have shown, according to Dr. Siegel, that relaxation training "can be helpful in combating the negative effects of prolonged stress on the immune system components. A dysregulated immune system ... may be a factor in asthma, allergies, diabetes, multiple sclerosis, rheumatoid arthritis, lupus and other auto-immune diseases ... " (Siegel, 1990, p.34) In addition, Siegel (1990) states that "psychotherapy and other techniques that bring repressed emotional material into consciousness can also heal, both psychologically and physically, by helping us to achieve peace of mind". (p.34) He cites a series of studies by psychologist James Pennebaker which showed that "people who confided traumatic experiences to a diary showed better immune function than those who didn't ... Blood tests
showed strikingly improved immune function among the emoters, who also made fewer visits to the doctor, but no improvements among the control group". (Siegel, 1990, p.35)

Dr. Candace Pert's research into emotion and health via peptides demonstrated "that emotions must play a clear role, and that repressing emotions can only be causative of disease. A common ingredient in the healing practices of native cultures is catharsis, complete release of emotion. Positive thinking is interesting, but if it denies the truth then I can't believe that would be anything except bad." (Moyers, 1993, p.191) Along with native cultures, Chinese medicine has also always recognized how the mind and emotions are closely related to health.

As regards these "life" experiences, psychologists Pirkko L. Graves and John W. Shaffer found that "logical patterns and attitudes formed in early life were found to continue to have a significant influence on the subjects' physical health as they aged". (Siegel, 1990, p.158) They discovered that "loners", for example, characterized by bland, emotionless exteriors and inner loneliness, were sixteen times more likely to develop cancer than those who both felt their emotions intensely and expressed them. Jon Kabat-Zinn, Ph.D., states that "as we begin looking at chronic illnesses ... we see more and more evidence that how we live our lives and, in fact, how we think and feel over a lifetime can influence the kinds of illnesses that we have". (Moyers, 1993, p.130)

Dr. Andrew Weil (1995) describes the vital, yet mysterious function that is breathing, and the therapeutic effects of proper breathing on the body:

Breathing is unique as the only function that can be fully voluntary or fully involuntary. As such it is a bridge between the conscious and unconscious minds as
As between mind and body. Proper breathing nourishes the central nervous system, establishes a harmonious pattern for other bodily rhythms, and also regulates moods and emotions. (p.62)

Proper breathing as a means of helping the healing process is particularly fascinating when considered for use with asthmatics. If proper breathing plays such a critical role in our overall health, then what does this mean for an asthmatic who has difficulty breathing properly in the best of circumstances? No longer are we coping simply with a respiratory system which seems to be the most fickle of friends; our entire being is as affected as our lungs, limiting our overall health potential. Alternative methods of controlling the disease must be found, for our current drugs treat symptoms, not the disease itself.

There do exist roadblocks impeding our progress on the road to good health via the mind/body connection. Bill Moyers, acclaimed television journalist and editor, has written a phenomenally illuminating book, *Healing and the Mind*, wherein he has recorded his interviews with leading physicians, scientists, therapists and patients -- people all taking a new look at the meaning of sickness and health. Interviewee Dr. David Smith explains one of these roadblocks to Moyers (1993):

... there's not a good balance. We're investing in new technology, but at the same time, we're not investing in prevention or in understanding what makes people tick or why they got sick ... we don't go back out to see if we can change some of the things that may have precipitated the sickness ... we're not even taught how to function in that environment. We're taught in a centralized, mechanized, medical model, not a health model. We don't look at the entire spectrum of health care approaches,
including prevention and rehabilitation ... The incentives for a health model rather
than a medical model just aren't there ... We don't reimburse for prevention, and we
also don't train people to do it. (p.55)

Another roadblock, as explained in Moyers (1993) by Dr. David Felton, is achieving
acceptance for alternative healing methods by the medical community. Felton refers to the
study which Dr. David Spiegel conducted on women with breast cancer and the role of a peer
support group in their fight against the disease. Women who had this support were better
adjusted, had a better quality of life, and lived longer. Felton argues that, if counselling is
proven to make a difference, should it not become a standard therapeutic approach to women
with breast cancer? Apparently some of his colleagues think not; that if we don't know the
mechanism by which it acts, perhaps we'd better be cautious and wait. Felton feels that
doctors are honour-bound to use it for the benefit of the patients, and then work vigorously to
understand the mechanisms behind it. (Moyers, 1993, p.223)

An impediment or a benefit to any healing can be the attitude of the patient
him/herself. Dr. Ron Anderson recounts anecdotes to Bill Moyers about patients who defied
odds against them, far outliving any deadlines they had been given, and those stories of
patients who wanted to die, and therefore did. Anderson sees "a very positive attitude, and a
goal" (Moyers, 1993, p.29) as being pivotal before any program of healing is commenced, if
it is going to have a hope of success. As doctors, Dr. Felton feels that we can't afford "to
ignore the role of emotions, hope, the will to live, the power of human warmth and contact
just because they are difficult to investigate scientifically and our ignorance is so
overwhelming ... because if we do, we'll miss wonderful opportunities to help our patients."
(Moyers, 1993, p.218) It would seem that both a positive, caring outlook on the part of the patient as well as the physician are critical in the healing process.

A pitfall which patients may fall into if they misinterpret the body/mind connection research and its precepts, is to blame themselves for the illness afflicting them. It is easy for them to believe that they got sick because of something they did that was wrong, and not righted. After all, tangibly, who or what else is there to blame? Their bodies have betrayed them, yet the body cannot be disassociated from themselves; therefore, it is their fault. Dr. Michael Lerner explains:

One of the illnesses of the "new age" is the view, "I caused my cancer, I should be able to reverse it." That's an incredibly simplistic and unfortunate attitude. We live in an age where cancer is essentially an epidemic illness, for reasons that have nothing to do with individual personalities. It may be that psychological factors in an individual life contributed to the multifactorial mix that caused the emergence of a cancer, but to say that you caused your illness because of some set of events or some way that you related to the world ignores all the other things over which you had absolutely no control. (Moyers, 1993, p.337)

Lerner feels that we must heed the message in our illness, that we must open ourselves up to something besides pain and sorrow, asking ourselves whether there are other lessons, other meanings of life, anything worthwhile in this very difficult experience? But to use the body/mind connection against oneself defeats the entire purpose of educating people in its use. It is there for awareness' sake, in order that we may all learn to take a closer look at our mental health in conjunction with our physical health in an effort to be the healthiest
individual we can be. Blame does not have a role in this process. It is not a guarantee against illness; it is not some mystical, miracle cure. It is education, for ignorance is not bliss, and in fact leaves one quite defenseless.

The Psyche and Asthma

Before it is determined whether asthma is psychogenic in nature, it is essential to understand what exactly it is. According to *The Harvard Guide to Women's Health*:

Asthma is a chronic airway disease that involves episodic attacks of breathing difficulty, wheezing, coughing, or tightness in the chest ... During an asthma attack the muscles tighten around the tubes inside and leading to the lungs (the bronchi) and the lining of the tubes becomes swollen and inflamed. Often thick mucus accumulates in the airways as well. In all cases airflow is restricted, and emptying the lungs of air becomes particularly difficult. These attacks can last anywhere from several minutes to several days. (Carlson, 1996, p.64)

"The key to asthma lies within the immune system," (Firshein, 1996, p.76) claims Dr. Richard Firshein, an osteopath and himself an asthmatic. "In active asthma, the immune system is ringing alarms all the way around the block -- and ringing them overtime ... on red alert for any possible invaders. Every newcomer is suspect ... you become oversensitive to your environment ... warrior forces seem to veer out of control, destroying innocent cells ... (and) immune dysfunction ... can actually be measured." (Firshein, 1996, p.76-77)

The standard medical treatment for asthma, according to the Harvard guide, is as follows:
Active asthma attacks are usually treated with a short-acting bronchodilator, such as albuterol (Ventolin), which opens the airways by relaxing smooth muscle.

Corticosteroid medication in an inhaler or in oral form, such as prednisolone or prednisone, reduces inflammation, which is a key mechanism of asthma attacks ...

Because it takes at least 6 hours for corticosteroids to take effect even if inhaled, bronchodilators are used to provide immediate relief of symptoms.

Once the attack is under control, the physician may prescribe maintenance medications, such as cromolyn (Intal), which reduce the chances that the airways will become inflamed. Corticosteroids are usually continued on a maintenance basis, in the inhalable form (Beclovent); long-term treatment with oral preparations is avoided if possible because they are associated with adverse side effects.

(Carlson, 1996, p.66)

In fact, the side effects of all corticosteroids -- inhaled or oral -- can be very serious. They can include:

... immune depression, poor wound healing, thinning of the skin, heart and lung damage, weight gain, high blood pressure, osteoporosis, joint pain, stomach bleeding, changes in fat metabolism, severe acne, extra hair growth (especially on the face in females), stunted growth in children, cataracts, mood disorders (including psychosis), suppression of the adrenal glands, leaching of precious minerals such as potassium, calcium, and magnesium, and swelling of the face and ankles. (Firshein, 1996, p.93)

The Asthma Society of Canada reports that the cost of asthma in Canada in 1990 was estimated to be between $504 million and $648 million per year, in both direct and indirect
costs. Direct costs included inpatient care, emergency services, physician and nursing services, ambulance use, drugs and devices, outpatient diagnostic tests, research, and education, for a total of $306 million. Drugs were cited to be the single largest component. Indirect costs included productivity loss due to absence from work, inability to perform housekeeping activities, need to care for children who were absent from school, time spent travelling and waiting for medical care, and premature death from asthma.

Why do some people get asthma and others do not? We still have no conclusive evidence in any direction. While those who have parents with asthma are more likely to get the disease themselves, this does not account for those with no family history. What we do know for certain is that the incidents of asthma are on the rise, particularly in children. Researchers have started to consider asthma as having various types, depending on where the airway blockage occurs. Dr. Firshein (1996) is confident the new era of genetic medicine, and research into "free radical" damage and illness will provide us with answers one day soon.

But what causes asthma attacks? This is also a question to which there is yet to be a definitive answer. The Harvard Guide to Women's Health states:

Just what triggers these attacks varies from one person to another, but allergies probably account for the majority of symptoms in people with susceptible airways. Other influences can include cold air, respiratory infections (including colds), smoke and environmental pollutants, sudden changes in temperature or humidity, and strenuous exercise. Only rarely is asthma attributed to emotional or psychological
distress, although for many years this was considered one of the prime triggers.

(Carlson, 1996, p.64)

This last statement is cause for discussion, for there are researchers who would be inclined to disagree, as well as certain asthmatics, including myself. Therefore, what are the links between psyche and asthma according to the literature?

Doctors Lehrer, Isenberg, and Hochron, in their article "Asthma and Emotion: A Review", refer to "individual response stereotypy"--the concept where some people respond stereotypically to a variety of events and stressors in a particular physiological system. This is not found in all people; however, "its presence has been implicated as a predispositional factor in various psychosomatic diseases ... (there exists) evidence that asthmatics are characterized by individual response stereotypy in the respiratory system ... little is known about the relationship between parasympathetic activity (in the nervous system) and stress among asthmatics ... (however) there is a relationship between stress and increases in various signs of asthma." (Lehrer, Isenberg & Hochron, 1993, p.11)

Stress and Its Relationship to Health and Illness by Dr. Linus A. Bieliauskas (1982) describes the disease asthma as a psychophysiological reaction to stress, and notes that some experts feel it is a "lack of development of appropriate emotional responses to daily conflicts in childhood" (p.71). Dr. Robert A. Anderson (1978), in his book Stress Power!, considers asthma to be among many adaptive responses to stress. He discusses his encounters with asthmatic patients as he tries to work through the stressful situations which trigger attacks. He remarked a direct relationship between childhood asthma and tension-filled homes. He
did not conduct any formal studies; rather he recounted what had been his observations throughout his practice.

Dr. Anita Stevens (1974), in her book *Your Mind Can Cure*, points out the centrality of breathing among all other body functions, and how one's entire well-being is in jeopardy if breathing is not performed properly. She also informs that psychoanalysts "discovered that asthmatic children show an unusually strong attachment to a mother from whom they cannot, or dare not, separate. The wheezing of the asthmatic has been compared to a 'cry for the mother'". (Stevens, 1974, p.81) This theory has been contested in studies by Gauthier (1978) and Purcell (1963), but Dr. Thomas Creer (1982), author of the article "Asthma", cautions strongly against ignoring the original findings of these psychoanalysts such as French and Alexander (1941). In Stevens, Dr. Eduardo Weiss hypothesized as early as the 1920's that "mental pain, in many, becomes converted into asthma, their unconscious choice of physical suffering." (Stevens, 1974, p.82) This physical suffering can be self-punishment or punishment of others who must worry over the asthmatic.

Dr. David Smith, interviewed by Bill Moyers, states:

We're seeing more and more asthma ... (which) has a component that relates to mind. The healing process, the motivation to seek help, the understanding of how they got into that state in the first place -- all these involve the mind. We know that in the healing process of anything from an ulcer in diabetes to asthma, the mind is very intricately involved with whether the patient gets better or worse ... we bring people who are wheezing with asthma into the emergency room, and we give them some
wonderful medicines. We don't talk to them about the fact that emotions can affect asthma ... (Moyers, 1993, p.48-49)

Smith (Moyers, 1993) feels frustration at the fact that the medical profession of which he is a part treats the symptoms of asthma, but not the underlying causes, some of which are stress:

You know, you can cure people, but if they're still dealing with the environment that contributed to the problem, the stress will continue, and the problem will return. We see that often with asthmatics. We improve them to the point that they can go back home, but if we don't deal with what's going on at home, they're going to be back. So we haven't made any real difference, we've just created a dangerous cycle of sickness and temporary relief. (p.60)

Dr. Carolyn DeMarco, in her book Take Charge of Your Body, cautions her patients against letting frustration build up, because "stuffing your feelings down (the old grin and bear it routine) contributes to ulcers, high blood pressure and asthma (my emphasis) as well as premenstrual syndrome, depression, infertility and eating disorders." (DeMarco, 1994, p.21)

Dr. Daniel Kohen, in his article "A Biobehavioral Approach to Managing Childhood Asthma", reports that "there has been an increase in sudden and apparently unexplained death in young people with asthma ... which appear to be more common in children in whom substantial psychosocial/familial problems were identified and ongoing, either untreated or unresolved." (Kohen, 1987, p.7) While he admits that the validity of causal relationships could be questioned here, he states, "the role of psychologic factors in children (and families) with asthma is indisputable". (p.7)
In his article, psychologist Dr. Thomas Creer reiterates:

... perhaps more than occurs with other chronic physical conditions, there is a strong psychological component to asthma. This is reflected in a number of ways, extending from the role of emotional behaviors in eliciting attacks to the consequences of the disorder. Because physical and psychological factors are so inextricably interwoven, the investigation of asthma requires frequent collaboration between medicine and psychology. (Creer, 1982, p.913)

Creer believes each expertise is crucial in pursuing a common problem: the assessment of the disease.

Lehrer, Isenberg and Hochron (1993) summarize that "asthmatics tend to report and display a high level of negative emotion, and asthma exacerbations have been linked temporally to periods of heightened emotionality" (p.5). This conclusion is derived from analysis of both alpha- and beta-sympathetic activity in the nervous system in regards to both emotional response and an asthma attack itself. What is important to note, however, is that causality may be bidirectional; in other words, the asthma itself can cause negative emotions, such as anxiety and fear, which could in turn exacerbate the asthma. Lehrer et al. (1993) also break down the responses of asthmatics to stress and anxiety, for example, into two types: smaller airway obstruction versus larger airway obstruction. They found that asthmatics who were experiencing predominantly smaller airway obstruction were not responding to stress via their asthma; rather those who experienced larger airway obstruction, or bronchoconstriction, were, and, therefore, would benefit from a therapy program oriented
toward stress management. This distinction could prove important in analyzing the success of psychologically-based treatment programs such as the one in this study.

According to Firshein (1996), to date, the suggestions for the prevention of asthma attacks range from the practical avoidance of lung irritants, to "alternative" approaches -- all of which claim varying degrees of success. These have included minimizing dust and other household allergens, avoiding moulds and pollens, exercising with care, being wary of aspirin and other anti-inflammatory drugs, avoiding smoke and other pollutants, eliminating foods that cause problems, getting a flu shot, acupuncture, yoga, meditation, biofeedback, visualization, sound and brain synchrony, tai chi and chi gung, sleep, cognitive reframing, osteopathy and chiropractic manipulation, herbal medicine, homeopathy, naturopathy and hypnosis. The following are reports on various psychological interventions specifically, as the treatment program for this study is psychological in nature.

Dr. Donald Morse and Dr. Lawrence Furst, in their book Stress for Success: A Holistic Approach to Stress and Its Management, view remedies for asthma and other stress-related ills as proper nutrition, exercise, massage, sleep, hypnosis, meditation, biofeedback, and the right doctor/dentist for you. Drugs are encouraged only in emergency situations, and the book is largely preventative in nature. It is interesting that Morse and Furst view practically every known illness, from warts to cancer and cardiovascular diseases, as a "consequence of distress" (Morse & Furst, 1979, p.xvi). Asthma is not given much specific treatment here; rather the focus is on a general cure for all stress-related disease. Dr. Wolfgang Luthe (Schultz & Luthe, 1969), in the book Autogenic Therapy, discusses how to
apply autogenic meditation, including visualization, to help control a wide variety of ills, including specifically bronchial asthma.

According to Spanish psychologists Vazquez and Buceta:

In recent years the most commonly used forms of psychological intervention in the treatment of bronchial asthma have been self-management education programs. This type of intervention combines the use of educational materials with various behaviour modification techniques, with the aim of instilling self-care patterns in the patients' behavioural repertoire. Such multi-component approaches seem to have been effective in improving both the patient's understanding and management of the disorder and their attitudes towards it. (Vazquez and Buceta, 1993, p.172)

Unfortunately, the impact of these programs on morbidity has been uneven and generally limited to a subset of patients, Vazquez and Buceta claim. Therefore, they conducted a study to prove the combined effectiveness of a self-management program and relaxation training, which included visualization. They had three subject groups: one which followed the self-management program exclusively, one which followed both self-management and relaxation therapy, and a control group. Their results indicated observed reductions in the frequency, duration, and intensity of symptoms and in the use of medication during attacks for both self-management groups, but that relaxation training did not specifically contribute to the changes observed. Regular contact with the therapist, which served to focus the patient's attention on his or her asthma seemed to be of some therapeutic value. Finally, the patients whose clinical parameters benefited most from the program were those with poor pretraining asthma self-care. (Vazquez and Buceta, 1993, p.182-183) The researchers
attributed the seeming lack of effect of relaxation training to the children's "devoting excessive attention to the relaxation techniques, to the detriment of the other strategies included in the program". (p.182)

Dr. Daniel Kohen, on the other hand, teaches "Relaxation/Mental Imagery (RMI) exercises--self-hypnosis techniques--to children and adolescents as an adjunct in the management of their asthma" (Kohen, 1987, p.8) at the Minneapolis Children's Medical Center. He shares the results of his study:

An evaluation of 40 of these children, who were followed from six months to two years, found that most had experienced a greater than 50 percent improvement in symptoms, as indicated by reduction in emergency room visits, decreased severity and reduced medication needs. Twenty percent of the children reported no further need for medications ... (Kohen, 1987, p.8)

Kohen's program also included storytelling and gameplaying, focusing on the power of the children's imagination. In terms of the success of the program, he states, "children who do not succeed do so for reasons usually related to serious psychological difficulties or conflicts within themselves or their families". (Kohen, 1987, p.10)

Dr. Richard Firshein (1996) uses imagery and visualization as part of his program to reverse asthma. He cites research being conducted by psychiatrist Dr. Gerald Epstein, author of Healing Visualizations (1989), who has achieved success having patients visualize blowing up balloons. Peak flow meter readings to "measure" breathing increased dramatically in his subjects. Dr. Epstein stresses the importance of commitment and practice on the part of the subjects (Firshein, 1996, p.323). Firshein also encourages his patients to
use relaxation tapes for, as French physician, psychologist and ear specialist Dr. Alfred A. Tomatis discovered, one function of the ear is to charge the brain with electrical potential, through the vibration of sound. Certain music and sounds can energize, while at the same time focus and quiet the mind, and, Firshein feels, be a valuable adjunct to any kind of meditation or visualization (Firshein, 1996, p.329).

In the treatment of asthma, Dr. Thomas Creer (1982) has evaluated three general strategies which apply psychological or behavioral techniques to asthma. The first was psychotherapy with the expectation that such treatment would somehow ameliorate the individual's asthma. According to Creer, "causal relationships between psychotherapy and asthma have failed to be established ... patients with asthma are as psychologically healthy as most other people ... routinely referring a person afflicted with asthma to a psychiatrist or psychologist was unnecessary". (Creer, 1982, p.917) The second strategy was psychological or behavioural methods directly applied to treat asthma, which produced no causal relationship. The final strategy entailed the application of psychological or behavioral techniques to modify some aspect of the asthmatic patient's performance -- "performance" consisting of two categories: symptom discrimination and attack behaviours. It is in this area that psychological and behavioural techniques had an impact. The patients stopped intensifying ongoing attacks or interfering with medical management, hospitalizations decreased, as did amounts of medications. Dr. Creer feels there is a bright future for a marriage between self-management programs and behavioural techniques, but stresses that "before we achieve such success, we must learn more about the complex nature of asthma". (Creer, 1982, p.920)
Dr. D.J. Lane (1994), in his article "What can alternative medicine offer for the treatment of asthma?", summarizes the need for further research into "alternative" healing techniques:

There are intriguing psychophysiological questions behind much of the work reported on alternative medicine relating to the extent to which attitude and mental activity can influence symptoms and/or lung function in asthma ... Some techniques may allow reductions in therapy or greater symptom relief on the same treatment, but it would be to court disaster to replace well-tried pharmaceuticals with poorly evaluated and potentially ineffective alternative treatments". (p.159)

There are raging debates as to how to control asthma, as various studies seem to show an equally variable number of solutions. Hock, Rodgers, Reddi and Kennard (1978) found relaxation techniques to be quite effective; yet Kinsman, Dirks, Jones, and Dahlem (1980) caution against buying into this. Neither found changing behavioural coping patterns to have much effect.

I have been unable to uncover any studies which promote holistic art therapy as a preventative measure when treating asthma. The closest I have come is a study conducted in Italy in 1992, and presented in the French journal Therapie-Familiale. The title of the article is "Language of the body and language of the therapy: The sculpture of the future as a systematic intervention method on psychosomatic situations." The abstract reads:

Presents a nonverbal therapy method for use with families with psychosomatic disorders. This method uses sculpture to determine each family member's perceptions of how the family is at the present and how it will be in future. The method's
effectiveness in revealing the myths and fantasies that impede separation and individualization processes is illustrated with a case example of a 10-yr-old boy with asthma. The 3-phase therapeutic process is described, and the epistemological functions of family sculpture therapy are discussed. (Onnis, 1992, p.3)

The study is predominantly psychological in nature, and boy's asthma is secondary, and almost incidental. In other words, the goal is to help the family cope with issues which may arise due to a member's chronic, "psychosomatic", illness, using art therapy - not to help prevent the boy's asthma attacks in the first place. It is interesting, however, that asthma was considered a psychosomatic situation. This categorization has been the subject of much debate in the study of asthma--a disease about which we truly understand very little.

The Psyche and Art Therapy

The literature surrounding arts therapies is invaluable to this study, as holistic art therapies are themselves the basis for the self-healing program the subjects will adopt. Art therapy literature to support the concept of self-healing abounds, for, inherent in the arts is the crucial self-expression needed for self-healing. No longer are the creative arts considered some far-off land where "real" artists live; rather they are becoming so widely accepted as tools for healing, that now each of us "has an artist within". "The official definition of art therapy adopted by the American Art Therapy Association reads as follows: 'The use of art as therapy implies that the creative process can be a means both of reconciling conflicts and of fostering self-awareness and personal growth.'" (Feder, 1981, p.59) However, there exists as
many definitions as there are art therapists. Common to all, though, are the concepts of "creative impulses and emotional expression". (Feder, 1981, p.60)

In 1973, Howard Gardner, in his book entitled The Arts and Human Development, acknowledged the role of the arts in therapy:

Because of the possibility that one's participation in the artistic process may facilitate or signal an improvement in one's psychological state, the art work of individuals who appear to be benefiting therapeutically from their work with a medium has engendered considerable interest. Just as neurotic children can often communicate their difficulties and feelings more effectively through play than through verbal encounters, individuals with various maladies may better be able to gain access to others and themselves through their artistic endeavours ... the arts provide natural means of making and expressing for all individuals ...(Gardner, 1973, p.344)

Bernie Warren (1984), an arts therapy consultant, articulates his perception of the power of the arts in the introduction to the book Using the Creative Arts in Therapy, for which he acts as editor:

The arts do not stand in isolation and are most definitely not, in themselves, a cure for all ills. However, what the arts can do is, in the individual's act of creation, engage the emotions, free the spirit and make individuals do something because they want to and not just because someone decides it is good for them. The arts can motivate in a way possibly no other force can, because it is only through the arts experience, through making a mark that no one else could make, that we express (my emphasis) the individual spark of our own humanity. (p.4)
Robena Nadeau, a contributor to Warren's book, qualifies this human "expression" further: "Feelings flowing are essential for artistic experience. Freud, Jung, Plato and Aristotle are but four of the thinkers who have as clearly defined the value of the arts in human growth and development". (Warren, 1984, p.61-62)

Tessa Dalley (1984), editor of the book *Art as Therapy*, stresses that the person and the process are most important in art therapy, not necessarily the final product. She, like the Feders', sees art as a means of non-verbal communication, both of the conscious and the unconscious. However, she does caution that "it would be naive to suggest ... that art is synonymous with therapy in the sense that all art activity is necessarily healing ". (p.xiii) For example, should the artist feel pressure to produce an aesthetically-pleasing work for evaluation, the process involved might be more harmful than beneficial.

Elaine and Bernard Feder (1981), in their book *The Expressive Arts Therapies*, provide the reader an overview of each of the arts as a therapeutic tool, as described by the therapists who use them. Initially, however, they make the important distinction between psychotherapy and art therapy -- a distinction important to this study, given the apparent failure of psychotherapy in treating asthma (see Creer):

Just as the old body-mind dichotomy has been brought under scrutiny in recent years, so too have the reason-emotion and word-image distinctions ... However, despite increasing evidence that the old dichotomies are based on simpleminded views of the world, these either-or distinctions still dominate much of our commonsense thinking. Not only have emotion and reason been divorced, but they have been provided with separate homes; we may obey the dictates of our heads or our hearts. Such divisions
still underlie much of the theory and practice of the psychotherapies. It is conceded that emotional problems will affect and influence an individual's thinking, but the resolution almost always is cognitive. In psychoanalysis, the resolution of emotional problems usually involves the re-cognition of a problem -- which must almost always be verbalized.

The expressive arts therapies often blur these psychotherapeutic distinctions. While the arts therapies have adopted the terms and classification systems of the psychotherapies, implicit in much of the practice is the assumption that a human being is a unitary and indivisible organism ... that thinking and creativity are related.

(p.58-59)

The Feders' promote four roles for the arts in therapy. They proceed to label the arts as "cathartic", a concept "attributed to Aristotle, who said that 'art releases unconscious tensions and purges the soul'" (p.68), and as a means of interpersonal communication. They remind us that before phonetic symbols were used as the basis for written language, humans used pictorial symbols. "To art therapists, the heart of the communication is precisely that element that is expressive and revealing (of the artist)." (p.71) They cite the arts as a means of communicating with the unconscious, and quote Edith Kramer, a renowned art therapist, who feels that "the healing potentialities of art therapy reside in 'the psychological processes that are activated in creative work'". (p.74) Finally, the Feders' state that "conscious image formation can be used to change moods and attitudes". (p.79)

Edith Kramer, in Dalley, sees yet another role for the arts in therapy:
'Art is a means of widening the range of human experiences by creating equivalents for such experiences. It is an area wherein experiences can be chosen, varied, repeated at will. In the creative act, conflict is re-experienced, resolved, and integrated' (Kramer 1958:6). In other words, it is the rationalization of inner feelings into a comprehensible form. (Dalley, 1984, p.xiv)

However, Dalley acknowledges the scepticism which accompanies art therapy. "The value of verbal communication is rated very highly in our society ... The value of communication through imagery and symbols, although generally acknowledged, is seen as more obscure and even mystical". (p.xiv)

Dalley also cautions art therapists against interpreting any painting -- that the only person qualified to interpret correctly is the artist -- and she states conclusively that "art therapy is not diagnosis through art". (p.xxiv) Using examples of Van Gogh and Munch, she explains the popular conception that "a disturbed, fragmented type of painting is connected with a disturbed personality" (p.xxiv) -- an interesting idea, according to Dalley, but a matter only for speculation. Other therapists might be inclined to disagree with her stance on diagnosis. D. Harvey (1985), in his article "Emergent Concepts in Art Therapy" emphasizes art therapy as a means of self expression, diagnosis, communication, and personal development. Visual art therapy is becoming more widely accepted in the education community, for example. Teachers are now generally expected to flag "disturbing" works of art created in their classrooms by students, to question them about the nature of the art in an effort to discover any signs of emotional disturbance, and then to report any concerns to the school board psychologist. This view that the arts are a vehicle for the expression of inner
experiences is shared by Brian Nichols in his article entitled "Children's Drawings as Indicators of Sexual Trauma", where he revealed that "early in the (Victim Counselling) program, the value of using children's drawings as a diagnostic indicator of stress became apparent." (Nichols, 1981, p.52)

The rationale for combining the various arts in therapy in a more holistic approach, as is attempted in this study, is based on the concept of *synesthesia*, or "the crossover of responses in terms of alternative senses". (Feder, 1981, p.230) According to the Feders', "this crossing over of sensations can be experienced in a variety of ways, and color (for example) can be evoked by odors, sounds, tastes -- and even numbers". (p.230) Research in this area supports a "'holistic' hypothesis, based on the conjecture that an individual responds as a whole to any stimulus, rather than as a series of parts". (p.231) It is interesting that despite the positive implications of combining the arts in therapy, "synesthesia has been largely ignored by arts therapists on a practical level ... Part of the problem may be the fact that arts therapists tend to have approached their practices from the narrow base of theory in one therapy and proficiency in one underlying art". (p.231)

Dalley (1984) demonstrates the wide variety of conditions treated by art therapy. These include anorexia nervosa, mental retardation, terminal illnesses, and prison confinement specifically. Elinor Ulman and Penny Dachinger, editors of *Art Therapy in Theory and Practice*, have gathered evidence of art therapy in the treatment of geriatric patients, adolescent drug abusers, slow learners, marital crisis, and schizophrenia. Edith Kramer, in her book *Art as Therapy with Children*, describes the "power of art in preserving and fostering children's capacity for growth and self-expression under hardship" (p.xiv)
which she witnessed when viewing art of child survivors of Nazi Germany. Once again, I was unable to find evidence of specific studies where creative arts therapy was utilized in treating specifically asthma, despite evidence that it may be advantageous.

The Soma and Art Therapy

The literature does indicate a link between the healing powers of art therapy and physiology. This is important to establish, given that this study employs holistic art therapy as a means of controlling asthma -- a most physically manifested disease. To date, the most common forms of art therapy used in healing physical ills have been imagery and visualization; however this repertoire is expanding.

Dr. Bernie Siegel (1990) views imagery as the means with which we communicate with our own bodies:

Probably the most direct and volitional of the communications that affect us are the words we say to ourselves. But how do they get through, how does verbal language get translated into physiological events? According to psychologist Jeanne Achterberg in her book *Imagery in Healing*, images are the bridge. Achterberg feels that messages in the form of words "have to undergo translation by the right hemisphere into nonverbal, or imagerial, terminology before they can be understood by the involuntary, or automatic nervous system". (p.85)

He proceeds to expand the concept of images into that of drawings -- a central tool in art therapy:
Drawings can be powerful tools for helping us deal with the important issues in our lives. Like dreams, they speak in the language of symbols, of metaphors ... I wish all physicians would add a box of crayons to their diagnostic and therapeutic tools.

(Siegel, 1990, p. 81)

Dr. Rachel Naomi Remen, Director of the Institute for the Study of Health and Illness at Commonweal, in an interview with Bill Moyers, informs us that there are various ways to use imagery, just as there are various ways in which we learn:

... the visual is only one way in which we imagine. We usually trust one of our ways of perceiving and processing the world more than others. Some of us are visual, some auditory, some kinesthetic. For example, I'm not a visual person. My experience of you is not what I see but what I hear or sense about you. And forty percent of people are like me in not being primarily visual. These are the people who come to Commonweal and think they "can't do imagery" because they can't visualize. And yet imagery, like healing, is part of everybody's birthright as a human being. We all do imagery -- but in our own way. Even worry is a form of imagery.

(Moyers, 1993, p. 347)

Visualization is a form of imagery, and Siegel (1990) describes the use of visualization by Dr. Karen Olness of the Children's Hospital in Cleveland in helping children who have chronic problems such as cancer, asthma, rheumatoid arthritis and hemophilia:

One young boy with hemophilia so severe that he was wheelchair-bound was instructed in the use of imagery to control his pain and, as he said, "stop my bleeds."

He created a visualization in which he saw himself flying a plane through his blood
vessels and dropping off loads of Factor 8, the blood-clotting factor that he was missing, wherever it was needed to control bleeding. Another child, a little boy who had to endure multiple operations, learned to use a biofeedback fingertip temperature monitor to help with pain control. Once he saw on the monitor that he could make his temperature go up by imagining himself sitting in the sun, he was on the way to understanding that he could control other body functions too. Besides pain and temperature control, the children have learned to control numerous autonomic processes, including galvanic skin resistance, blood pressure, transcutaneous tissue oxygen saturation and salivary immunoglobulin production. (p.111)

Olness, in an interview with Bill Moyers, depends on children's "excellent imaginations" for the success of her studies, and laments society's attempts to limit the capacity of imagination of its young. (Moyers, 1993, p.76)

Siegel (1990), in his "Shopping List for Change: A Five-Part Therapeutic Program", lists as number one keeping a daily journal. Writing, as much an art as painting, has proven therapeutic effects, hence its use in this study. Siegel explains its inclusion:

In tests of college students and executives, those individuals who had been asked to keep journals were shown to have a more active immune system and to develop fewer colds and other illnesses during exam time and periods of work stress. Even after they stopped keeping the journals, the immune system remained more active for up to six months. Including periodic drawings may also help. (p.224-225)
Psychologist Dr. Alice Domar concurs with Siegel on the need for self-expression, particularly via a journal. Domar recounts that studies at the Pittsburgh Cancer Institute showed that women who survived breast cancer, for example, were those who "experience and openly articulate a range of feelings". (Domar, 1996, p.159) These women appeared to have more psychological and physical resilience. Domar uses the journal as a tool of self-expression in her therapy sessions, with tremendous success, as her patients "report that they released grief, fear, or anger that had been frozen in mind and body. The floodgates opened, and they discovered emotions or conflicts they did not know had plagued them ... Later, these same patients report that the writing exercise sparked a lasting improvement in their emotional and physical well-being". (p.161)

Domar (1996) does not attempt to take credit for making up this approach. She attributes its development to Dr. James W. Pennebaker, a psychologist at Southern Methodist University in Dallas:

The people in Pennebaker's studies experience remarkable benefits from writing about traumatic events. They not only feel better emotionally, their physical health markedly improves. Compared to control groups ... the people who wrote about traumas made significantly fewer visits to the doctor and reported fewer symptoms of illness for months afterward. In one extraordinary study, Pennebaker and his colleagues found that the subjects' T-cells -- immune cells that lead our internal fight against disease agents -- were livelier for six weeks after the experiment. (p.161)

This immune boost occurs, according to Pennebaker, because it is physiological work to keep emotions locked up. Blood pressure, heart rate and muscle tension all increase, and the
immune system suffers. This approach need not be confined to past traumas; rather, Pennebaker states, it should also be used to combat stress of ongoing events in our lives. In addition, it should not be used for only one day and then left, he cautions. This only scratches the surface, and could quite feasibly make the person feel worse, as if a Pandora's box had been opened and not closed again. Journal writing must be consistent in order that the writer may work through any emotions he or she needs to. (Domar, 1996, p.162-163)

Dr. Rachel Naomi Remen, in her work with patients having life-threatening illnesses, uses the art of poetry as a means of self-expression:

... we started writing poetry here as a way of helping people listen to the part of themselves that knows what's true for them and speak that in a simple and real way ...

My sense is that creativity and healing are very close to each other ... At first most people don't believe they can write poetry. They'll say ... "I'm not good at this."

There's some way that our culture has caused us to become alienated from the intuitive and creative in us, perhaps by calling up in us some habit of judgement. We're supposed to produce something perfect or professional. But we help people reclaim this healing, creative part of themselves by having them write poetry. And you know, we've never had anybody who couldn't write it. (Moyers, 1993, p.348-349)

While the literature certainly supports the concept of holistic art therapy in its role as healer of physical conditions, specific studies on the effects of a multi-faceted, comprehensive arts program on the disease of asthma were not found for the purposes of this review.
My earliest memory of mind-body healing is my mother's recounting how my grandmother "bought" her warts, and they all disappeared within two weeks. I greeted this news with a degree of scepticism, but I was fascinated nonetheless. Had God thought perhaps that this was humorous, and decided to rid my mother of the ugly growths riddling the skin of each of her knees? I did not know, but the memory stuck with me.

I was born with the skin condition called eczema, which I apparently inherited from my mother. What I have since learned is that eczema and asthma go hand-in-hand -- that is, if you start out with eczema, you will probably exchange it for asthma later on in life, and vice-versa. If really unlucky, you will have both your whole life. In my case, at the age of twenty-one, my eczema under control, I started to feel a recurring tightness in my chest, as if I constantly needed to "crack" my breastbone (like "cracking" knuckles) in order to get more air in my lungs. Then I noticed that walking in the cold outdoors during winter literally took my breath away, and I would need longer and longer to recover once indoors. When I got worked up or upset about something, I started to wheeze. Spring arrived, and my typical seasonal allergies, which had been worsening each year since I was fifteen, were horrendous. But still I denied anything could be wrong. After all, allergies were "wimpy", afflicting only those who were sickly and weak -- then I became one of those I so scorned.

The turning point came one evening in the summer of 1991 when I was out for dinner with a friend. I thought I would try a pasta dish I had never eaten -- a pesto linguini. It was delicious, but about a half hour after eating, I started to get terrible stomach cramps. Quickly on the heels of this, my lips started to feel swollen and puffy, as my scalp started to itch
enough to make me mad. I would happily have scratched right down to my skull to make it stop. We headed for the hospital, and on the way there the scariest symptom of all occurred: my throat started to close. I panicked. I was sure we would not make it in time, and even if we did, what if the doctors couldn't do anything?

We reached emergency, the nurses took one look at me--now starting to resemble one of the illustrious cast of the movie "Planet of the Apes" due to the swelling in my lower jaw--and pumped me full of epinephrine and antihistamine. The attack cleared within minutes. They advised me to seek out an allergist. I did.

What the allergist told me was, not only was I allergic to pinenuts -- a main ingredient in that pesto sauce I had eaten -- but also to many other foods and environmental factors. To exacerbate this problem, I had asthma, and was advised to carry an Epipen (self-injected epinephrine), Ventolin (bronchodilator) and Beclovent (anti-inflammatory) inhalers with me at all times. He suggested I wear a Medic-Alert bracelet always; the less explaining I had to do during an attack the better. I left the allergist's office reeling. All of a sudden I was sick. I could no longer take freedom to do as I pleased for granted. Hemmed in, trapped, I felt the victim of bad genes, of a polluted environment. And the more I felt sorry for myself, the faster the asthma attacks escalated, for I was not, as I see it now, taking a proactive role in combating them.

There were numerous hospitalizations -- one where I was actually in the first stages of cardiac arrest due to an overdose of adrenaline by a hospital in Quebec -- and countless inhalations of Ventolin and Beclovent, which caused annoying shakiness. However, I had resigned myself to this lifestyle. In the Fall of 1993, I decided to try out for a local theatre
group's annual musical. I was successful in getting a role. Each week I rehearsed 3-4 times, during which I would obviously be singing. Although I didn't realize it at the time, my asthma attacks were decreasing. I was enjoying myself so thoroughly that I suppose there was no room in my life for asthma, not to mention that I loved to sing -- it had always been a release for me.

Then I met my husband. I had been through what seemed one disastrous relationship after another, and my self-esteem had taken a subsequent beating. With him, however, I felt that never had anyone other than my loving family treated me with such respect, admiration, and total commitment. He loved me -- and I him -- completely, with all my faults, and with all the scars of past mistakes. Again, I didn't realize it right at that time, but my asthma attacks were still diminishing in frequency and intensity. It was my husband who remarked one day, after we had been seeing each other for about three months, that he hadn't seen me take my inhaler for a while. I realized he was right. However, I was sure this was good luck, not good management, for I still felt a slave to the dictates of my lungs.

In January of 1995, I took the OISE course "The Holistic Arts Therapies" with Dr. Joyce Wilkinson. The expression "holistic art therapy" had evolved from Dr. Wilkinson's experimentations in the late 1960's and early 1970's in an area which she initially termed "expressive art therapies". Her original studies were based primarily on the effects of visual art therapy, then expanded to include all the arts, and therefore a more "holistic" approach--hence, the new term. In this course we were expected to keep a daily journal; take time out each day (4-6 times) to consciously relax our bodies and minds via imagery, visualization and/or music; to take stock and take charge of our feelings at least twice daily;
to stand in front of the mirror twice daily in an effort to learn to love what we saw; and to consider our class time like a therapy group meeting, where we all shared and nurtured each other.

This was the culmination for me of all that had been transpiring in my life in the previous year. Finally, via my journal, I had an outlet for all the anger and self-hatred I had been harbouring, as well as for the joys I could relish. I also had daily stress relievers, which did not allow these stresses to build upon those already accumulated, until I felt I had the weight of the world on my shoulders. Through reading the course text, *Peace, Love and Healing* by Dr. Bernie Siegel, I realized asthma was serving a purpose in my life, and that maybe, if no longer useful, it would go away.

It was through the reflection I was finally forced to do on my own life that I became aware that asthma was my body's way of saying "Slow down! Stop doing things that harm yourself!" If I heeded that message, the asthma was kept at bay; but if I chose (and choose) not to, it would rear its ugly head. The means of keeping it at bay fascinated me, for I had learned how, but couldn't articulate what these means were. Through this course, I realized the healing power of the creative arts -- a venue in which I thrived, but in which I was not participating nearly enough until I started to sing again for that musical. The power of journal-writing struck me, in addition to being part of a group with a common goal: healing and wellness.

Today, my asthma is under control, and I attribute this to a mental shift in perception. The way in which this was achieved was learning to express myself, to let go, and to love myself for who I was. The main vehicle of expression was, and is, the holistic art therapies.
I continue to write in my journal, to take time out of my day to re-group, and to sing. At this stage, I wanted to discover if this transformation, or even a part thereof, could occur in other asthmatics, using the same or similar vehicles. I was given the tools for change. Could these be passed on successfully?
Chapter Three: Methods and Procedures

Statement of the Problem

Modern medicine relies on drugs to combat asthma. The essential link between the psychological and the physical, and thus the patient's role in the healing process, is largely ignored when physicians treat the disease. Holistic art therapies induce the psyche's healing powers, and, therefore, can be effective tools in the search for wellness. As educators, we must be aware of any and all means at our disposal to teach students life-long strategies for healing and wellness, particularly those which combat stress: a significant perpetrator of asthma.

Questions Researched

The thesis question is: can a holistic art therapy-based self-healing program control asthma in subjects other than the researcher?

The sub-questions generated from the thesis question are: What role does the individual play in the success of the plan? How will individual reactions to the plan differ or be similar? Would the same healing plan work for all members of the treatment group? Should the healing plan not control the asthma, or at least significantly reduce the number of attacks, is it a failure? What constitutes failure/success of the plan? What do candidates feel is the key to the success of the plan for them? What role does the relationship between the co-ordinator (in this case the researcher) and the individual play in healing?
Research Design

The thesis question was tested in the following manner. Initially I obtained administrative consent from my principal (please see Appendix A), as well as that of my school board's communications supervisor who oversees compliance with the Freedom of Information Act. Ten students (ages 14-19) who are asthmatics were then chosen from my Catholic secondary school. They were chosen from a list entitled "Emergency Response Procedures for Medical Conditions" provided to each teacher by the school, where students having emergency medical conditions such as asthma are listed for teachers' awareness. Each asthmatic's name on the list was placed in a hat, and then ten names were drawn. Each of these ten was approached by me, given a verbal outline of the study, and asked if he/she was interested. If not, another name was drawn from the hat, and the process repeated.

When a group of ten had verbally committed, they were all invited to an orientation meeting, where the program and the expectations of them were explained in depth, and where they were given a copy of the consent form (please see Appendix A), to be signed by each of them and their parents (if under 18 years of age). Should one or more have decided at this stage not to participate, another name would have been drawn, and the process of information exchange repeated until there were 10 students committed with signed permission forms. However, all ten who attended the orientation session agreed to participate, and brought back signed permission forms within a week.

Once the group was formed, individuals commenced the 12-week program, which consisted of keeping a journal of both written and visual art expression, and of group healing
sessions once per week for 40 minutes each. Students kept a record in their journals of any asthma attacks, and any time medication for asthma was taken as part of the physical tracking program. They also recorded on tracking sheets attached to their journals (please see Appendix B) their time spent writing in their journals; visualizing, using guided imagery and/or listening to music; attending group sessions; being aware of emotions experienced at any given moment; and standing in front of a mirror learning to love and accept what they saw there. This was designed to help them monitor their own progress. Group sessions included guided imagery, visualization or visual art activities using various media, and were pre-planned by me as researcher (please see sub-heading "Implementation of Holistic Art Therapy Program" for a detailed description of sessions). However, students' suggestions and comments were welcome, as it was their group from which they needed to derive the most benefit. At the end of the 12-week period, students handed in their journals to me, and participated in a taped personal interview with me.

Students were asked to complete their journal daily, and to have at least one visual art representation per week of their choice of theme. Students were accustomed to keeping journals for English and Religion courses in a Catholic school; therefore, they were familiar with what this entails. However, I informed them that journal writing could be on any topic they chose each day, in order that they not feel restricted in any way. They were provided with notebooks for this purpose. In addition to activities listed above, group sessions consisted of discussion based on student observations, and of quiet reflection during the art activities, based on the needs of the students. In an effort to promote attendance by each
member of the group at each session, I placed reminder slips in their homeroom teacher's mailbox to give to students on the relevant mornings. Students felt this helped them remember within a very busy schedule, which each member of the sample group seemed to have as each was very involved in school life.

The imagery/visualization was designed to relax students, stimulate thought, and provide a model for them to follow should they have wished to do so on their own (please see Appendix G for sample of visualization exercise). The final interview consisted of questions to prompt their observations of their own progress, if any, and of the program in general (please see Appendix C for interview questions). The interviews were tape-recorded, transcribed verbatim, and analyzed in order to identify trends and commonalities of theme, or the lack thereof. The journals were analyzed for evidence of the statements made by subjects in the interviews, or the lack thereof. Field notes of the researcher made after the group sessions were analyzed for correlation between researcher observations and those of the subjects. Data was then analyzed in three phases using Strauss and Corbin's (1990) Grounded Theory approach. Nine out of the ten students who commenced the program completed it.

The final group session took place after all the interviews were complete, and I was in possession of the journals. We had a pizza lunch at school, where I showed my appreciation for their efforts with a small gift. As we had become quite close as a group, this last session was quite emotional. We had shared in something unique and special.
Task Analysis of Each Step and Time Schedule

The study required the following steps and timelines:

- **February, 1997**: select 10 asthmatic students at random for study and gain their verbal consent to participate, then invite them to orientation meeting; form thesis committee; complete ethical review forms; submit thesis proposal; obtain administrative consent.

- **February 27, 1997**: orientation meeting with prospective candidates to discuss the study with them in detail, and to hand out consent forms for signatures.

- **March 6, 1997**: final date to submit consent forms. If all 10 did not agree to participate, then others must be asked to maintain initial complement at 10. However, if any dropped out after the start date of the program, they would not be replaced.

- **March 17, 1997**: program officially commences; students start journals.

- **March 20, 1997**: first group session 12:00pm.

- **June 5, 1997**: last group session 12:00pm.

- **June 9, 1997**: students hand journals in to me; 2 personal interviews to be held.

- **June 10, 1997**: 2 personal interviews to be held.

- **June 11, 1997**: 2 personal interviews to be held.

- **June 12, 1997**: 2 personal interviews to be held.

- **June 13, 1997**: 2 personal interviews to be held.

- **August, 1997**: thesis submitted.
Sample

Selection and Description of Subjects

The sample hailed from a Catholic secondary school of approximately 500 students in a small, homogeneous town near Toronto where I, the researcher, am a teacher. Students ranged in age from 14-18, although all were below the age of 18 when the study commenced in February of 1997. At the beginning there were nine white females and one white male selected, and it was the male who dropped the program half way through. Their socio-economic backgrounds varied minimally - all were middle-class, and of European ancestry. Six of the ten selected had been or were currently students of mine. This is not surprising given the size of the school.

Characteristics of the School

The study encompassed 12 weeks during the second semester of high school. Group sessions took place on the students' lunch hour, and were subject to much competition from other extra-curricular activities, extra-help sessions from teachers, and general socialization. This is predominantly because the school is in a rural setting, and sits on vast acreage. An overwhelming majority of its students ride a school bus, as walking is not feasible for most. Any in-school activities which you wish to accomplish really should occur between the hours of 8:40am and 3:15pm. The competition for students' after-school time is even more fierce than that at lunch; therefore, we opted as a group to have our meetings Tuesdays at noon for 40 minutes. Even having derived this time by consensus, attendance was a challenge.
The school itself is located on many acres of grass, forest and streams just on the edge of the town. While the natural setting is unrivalled, the buildings themselves leave much to be desired, and are sometimes a deterrent in attracting elementary students to attend there. However, a new school has been promised, and this is eagerly anticipated. The student "veterans" of this school are proud of the role they have played in building such a warm, prosperous school community, despite poor facilities, and this shows in the happy, caring atmosphere within the school. Art work is displayed throughout the school, brightening dingy hallways. Each department takes turns doing the monthly decorations for the central auditorium. Teachers are all heavily involved in the students' school lives, and this nurturing shows in the respect students have for teachers in general. Overall, the parent community is very supportive, and this is reflected in student achievement and attitude also. It is a positive environment for the staff and students.

Characteristics of the Group Session Room

The room in which the group sessions were held was highly decorated and full to bursting with supplies and materials. This made the room very cosy and welcoming. Unfortunately, we were unable to turn the PA-system from the office to the room off, and would sometimes be interrupted by unavoidable announcements to the school. However, the view out the windows was that of trees and a nearby stream, and the only sounds we could hear (other than the announcements) were the wind through the trees and the birds singing. We would place our desks in a circle, and could, therefore, focus on each other if need be.
Any art supplies needed were available in that room, such as pencil crayons, pastels, markers, plastocene, and paper.

**Characteristics of the Subjects**

As aforementioned, the students were all white, of European ancestry, and middle-class. Most were Roman Catholic. Six of the ten students had been or were at the time students of mine. At the start of the program, two were 14 and in Grade 9, four were 15 and in Grade 10, two were 16 and in Grade 11, and two were 17 and in Grade 12. Each of their personalities seemed to be one of two extremes: either they were very gregarious and outgoing, or very shy and reserved. Eighty percent of subjects were "A" students, with the remaining twenty percent very capable of this achievement if the effort was made. Each was very willing to take on this program -- initially, I had the impression, as a favour to me. For, even if I had not yet taught each student in the group, I knew him or her, because the high school was so small. While I feel this fact influenced their decision whether or not to participate, I do not believe it influenced the results, as students were made aware I needed them to be honest, and that there was no right or wrong answer. The results seem to indicate that they respected this.

Few of the group members socialized together. In fact, this grouping was the first time some of them had spoken with each other. However, they were very respectful of each other and the more gregarious were openly encouraging of the shy ones. However, the shy ones were so quiet that the outgoing members eclipsed them in discussions. Even when
given the opportunity to speak by me, they resorted to very short answers and were quite self-conscious. This quickly made the talkative students realize that they were the only ones talking, and even they became quiet. This was not such a negative thing; for, while a little uncomfortable at first, the silences during art activities became comfortable ones. I instead put on music, and everyone was comfortable with this. The visualization and guided imagery were very popular, for nothing was expected except tranquillity. The following individual subject profiles are derived from my observations of the subjects at school in general and during group sessions, from the journals, and from the final interviews.

Subject #1 was a very quiet, athletic girl whom I had never taught. She was quick to smile, and it lit up her face. She was not particularly comfortable expressing herself either in verbal or written form, but was willing to take the risk and do this program, the result being she actually started to enjoy journal-writing when it wasn't for marks. Drama class, for example, was not easy for her, and she would opt out of assignments rather than have to perform in front of the class. She has labelled herself a bad "drawer" and a bad speller. She plays all varieties of sports, despite severe asthma which only responds to one type of puffer -- she is allergic to the rest! She has aspirations of becoming a paramedic, for then she can help others. School seems to represent stress for her to achieve good grades, and she pushes herself to do well, but generally finds it boring. Chronic headaches plague her. Winter represents nothing but hardship for her, for she gets sick easily, and her asthma is aggravated by both the damp cold, and the illness she catches. A recurring theme in her journal is getting away to a sunny beach with her mom. Her relationship with her mother appears to be
very close, while there seem to be issues to be resolved with her father. Attendance at the group sessions was fairly regular unless she was away from school ill.

Subject #2, a student I had not taught, was also very quiet but in no way shy. She listened attentively to everything occurring around her, and weighed her responses carefully before making them. She was also one whose smile transformed her face. Out of all the subjects, she projected the most confidence that she would enjoy the program, as she was used to keeping a journal, and wrote poetry to relax. Her poetry, which was perhaps one third of her journal entries, seemed to centre on the themes of true lovers in harmony with nature, and souls struggling to break free, and was beautifully written with a rich vocabulary. She was unafraid to attempt any art endeavours, and never denigrated her efforts, as some others were wont to do. She experiences difficulty catching her breath sometimes, for no apparent reason, and she longs for good weather. The fact that she smoked, she admitted, did not aid her situation. Meditation was something she added to the program herself with great benefit to her. In a "to-do" list she created for her life, she expressed that she would like to be a social worker. There is evidence of a strong relationship with her mother, but Subject #2 "despises" her father. Attendance at group sessions was regular unless she was away from school ill.

Subject #3, a student I had not taught, was the most outgoing and gregarious of the group. She is involved in almost every extra-curricular activity at school, and is successful at all of them, while maintaining good grades and a demanding part-time job. However, this does take its toll, as she claims she is always exhausted. She is outspoken and dramatic, yet
very sensitive and compassionate; therefore, she is very popular, but still yearns for acceptance. It seems she is forever in search of something, and goes at a frantic pace to find it. When events go poorly for her, her reaction is very emotional -- angry outbursts, then tears. She is very romantic in her outlook on life. She is adopted, and longs to know her real father. She already knows who her real mother is, yet does not seem very impressed by her.

In her journal, she shared with me photos, pictures, poems and stories which had great meaning for her, and her presentation -- "a picture tour" -- of this was quite unique and original. Despite her busy schedule, she managed to write in it fairly frequently up until the last 4 weeks. The theme of the poetry she chose was predominantly that of the regret of those who had missed opportunities in life, or of a warning not to do so. During the group sessions for which she was present (her attendance was sporadic due to various other activities she was involved in which she felt took precedence), she could tend to dominate conversation, and was always interested in what the others were doing, encouraging their efforts, but also making the shyer ones self-conscious to be under scrutiny. She laughed at her own art efforts, as she did not see visual art as her forte. Visualization and guided imagery were very difficult for her, as she said her mind wandered too much. Her asthma is severe, and she is now on oral medication to help control it. She expressed interest in working in the medical field as a career, but feels she does not have the stomach for it.

Subject #4 was a student of mine who was fun-loving, mischievous, popular and outgoing. As outspoken and irreverent as she can be, she is very loyal and sensitive to others, forming friendships and bonds easily with those of any age group. She surprised me by being
very quiet during group sessions, seemingly slightly intimidated by the older girls, whom she watched avidly. She is an only child of a second marriage for her father, and first marriage for her mother. She is incredibly close with her mother, who is very involved in her daughter's life, admitting that she likes to "spoil" her. Her father, who has grown children from his first marriage, seems to be a more distant figure, however the disciplinarian when needed. For one who was not convinced of the benefits of journal-writing -- it had become an onerous task to be completed each day for marks in elementary school -- she grasped the idea wholeheartedly, even naming her journal "Escape", while she assumed the pseudonym "Eternity". She included many poems that had touched her, as well as her own poetry, always on the theme of love. Some would even label this girl "boy-crazy", although perhaps highly social is more accurate. Her asthma is worst during physical exertion. She is an avid jazz, tap and modern dancer who competes frequently, so her puffer is readily available during these times. She faithfully came to every group session.

Subject #5 was a very quiet, shy individual, and a former student of mine. She is an incredibly conscientious student very concerned with getting high marks, and her parents are very involved with her education and activities. Music is an outlet for her, and she is very talented, playing in various bands, and attempting new, more difficult instruments. She is very sensitive and mature, and feels tremendous pressure to never rock the boat in whatever situation she finds herself, especially at home where she copes with a difficult brother, and a father who experiences bouts of depression. She is very close to her mother, who has an older child from a first marriage who Subject #5 wishes would show more interest in her
mother's second family. She internalizes her emotions, and is very introspective, with a self-professed low self esteem. Her "friends" tease her about her dedication to her music, as it takes her out of the main stream socializing, and she resents their interference, yet still cares very much what they think. However, she is well-liked because, while not one to initiate a conversation, she listens attentively to others and has an excellent sense of humour. Her asthma is severe, aggravated especially by bad weather, and the problem is compounded because it upsets her that the asthma can force her to miss school. She faithfully came to each group session, and in fact felt sessions should have occurred twice a week to help relieve her stress and keep her on track in writing the journal.

Subject #6 was a student of mine who had an excellent sense of humour, was very popular, and had an incredible imagination. School was not her favourite place to be, and she achieved well below her potential in terms of academics. She was absent from school very often due to a variety of illness, and sometimes due to activities which were perhaps more stimulating happening elsewhere. Despite playing very competitive hockey and doing aerobics every night, she smoked heavily and ate poorly (mainly fast-food). I got the impression that her parents were fairly permissive and unstructured, as she seemed to come and go as she pleased with little or no accountability. She took nothing seriously, at least outwardly, and only made it to two group sessions: the first and the last. The entries in her journal are very sporadic. Yet, even when I asked her if she wanted to continue the program given her seeming lack of enthusiasm, she emphatically said yes. She spoke with me one-to-one very frequently, not necessarily about anything in particular, and we developed an
excellent rapport. I venture to say that perhaps this was her modification of the program to suit her needs. She was a very loyal friend, and, while having many acquaintances with whom she would socialize frequently, had very few close friends. Those she had, she was seldom without. Her asthma was severe, and was aggravated by her frequent infections of various natures. She hid any emotion behind a wall of mockery and humour, making it hard to really get to know her.

**Subject #7** was a very shy, quiet girl, yet very competitive. She was a conscientious student who always wanted to get the best marks, and would become upset with herself and the teacher if this did not happen. She had a group of five friends with whom she socialized exclusively, one of whom was her fraternal twin sister, and all had similar personalities. They were admired by other students for their good grades, but students had difficulty relating to their single-mindedness. Both sisters skated competitively, and this seemed more a source of stress than enjoyment. While she competed against her friends for marks, she did not do so with her twin to the same degree -- in fact, she was very protective of her sister. You never knew what she was really thinking or feeling, because she was so caught up in trying to guess what you wanted to hear, rather than what she wanted to say. She gets chronic headaches and feels tired most of the time. Her journal reflects her preoccupation with the evaluation aspects of school and skating, as almost each entry relates a test she did, was doing that day, or would do shortly. She appears to have a good relationship with both parents, who seem very involved in the girls' activities. Her attendance at sessions was faithful, as was the writing in her journals.
Subject #8, a student of mine, was a friendly, warm and outgoing girl who was very popular with her peers. She had an air of fragility about her which inspired one to feel protective toward her. Her smile transformed her face, and her laugh was infectious. She was very creative and artistic in music, drama and visual arts -- tremendous outlets for her and in which she was heavily involved. Her teachers were informed (approximately one quarter of the way through the program) that she was in counselling for trauma she had suffered as a child, and we were given no more information than that. However, this did come to light when she approached me near the end and stated that she would speak to me of her journal, but did not want to give it to anyone to read. I of course respected her wishes, and highlights of her journal are in the interview. She stated that the program had been very powerful for her, that it had evoked many painful memories which were difficult for her to cope with, even in therapy. She agreed to do the interview with the understanding that she would speak of that with which she was comfortable -- nothing more. I understand that the journal is full of poetry and pictures, some of which she discusses in the interview. Her poetry is mature and beautifully written, reflecting a maturity beyond her years. Attendance at meetings was sporadic due to her other lunch-hour extra-curricular activities, and because, she informed me near the end, she was afraid of what the sessions evoked in her.

Subject #9, a student I had never taught, was bright, enthusiastic, energetic and bubbly. Everyone enjoyed being with her because she was so friendly and kind to all. She adored poetry and wrote it avidly. In addition, she was an excellent artist, so her journal consists of poems and works of art. The themes of her poems are invariably about love or
about life in the big city. She is another whose smile lights up a room. Her brother is troubled, and she takes this quite to heart. Attendance at sessions was sporadic, and I was beginning to wonder whether or not she was committed to the program despite her assurances to the contrary. However, her enthusiasm in the interview was overwhelming, and the thank-you letter she wrote me was very touching. Her asthma was mainly exercise-induced, and she needed to take her inhalers with her everywhere.

Subject #10 is the boy who dropped out of the program, and was a student of mine. This was most disappointing, as I felt he would have benefited tremendously from the experience. He had asthma so severely as a child that all the nurses in the local hospital knew him by name. He has outgrown it to a degree, but still must have his inhalers with him at all times, particularly when doing sports. He is an excellent athlete, although very competitive. He is also competitive in school, always interested in his standing relative to the rest of the class, and hard on himself -- and sometimes his teacher -- if he does not achieve at the level he expects of himself. He will openly challenge authority with whom he disagrees, and this has aided some to label him as having an attitude. However, he is most sensitive, fair and kind, and is well-liked by his peers. He is very close with his mother, and is in fact her right hand in running that home. He never knew his father. He dropped the program because he felt he could not spare the time for it. He could never overcome seeing it as an add-on to his many responsibilities.
Description of Researcher

As the researcher, I led all group sessions. I am a teacher certified in Ontario and, as aforementioned, I teach in the school in which the research was conducted. The approach I took to this program was one of tremendous enthusiasm, as I wanted very much for the students to experience the success I had. On the other hand, I cautioned them that it was very important to be honest with me in the final interview; otherwise results would be meaningless. I believe they took me seriously, for in no way did the interviews consist of pat answers.

I tend to have a very strong bond with the students I teach, and this occurred with the treatment group as well. I believe in their goodness, their sense of fair play, and their capacity to love. This program teaches them to love themselves better, and it is not an easy thing to do. I remained open to their comments and questions, and I understood when they made decisions to be elsewhere other than at group sessions. The last thing I wanted was for this to become an onerous task, like homework, or a test to study for. As is clear in their profiles, they placed enough stress on themselves every day. I wanted this to be light-hearted, yet meaningful—a break in their day when they took time for themselves.

Data Collection

Three sources of data were collected during the holistic art therapy program. The first source was my field notes based on observation during group sessions, including a medical questionnaire completed by each subject at the outset. The second source was the
journals completed by each subject. The third source was interviews conducted with each subject at the end of the twelve-week period.

Methods and procedures utilized to obtain and record data are discussed in the subsequent sections. Initially, as was previously stated, I obtained administrative consent from my principal, as well as parental consent from each subject's parent/guardian (please see Appendix A).

Researcher's Field Notes

The purpose of taking field notes was to record observations during the twelve-week holistic art therapy program. These consisted primarily of observations made during the group sessions held once a week, which I would write in a notebook afterwards while the memories were still fresh (please see Appendix D for a sample of field notes). I tended to describe individual reactions to the activities, including my own, after writing a brief summary of the activity itself. I would also record any comments, questions or concerns the students would raise outside of the group sessions, as they saw me on a daily basis in the school and had easy access to me should they have needed it. I attempted to note what I perceived as common themes or trends which would arise as time progressed. The group sessions were particularly important, I found as time progressed, for keeping the students motivated, on track, and for reassuring them when they had a concern or question. Also, a few remarked how encouraging it was to be part of a group where everyone understood how this disease can impact on a life. These field notes, therefore, reflect the guidance and
energy the group gave each other, culminating in the data contained in the journals and interviews.

Journals

The purpose of having students write in journals on a daily basis was to provide them with a means of self-expression which could potentially alleviate stress. The purpose in collecting these journals at the end of the twelve weeks was to attempt to find commonalties amongst them. The students completed the journals on their own time and at their own pace (please see Appendix F for sample journal entry). At each session I would ask them how the journals were coming along, and did they have any questions or concerns. The most common questions at the beginning were: how much do I write? What types of things should I write? Is it okay to write about ______? How often should I write in my journal? Does anyone else find it difficult sometimes to think of things to write? Even though these questions had been largely answered in the orientation session, it was obvious to me that most of them needed reassurance from me that they were doing it "right" once they had started. I reassured them.

At approximately the six-week mark, I asked them to bring in their journals so that I could glance through them to ensure that everyone was on track. As for those who had perhaps not been writing as much as I would have anticipated up to that point, we discussed strategies to make the journal-writing easier to remember to do, or simply just easier to do. These included putting it with homework to be done as a relaxation technique at the end, and
leaving it in a clearly visible place in their bedroom. Knowing they could write about whatever they wanted was liberating. On the day of their final oral interview, I asked them to hand in the journal to me.

Within the journal itself, the students were given tracking sheets (please see Appendix B for sample tracking sheet). These were designed to aid students in monitoring how often and for how long they would a) write in their journals, b) attend group sessions, c) use music, visualization and/or guided imagery to relax, d) be aware of their feelings at any given moment, and e) stand in front of the mirror in an effort to learn to accept and love what they saw there. These were aspects of the program that the students were encouraged to do to the best of their ability and comfort level, always being honest about their experiences, and to ask questions about when they reached a block or prolonged plateau.

**Interviews**

The purpose of the interviews was to share information, and specifically for the candidates to reflect on the program, and then share insights, comments and suggestions which would suggest the impact of the program on them. This evaluation was critical in determining the effects of the program common to all candidates. The first interview was the orientation session with the candidates prior to the commencement of the program. In this session, I shared my experience with the program, I explained what would be requested of them in terms of commitment to fulfilling all aspects of the program, and I answered any questions they posed. I handed out the consent forms, and asked those interested in
participating to have them signed by their parents and by themselves within one week. I considered the written questionnaire (please see Appendix E for sample of questionnaire) the participating students completed which outlined their history with asthma to be the second set of my "interviews", as it provided a basis for comparison with the final interview, which was tape-recorded.

The final interview occurred after the twelve-week program had finished. (For a list of the interview questions posed to each candidate, please see Appendix C) Its purpose was to gain the insights of each subject into her progress during the program. Interviews were conducted individually, and the average duration was 15 minutes long. Two were conducted each day at lunch hour over a 4-day period within the same week, with the final interview being held the fifth day at lunch. Subjects were asked to bring their journals to the interview in order that they might highlight certain aspects, according to the questions posed. Also, I was in possession of the "before program" and "after program" pictures of their illness and its solution which they had created (for a detailed description of this visual art activity students performed, please see the sub-heading following this one). These were presented to each, and each was asked to compare the two verbally, as per the questions posed. While all candidates were asked the same questions, if the candidates wanted to expand tangentially, they were welcome to do so, and I would prompt them with further questions to aid the process. In some cases, it was the subject who guided the interview as much as I did.
Implementation of the Holistic Art Therapy Program

The two principal aspects of the program were the journals and the group sessions.

As aforementioned, the journals were an exercise in freedom. Each candidate was permitted to create a journal which was meaningful to her; therefore, anything could constitute an entry. Some chose to use photographs, magazine cut-outs, borrowed poetry, her own poetry, drawings, doodlings and simple prose. Sometimes the writing was barely legible (to me); other times it was as ornate as calligraphy. Subjects had been asked to make daily entries -- some achieved this, but some others did not. The notebooks I provided for them were Duotang folders containing two thirds blank, white paper, and one third lined loose-leaf paper. I wanted them to have more blank paper because then there would be no impediment to drawing if they wished to do so, but they could just as easily write on it. Also, lines can dictate rules and order, and I did not want them to feel restricted here. However, if they were more comfortable writing on loose-leaf, they had some of that, too. As stated above, I checked the status of the journals at the six-week point, encouraging them to continue their excellent work. Then I collected each one on the day of the taped interview at the end of the program.

The sessions were typically 40 minutes long, and occurred at lunch hour. The sessions where we did visualization or guided imagery were typically slightly shorter at 30 minutes. Initially I had envisioned having a treatment group of adults perform the program, but I changed my mind as my teaching career progressed and I started to realize (and remember!) the stress that especially high school students experience. I wondered if, rather
than relegating a program of this nature to the realm of adult education, it would not be better to teach wellness as an explicit part of the secondary curriculum, if not the elementary. I, therefore, decided I would start with the older students, ages 14-18.

The next step was administrative consent, which I received from my principal after she had the blessing of the school board to do so. The orientation session took place shortly thereafter, and consent forms were in within a week from candidates agreeing to participate. At this point I gave them the asthma questionnaire to complete, along with a letter explaining its purpose (please see Appendix E). In this letter I also explained a modification to the program which had become necessary due to research of which I had been unaware linking meditation with improved asthma. Not wanting to duplicate this research, as I explained in the letter, I was eliminating it from the program. In addition, the process I had originally followed to control my asthma did not include meditation—this was not added into my regime until years later. Therefore, as my central thesis question was whether the same program I had used work for others or not, it was most appropriate to respect the original program.

Session #1 was an opportunity for students to return their questionnaires to me. Following this, we performed our first activity. Subjects were asked to draw a picture of their illness (asthma) and a solution to it, using the materials provided. Everyone was a little hesitant at first, looking around at the others to gauge their reactions to this seemingly unusual request. This is where the fact that I had a prior relationship with most of the subjects came into play most significantly; for, as I had their trust, they forged ahead. It also
helped tremendously that I did each art activity with them. As I was taking the risk, so could they.

The freedom they started to feel was palpable in the room, as some expressed that they "couldn't draw", but they weren't being marked on it so "who cared?". The session was noisier at first as the more boisterous chatted away to anyone in particular, even commenting in a positive way on the drawings others were doing. I tried to re-route this enthusiasm back to their own work, as I could see it was making some others self-conscious. Gradually things quietened down as students got more involved in their art, until finally towards the end we had worked in silence for at least ten minutes. Some subjects were self-conscious handing me their pictures, but I reassured them.

Session #2 was our first attempt at visualization and guided imagery. I read to them "Meditation #1" from Dr. Bernie Siegel's Peace, Love and Healing. In this guided imagery exercise, we returned to primary school where we wiped the blackboard clean for new lessons, we found our favourite place to be, and then built a bridge between our corner of the universe and the rest of the world. We crossed the bridge and started down a path. On this path was a house which we entered, we went into the living room, found a chest, and opened it, absorbing its message to us. We went back outside and planted a seed, and then became that seed, growing, blossoming and becoming renewed.

They all made a valiant effort to immerse themselves in the process, even though this was the first time some had performed visualization, and were not comfortable with the concept. I asked for reactions afterwards, as I would inevitably do after each session's
activity, and they were mostly positive. Subject #3 had a particularly difficult time with the process, as she said her mind wandered to all she had to do that day. The rest were surprised how relaxing yet refreshing it was.

**Session #3** consisted of drawing to music. I played a CD of Handel's "Water Music" and asked them to draw whatever they felt like. In discussion I discovered some found the music relaxed them and inspired them to draw, and others felt it distracted them. The stronger visual artists were those who preferred to draw without music, preferring the accompaniment of their thoughts only. What I did remark was that the noise level in the room compared to the first session was drastically lower, seemingly attributable to the music, but perhaps because they were beginning to sense the quiet and peacefulness of the program itself. (Please see Figures 19-24 following this page for samples of subjects' drawings.)

**Session #4** was our second visualization/guided imagery exercise. This time I read them Siegel's "Meditation #2", and I added background music -- Pachabel's "Canon". This had mixed reactions. About half the group liked the addition of the music, and the other half truly did not like it, feeling it was distracting. I was heartened by this, as I could tell they were all starting to reflect in the experience seriously. All found visualization much easier the second time, and Subject #2 even said that she "loved" it. Subject #3 came to the session despite an extra-curricular commitment elsewhere which was considered mandatory attendance by the teacher in charge. She was reprimanded by that teacher, and this was the start of her erratic attendance at the meetings. She followed the line of least resistance in order that she would not get in trouble again, and yet tried to keep everyone happy. I believe this caused more stress for her in the long run.
This visualization exercise consisted of travelling once again to our favourite place. We set out on a journey, and again crossed the bridge between us and the rest of the world. This time a little child met us -- ourselves as small children. We followed the children wherever they wanted to go, feeling free and joyful. We became one with the child and then rode an elevator through the years of our lives, getting off at the "floors" we wished to, reliving them. We exited the elevator, and then continued on our path to a lake. We released a bowling ball, signifying releasing the weight of our problems, and then stretched out on the shore, absorbing the elements and recharging, healing, renewing.

Session #5 was supposed to be a drama exercise. When I originally planned the sessions, before knowing who my subjects were going to be, I had thought we could perform skits depicting stressful situations and their solutions. After four sessions with these students, I was beginning to realize that, while I might have half who would be enthusiastic, for the other half-- the painfully shy half--it would be a painful experience. As my intention was that the sessions be relaxing for them, this did not seem like a good idea. Instead, when I sought their suggestions as to an activity they would like to do that was arts-oriented, they asked if we could do more visualization. This time I constructed the visualization as I went along, having become more comfortable myself with the process. Attendance was poor at this session--only half were present--however, those that were there really seemed to focus on the exercise. The fact that they had provided input into the session gave them ownership and was very empowering.

Session #6 was scheduled to be a visualization/guided imagery session -- I had been trying to alternate a drama or visual arts activity with a visualization activity each week -- so
I decided to maintain the schedule, given how popular the visualization had seemed to become. I used a guided imagery exercise from Dr. Alice D. Domar's *Healing Mind, Healthy Woman*. This was an anger management exercise (p. 170) where first we conjured up an image of anger, we thanked it for being there to defend us, we informed it of what it could and could not do for us now, and then bid it good-bye. At that point, we had to turn around on our journey away from anger and see what had happened to it as we walked away. This was perhaps a more provocative and difficult visualization than the two previous ones; therefore, I was relieved that it was as well received as the others. I asked if anyone wanted to share what they had experienced, and none did, so I did not pry. However, they did seem to feel as a whole that the exercise had been effective. Attendance was again poor at this session--only half the group--and, seeing as I had informed them I would be glancing at their journals at this point, I obviously only managed to see half of them this time.

Session #7 was a popular activity where we moulded clay into whatever shape(s) we wished. I played the soundtrack to the movie "Far and Away", very Celtic in its style, and we pounded away. There was much more chatter in this session, and much laughter as we tried to knead stiff clay into regular shapes. The comments emerged fast, furiously, and sometimes viciously, such as "This feels good!", "This is so-and-so's head!" (as they squished the clay), and "I should do this more often!". The negative energies poured out of them, the malleable clay acting as a catalyst for the release of built-up negative emotions. Then, they started to create. Very subtly, the mood in the room changed to that of tranquillity, calm, and focus. Subject #1 created a happy face, Subject #2 created a smiling sun, Subject #5 created a mud pie, Subject #7 created a bird, and Subject #8, much to everyone's admiration, created
a beautiful, elaborate angel. Her work was so detailed, it looked like filigree. Unfortunately, only five participated in the session, and some of the others, when they had heard what we had done, expressed their dismay at having missed it. The subjects asked if we could do it again another day. I managed to see two more journals this session, and made a point of tracking down the remaining two during that school day.

Session #8 was the fourth visualization exercise, and was taken from Siegel's Peace, Love and Healing, "Meditation #3". Here, we went to our favourite place again, then took a path to a pond, and went in the water. We reached into the depths, brought up what was down there, and brought it to shore to dry in the sun. We then continued on our journey, arriving at an outdoor theatre, and performed for all the people in our lives, soliciting their responses afterwards. We continued on our paths, meeting a guide to help us on our ways. We then focused our energies inwardly again, healing, recreating and renewing. By this point, students were openly expressing how comfortable they were with visualization, how much more quickly they could immerse themselves in it, and how real their images were.

Attendance at this meeting was much better -- only two absent -- but I could sense that those who had missed sessions frequently were definitely out of sync with the others. However, they struggled hard to be part of the process, including the conversations after the exercise, as I believe they sensed they had somehow been left behind and needed to catch up.

Session #9 was supposed, in the original session plans, to be another drama exercise--improvisation whose theme would be acting out various emotions in their various forms. But, for the same reasons as stated in Session #5's synopsis, I decided to change it. Given the few sessions together which remained for us, I let them do clay-moulding once again, as per
their request. Those who had not been at Session #7 had the same initial reaction their peers had had that day. Those who had already performed this activity, interestingly enough and almost without exception, chose not to make an image or likeness this time; rather, they (and I) were content to make geometrical shapes, to feel the regular, perfect shapes clay could become in our hands. This was an interesting phenomenon, for which I have no in-depth explanation other than, as one subject said, "It just felt good." Indeed it did feel good to mould mindlessly the first shapes we learned to form as children: spheres, pyramids, cubes, et cetera.

Session #10 was Siegel's "Meditation #4". In this visualization, we crossed our bridge, took to our path, and encountered a mountain. We climbed it, reaching the top where a rainbow-coloured balloon was waiting for us. As we sailed upwards, we left our problems behind, floating high above them. We descended to earth to start on the path again. Then, we were allowed to become any creature we wished, learning from it all the while. The path continued as we became ourselves again. We put our own message on a billboard flanking the path to those who would come after us. Another mountain loomed, and this time we went through it via a tunnel. We could see the light at the end, but the journey was difficult: cold, damp and dark. However, we overcame the obstacles, and all our loved ones were at the other end to greet us. We absorbed their love and encouragement, letting it energize, renew and revive us.

Attendance, seemingly on the rise once again, was excellent at this session -- only one absentee -- and this time the weather was kind enough that we could have the windows open, listening to the birds and the gentle breeze in our beautiful surroundings. Subject #2
remarked how real the visualization was with those sounds in the background. Also, for once there were no interruptions on the PA system, so our stream of consciousness was unbroken.

**Session #11** had an almost festive air, as subjects began to have a sense of accomplishment. There was only one session left after this one, and they had made it! This session was the follow-up to the very first session, where now they were drawing a picture of their illness and its solution, but *after* the program had been completed. They were asked to try and find different symbols from those initially used, as I wanted them to reflect more than simply repeating what they had drawn previously. These pictures will be described as part of data analysis, for the subjects all described their efforts in the final interview. They were much more efficient in finding symbols and drawing them this time, taking on average half the time they had the first session. They also seemed much more confident about what they were doing. They were sure of what they wanted to depict, and there were no disclaimers about how terrible they were as artists. Attendance was one hundred percent, and the one girl who had been chronically absent (Subject #6) surprisingly fit in as if she had never been away. As mentioned in her subject profile, perhaps this was because she had spent so much time dialoguing with me, she was comfortable with her level of participation.

**Session #12** was our final session, and occurred the week before interviews started. This session seemed largely more administrative in nature, as we together set times, places and dates for the interviews and the passing over of the journals. We had three subjects absent, and there was a restlessness about the group which had not been there ever before, even at the first meeting. It was as if I was asking them via the interview to now do a test on
everything they had learned in the twelve weeks. I sensed their nervousness, and reassured them that it would be quite painless. (Indeed, when it came to the interviews themselves, each candidate eyed the machine apprehensively at first; then, after I had made a few jokes and silly remarks on tape, they realized it was not so formidable and relaxed.) Some were nervous about their journals: Would it be satisfactory to me? Was what they wrote stupid? Did they write enough? Justifications and excuses started to fly, when they had done nothing wrong! I reassured them that whatever they had would be wonderful because it was from them; they had made it.

I then moved on to why I had brought them together, in as much an effort to distract them as anything else. I explained the concept of meditation to them, highlighting the differences between it and visualization/guided imagery. I used Jack Miller's book *The Holistic Teacher*, pages 54-59, to help them understand the various types. This was an aspect of my own healing which had been added at a later point in my journey, and I wanted them to have as many tools as possible. We did not attempt the meditation for any degree of time, but I had them practice deep, proper breathing as an introduction. This was an appropriate point in the program to introduce meditation, for they were ready for it. They had already been convinced that visualization worked, and were eager to try meditation on their own.

Our last meeting as a group took place at our pizza party after the interviews had been conducted. As aforementioned, it was here that they expressed their thanks, which completely took me by surprise. I was fully prepared to be the one thanking them for their dedication and participation, for their generosity in helping me with my research. Instead it was they who led the charge, hugging me -- even the least demonstrative and the shyest -- as
they went out the door. We wished each other luck, and, while it was an emotional gathering, tears were not part of our ending. In fact, tears seemed out of place, for we had all given each other gifts to take away with us. It was a journey taken together, and, as in our visualization exercises, for each other we had become part of the loved ones cheering us on our way.

**Procedures for Analyzing the Data**

Data was analyzed in 3 phases, following Strauss and Corbin's Grounded Theory Procedures and Techniques. Phase 1 involved *open coding*, or "breaking down, examining, comparing, conceptualizing and categorizing data" (Strauss and Corbin, 1990, p.61), achieved via a line-by-line analysis of each interview.

Phase 2, *axial coding*, involved re-coding and integrating the categories derived from open coding by making connections between them. Categories were still being developed, but beyond properties and dimensions to include conditions, context, action/interactional strategies and consequences. The categories were shaped and re-shaped, generating a final structure of primary categories and subcategories.

The third phase of analysis, called *selective coding*, involved the discovery of the core category, or the central phenomenon around which all the other categories are integrated. A descriptive narrative about the central phenomenon of the study was written in order to achieve integration. This integration of categories established the core category. The core category was developed in terms of its properties, relating it to all other categories, and constructing a hypothetical statement regarding the relationships amongst the categories.
This statement was then validated against the data by analyzing the extent to which it was applicable for each research subject.
Chapter Four: Analysis of the Data

Introduction

The purpose of data analysis in this study is to ascertain and verify the impact of the holistic art therapy program on the treatment group, as expressed by them. What results did the program achieve for them? The first stage of analysis for me as researcher was to read each of their journals. This gave me an invaluable base from which to code the interviews, for I was already armed with information regarding the nature of the entries, their frequency and duration, and the type of content in each. This data supported what the subjects observed in the interviews about their own progress or lack thereof. In addition, the journals enhanced my ability to generate an accurate subject profile (see Chapter Three). The next stage was to review my researcher field notes in order to provide a synopsis for the "Methods and Procedures" chapter (again, Chapter Three). As I re-read my summaries, again my observations supported those of the subjects, and formed the basis for program modification strategies.

The primary source of data, and the only source subject to the Grounded Theory coding process, was the interview completed by each candidate at the end of the program. It is in these interviews that the subjects were permitted to actually reflect on their experiences as a result of the program, and upon the program itself. While the journals and researcher's field notes were part of the process, it was the interview itself which allowed for the most direct reflection on the program's effects -- the product. As a result, the interviews were
chosen for the coding procedures; each was analyzed separately and sequentially, categories emerging as each interview built on the last.

Open Coding

The process of open coding -- conceptualizing and categorizing the data -- consisted of highlighting words or phrases of each interview which seemed pivotal in the meaning being portrayed by the subject. Wary of imposing my own interpretation on the data, I asked two colleagues to submit the data to the same process, and they were in accordance with my findings, and even added two more categories which I had not perceived. The nine interviews yielded 165 meaningful words or phrases, averaging 18 per interview. As per Strauss and Corbin's "Techniques for Enhancing Theoretical Sensitivity", throughout the process I repeatedly asked myself *Who? When? Where? What? How? How much? and Why?* in order to "open up" the data, possibly yielding new categories via new ways of viewing the material before me. At this stage, the material yielded 13 provisional categories, averaging 4 properties each. The categories pertained to specific phenomena, conditions relating to these phenomena, strategies used to cope with the phenomena, and consequences of such strategies taken.

Axial Coding

Strauss and Corbin define axial coding as "a set of procedures whereby data are put back together in new ways after open coding, by making connections between categories. This is done by utilizing a coding paradigm involving conditions, context,
action/interactional strategies and consequences." (Strauss and Corbin, 1990, p.96) By reconsidering the data in this light, I re-shaped the initial categories to reflect relationships between the phenomena (what the action is all about in the data), the causal conditions, contexts, intervening conditions, interactional strategies and consequences related to each. Even the sub-categories had general properties and dimensional locations, specifying the category even further.

Axial coding requires the researcher to flow smoothly between deductive and inductive thinking, thereby "grounding" the theory, say Strauss and Corbin. Each time the researcher proposes a relationship, it must be checked against the raw data for verification, which I did. As the final step in this particular phase of coding, I looked for variation in phenomena by attempting to discover patterns via the comparison of each category and sub-category's properties. The final structure contained 4 categories, averaging 3 subcategories each. Three of the four were common to all subjects, while the fourth was common to seven out of nine subjects. The following is a description of each category generated from Strauss and Corbin's initial two phases of coding.

**Category #1: Conquering Stress**

Each candidate felt strongly that the program helped them to conquer stress by providing each with outlets to alleviate it. The journals and the group sessions became outlets for their emotions, for creativity, and for stress via the self-expression inherent in each.
Subcategory 1-1: Stress Outlet

"The journal helped to blow stress off," stated Subject #6. "I would turn to my journal to relax," said Subject #1. "It helped me to relax at different times of the day," Subject #8 felt. Subject #5 said that it "relieved stress from work, homework and friends ... School is a big stress, and I could write about my workload." Subject #9 emphatically stated that it "calmed me down". "I became more relaxed and not stressed out," affirmed Subject #4. Subject #3 would "use it when I was under alot of stress." She particularly appreciated that she was given the choice to draw or write or both, because "it was easier to draw things. It took off alot of stress because you're so used to writing assignments for school." Subject #2 enthusiastically stated how she had noticed a "big difference" in her ability to relax.

Subcategory 1-2: Emotional Outlet

Subject #8 found that she would be "writing about her day and something would come out in anger, and I'd realize now I have to start doing that ... I have to actually react on how I feel about it ..." She also found the visual art expression in her journal to be a tremendous outlet for her: "It helped me get how I feel out, even though I might not know how I feel, if I draw it's how I feel at the time ... I don't actually have to express it in words. Rather than someone saying how do you feel? I can just draw a mess and that's how I feel." The clay-moulding exercise was very beneficial for her: "The clay you can just take your anger out on. It can't feel anything. Or you can just be as calm as you want and it's all your feelings that come out on it." In fact, this subject found she was more emotional for a certain time after having written in her journal or having attended a group session. "I would get
more emotional ... would be more sensitive if someone said something to me ... would want to be alone longer, to think for extended periods of time." When I asked her if she thought this was a positive or a negative result, she replied: "Both positive and negative. You can analyze something to death, it can cause second-guessing, but I can also weigh out options myself and not ask others what to do, deciding for myself ..."

Subject #7 found she "didn't yell at my sister so much" because she poured out her frustrations in her journal. Subject #5 wrote down "whatever was bothering me, so I could function better with my work." Subject #9 actually believes she learned to "talk out" her asthma like she would express herself to her journal via poetry. When she felt the onset of an attack, she would start talking out loud about whatever was causing her stress at that point, thereby calming herself down. Subject #4 felt the journal "helps you get things off your chest", Subject #3 "could just draw to get things out", and Subject #2 "got out my feelings". Subject #2 particularly felt she had experienced a "big breakthrough" because she "was upset, wrote, read it over, then realized I didn't need to be upset, and I carried that to my whole life. I put things in perspective, was not so uptight, worrying about everything. I now feel things will work out, it's not the end of the world. That came from this project."

Each candidate felt this outlet was necessary because there were things they simply did not wish to share with another person. "I don't talk to people about things," stated Subject #1, "so I would just write in my journal. I didn't have to worry about anyone answering back, and I could write what I wanted." Subject #8 viewed the journal as "something no one else could do with me; I had my own time alone ... I didn't have to worry about others." "I got my feelings out so I didn't have to express them to other people," said
Subject #5. Subject #4 felt it "helps you express your feelings and put them down on paper if you can't say them to anyone." She actually named her journal "Escape", addressing each entry to this character, and she assumed the pseudonym "Eternity", signing off each time under this name. "I tend to keep to myself, don't want to complain to anyone. This was easy to complain to," said Subject #2.

**Subcategory 1-3: Creative Outlet**

Subject #8 utilized the program as an outlet for creativity. In her journal particularly, she "drew shapes, put solid colours together. Most shapes were in cloud form, then ended up having a form of something else. It doesn't start off that way. I just start drawing a cloud form then I look at it and I can see something right off it, and I guess that's how I'm feeling. It's a different image, like when you look into the clouds and you sometimes see some kind of animal in there, that's what my images do." Subjects #9 and #2 described great progress in their poetry, which is tremendously important to them, and attributed this to "having the time to write, having an excuse to write" (Subject #9) and "doing more and more as it (the program) went along" (Subject #2). Subject #9 was particularly thrilled with the progress in her drawing as well. She said: "My journal actually made sense. The drawings came together. I don't have to explain the drawings to anyone because they make sense. I really like it -- I'm proud of it." Subject #4 really "likes" her journal and "wants it back, just to have, just to keep."
A professed stumbling block to creativity in the visual arts, however, was the belief that "I can't draw". Six out of the nine candidates felt they "were not very good artists", and this was a reason for not having many drawings in the journal. All six actually laughed or smiled in embarrassment at their "illness and solution" drawings which I had them describe for the interview, despite my assurances that they were theirs, and therefore meaningful and perfect. I can relate to this self-consciousness, however, as it took me a significant amount of time to accept the fact that my art work was not being evaluated by anyone other than myself. When I became comfortable with this notion, my art work became more uninhibited. Subject #4 articulated their sentiments the best, referring to her aversion to drawing during the group sessions: "If you couldn't think of anything to draw, then you wouldn't draw what you were feeling, you'd just draw anything, even if it didn't mean anything to you, just because you had to." She much preferred drawing in her journal, where she "doodled", she said -- she didn't draw.

Category #2: Relaxation

Each candidate found varying degrees of relaxation obtained from the program. This was evolutionary in nature, and "became easier" (Subject #7) as the program progressed. According to the subjects, relaxation occurred when their minds were diverted from, and cleared of, everyday worries. In their opinion, this was made possible for them by the self-expression of the journal writing, visual art activities (for one third of the group only), the visualization/guided imagery exercises, listening to or playing music, and simple quiet
time alone. Being obliged to take the time to perform these activities on an ongoing basis helped the candidates go beyond stress-relief to actual relaxation.

Only two of the nine candidates cited other relaxation techniques they had used in conjunction with the program. Both Subjects #6 and #3 used sports to relax. Contrarily, Subjects #7 and #4 stated that the sports they were involved in caused them stress. Subjects #1 and #9 mentioned sports only to describe how their performance was affected by their asthma. The other subjects did not mention athletics.

Subcategory 2-1: Journal Writing

Subject #6 felt journal writing "took my mind off things, made my mind blank. When I was writing in my journal I wasn't thinking of anything." Subject #2 said that "it got easier to write; I didn't have to think as much. It relaxed me when I was writing in it -- sometimes I would turn to my journal for relaxation." "It helped me tune out better," stated Subject #8. "I could think of nothing else except what I was doing. I could block myself out, concentrating on writing." Subject #3 experienced contradictory feelings about her journal. At one point in the interview, she explains how she would "get relaxed, get comfy, and take time to do it", but then it "got in the way sometimes, because when I was really busy I had to make time to write in it. I didn't have the time so I'd put it off then by writing in the past."

Subject #5 was emphatic about continuing her journal, even after the end of the program. In fact seven out of the nine candidates said they wished to continue the endeavour.
Subcategory 2-2: Visualization and Guided Imagery Exercises

"Visualization was relaxing," stated Subject #1. Subject #3 added: "I didn't have to think about anything else." This was the consensus amongst all group members. In fact, it was the more popular activity during the group sessions because, again, the "I can't draw" phobia curbed some appetites for visual arts. "Visualization helped alot," stated Subject #5, "but a week was too long in between sessions, because I got out of it and it was hard to get back in." Two of the candidates felt that visualization helped them significantly with their ability to meditate, which they did as part of the Religion program at school or on their own. "Meditation in Religion was where I noticed the difference," said Subject #9. "I'm a worry person and used to wonder how people cleared their minds, how they relaxed enough to do it. Thoughts of what I had to accomplish would crowd my mind before, I needed pressure to survive. Well, the other day I actually fell asleep in meditation! I was so thrilled!" Subject #2 said she "always liked to meditate, but this brought it out more, was sort of an excuse. Visualization is harder to do alone, obviously, so I turned quite naturally to meditation ... it was really relaxing and I noticed a big difference. Then my dad got me a visualization tape, so I started to use that on my own ... I loved visualization -- I was relaxed for the rest of the day."

Subcategory 2-3: Spontaneous Visual Art Exercises

Three of the nine candidates expressed that they found the spontaneous visual art aspect of the program relaxing. As aforementioned, the rest of the group felt they "couldn't draw"; therefore, they were perhaps pre-programmed to find this aspect challenging rather
than relaxing. In fact, Subject #1 ventured to state that "art just frustrates me, trying to find something to draw." However, it should be noted that all did enjoy the clay-moulding. It seemed to be less threatening in that no one was an "expert" at it with whom they could compare themselves. The form seemed to allow a greater degree of latitude. Also, the subjects seemed to find directed visual art activities, such as the image of their illness and its solution, to be easier than drawing to music, for they were given at least some parameters.

For the three who did enjoy the visual art exercises in group sessions, and in their journals, they found the art to be "easier than words" (Subject #3). Subject #3 also included photographs in her journal. Again, an interesting contradiction arose with her responses. While she stated that she "liked to draw", that it was "easier to draw things", she claimed there were no drawings which had special significance for her in her journal, and that in fact, she was "not a good drawer". Upon reading her journal I did not find a single drawing of hers within, only the photos and some cut-outs from magazines. Subject #8 took great delight in discerning the images in her "cloud" drawings, and her journal consisted solely of art and poetry. Subject #9 was proud of the progress in her art to the point where she "didn't have to explain my drawings because they really made sense."

Subcategory 2-4: Music

Eight out of the nine subjects hailed listening to music as a key relaxation strategy in their program. This came as somewhat of a surprise to me, for they were not specifically asked to listen to music as part of the program; rather it was an optional activity. Interestingly enough, four of these seven play instruments in the school band, and are quite
talented. Subject #8 invariably listened to music in conjunction with writing in her journal, as she found it helped her regulate her breathing better to truly relax. Subject #1 and Subject #7 would listen to music while lying on their beds. Subject #9 listened to music as inspiration for the poetry and lyrics she created. Rather than watch television, she would come home with the latest CD, lie on her bed, and let the music "inspire" her.

Subject #5 played three instruments herself, and music was her absolute favourite pastime. Her journal was decorated with musical notes throughout -- her significant drawings -- and she wrote almost every day about her progress playing her latest instrument. She remarked that the breath control needed to play her bassoon helped her strengthen her lungs against the asthma. I could relate to this, for singing had a similar effect on me. Subject #3 also played three instruments herself, but she viewed her commitment to the school band as not always so relaxing: "When there are marks and festivals there's lots of stress, but when it's for fun, it's more relaxing. I don't really like it when it's stress, competitive."

Subcategory 2-5: Quiet Time Alone

"Just sitting" was also a popular option for relaxing. "Taking time to just do nothing" (Subject #3) was important to seven of the nine candidates. Most spent this quiet time on their beds at home, while Subject #2 preferred to walk by the lake near her home. None commented on the frequency with which they did this activity -- perhaps it could be difficult to gauge -- but Subject #3 did state: "I try to take time out of the day now, but it's hard with
work and school and activities -- I'm really busy -- but I try to take time out every once in a while just to do nothing."

Category #3: A Sense of Self

The program brought to a majority of the subjects a strong sense of being able to take care of themselves, both physically and mentally, and reinforced the fact that they were worth taking care of. It demonstrated to them the positive ramifications of "looking out for #1" (Subject #8), and the self-esteem which results from achievement. They easily articulated their growth over the course of the program, generally shifting in their focus from the problem to its solution, as signified by their art work. There was liberation in not being evaluated by others -- only they could evaluate their own particular progress.

Subcategory 3-1: Evolution

Each candidate remarked that it became increasingly "easier" to follow the program. They especially noticed what they considered progress in their journals. Initially, they all said, they wrote about what had happened that day in terms of events. Gradually they perceived themselves writing about how they felt that day. Subject #1 remarked that she "didn't have to think as much ... it got easier to write." Recall how Subject #8 would discover an emotion emerging in her writing that she did not realize was how she really felt until she saw it on paper (see Subcategory 1-2). Subject #4 "learned to write about what I was thinking, expressing myself, rather than 'Today, I ...'". Subject #3 reiterated, stating "At
first it was what I did in school that day, then I put more important things in it, meaningful things."

Seven out of nine candidates noticed evolution and growth between the first picture of her illness and its solution, created at the beginning of the program, and the second, created on the same theme but at the end of the program. Each was asked in the final interview to note the differences and similarities between the two pictures. "My second picture doesn't have any illness in it -- just solution," said Subject #6 (see Figures 1 and 2). Subject #8 remarked that "in both, the ink spot and the garbage (symbols she chose to represent her illness) are permanent, but you just have to learn to get on with it. The first picture is more negative, though, and the second has more hope, is more positive." (see Figures 5 and 6) "The first is more about the problem, and the second is something that would be relaxing," said Subject #7 (see Figures 7 and 8). Subject #5 remarked that, in her two pictures, the representation of her illness was the same, but that there was no picture of a hospital in the second because she had not had to go there since the program started. In addition, she noticed that the second picture was drawn in "stronger colours and (it was) more colourful because I feel more confident." (see Figures 9 and 10)

"In picture number one, the solution was there, it just needed to be used more," declared Subject #9. "In number two, the solution is working, I'm enjoying life as it comes ... You look at life in a different way, you notice things more because it's like 'Look at that next time, or think of that, and it can calm you down.' It's almost spiritual. Life around you means more just because of one little asthma group and I think it's nice." (see Figures 11 and 12) Subject #4 noticed that her second picture "has more solutions. The first picture shows
no fresh air, but the second picture has fresh air." (see Figures 13 and 14) "In the first the problem is overwhelming, there's so much of it. In the second it's so much smaller, it's been overcome," said Subject #2 (see Figures 17 and 18).

The remaining two candidates did not have similar experiences to their colleagues in this area. Subject #1's pictures varied little because, according to her "there's no real solution to asthma." (see Figures 3 and 4) Interestingly enough, she did remark in the interview that she felt more relaxed overall "but I don't know if this helped my asthma", and that sports -- one of her depicted causes of asthma -- were going better, but "I don't know if it's not because I'm pacing myself more." Subject #3 actually drew the reverse from her colleagues. According to her, her first picture depicts that there is a solution, but the second depicts that there is not (see Figures 15 and 16). One of her professed solutions in the first picture was to meet her real father, as she is adopted. "I want to know my real dad. I think stupid things, like if I meet him, I won't be so scared, so stressed, and that will help." It is important to note that she did not meet her real father during the course of the program. In fact, Subject #3 is the only candidate who felt her asthma actually worsened over the course of the program. This will be explained in more detail in Category #4.

Subcategory 3-2: Self-Esteem

Five out of nine participants directly expressed boosts to their self-esteem as a result of the program. Subject #8 summarized the program as a "self thing". She had come to the conclusion that "to get rid of asthma, you must deal with the mental, too, because if you take on too much, worry too much, get yourself all stressed, eventually it will affect your asthma
Figure 3

Anaphaesthetic
Restriction

Smoke and action upset my asthma.
I'm the sunset
Garbage is the problem
Gold hidden from view is the solution
Asthma Attack

Brain & Mind

Comforting Thoughts
NO
SOLUTION

No
Solution

No
Solution

No
Solution
Sickness overcome by life + happiness
... I have had to learn to give myself that time alone because I have to care about others, but I have to watch out for Number One, because if I go I can't help anyone after that." "I feel better about myself," said Subject #5, "I feel more confident." Subject #9 was very "proud" of her poetic and visual art endeavours which sprang from the program, and of how she had learned to relax herself, learning also to ward off asthma attacks. Subject #4 wished to get her journal back, "just to have, just to keep", for in it she was the character "Eternity", of whom she was very proud. "I am not so uptight," stated Subject #2. In her second picture she explained proudly that she had drawn asthma in the middle, "surrounded by light, nature, happiness, new growth, which are overpowering the sickness. I have overcome it."

**Subcategory 3-3: Time for Self**

Six out of the nine candidates expressed appreciation for the time alone, away from the eyes and ears of others, that the program afforded them. Subject #1 appreciated being able to "write what she wanted" because she "didn't have to worry about anyone answering back." Subject #8, a person who admits that she worries about how others perceive her, found that the program was "a freedom thing. I don't have to worry about others." Subject #7 took the time "to think about the day, which I normally didn't do. It was time alone, time to go over my thoughts." Subject #5 actually cited her "friends" as a source of stress, and that the solitude of the program relieved it. Interestingly, she was the only candidate who actually expressed that what helped her most about the group sessions was that they "brought everyone together". "Frustration starts my asthma, so I leave the person who makes me mad...

... The journal helped me to get things off my chest and breathe easier," stated Subject #4.
The mere fact that she did not have to speak to others about her problems was a relief for Subject #2, for she "didn't like to complain to anyone."

**Category #4: Translation into Disease Control**

Seven out of nine subjects noticed an improvement in their asthma from the beginning of the program. Subject #6 noticed she has not had to use her puffer much for aerobics, reducing usage from four times a day to once every two weeks. Subject #8 doesn't "run out of breath because I take my time now, I slow myself down." Subjects #7 and #4 say they haven't had to take their puffers as much as before. Subject #5 finds she is "not running to puffers all the time. I look at the situation to find a solution before resorting to a puffer.-- what is bothering me? How do I resolve it?" Subject #9 said, "I still have asthma, but I looked forward to doing the program all the time. I thought, 'Well, maybe there is a cure for it' -- well, maybe not a cure but something besides always lugging the inhaler around so that everyone knew "She has asthma!" -- something to calm it down. You look at life in a different way, you notice things more because it's like 'Look at that next time or think of that -- it can calm you down." Subject #2 has reduced her use of puffers from once a day to once every three days.

Subject #1 did not notice a change in her asthma attributable to the program. In fact, in the final interview question, she minimized the disease in her life: "Asthma only bugs me at certain points, like if I have a cold, or it's really raining. It doesn't happen every day, I don't need inhalers every day, maybe twice a month. I haven't noticed much of a difference." Yet, in her initial picture of her illness and its solution which she drew, she depicted,
according to her, her asthma as being triggered by "smoke, too much activity, running, humidity and puffers" (she has a very rare allergy to all puffers except for Pulmacort). Her picture bears the caption "Asthma = Restrictions".

Subject #3, as aforementioned, felt her asthma got worse during, but not because of, the program. Her second picture is riddled with the phrase "No Solution", and she volunteered that she thought her asthma had got worse "because of myself. I don't know -- maybe because there's more stress and more pressure -- work and school, some activities are no stress, but some are big stress."

Selective Coding

Strauss and Corbin define selective coding as "the process of selecting the core category, systematically relating it to other categories, validating those relationships, and filling in categories that need further refinement and development." (Strauss and Corbin, 1990, p.116) The first step in achieving this is to create a descriptive narrative, a story, about the central phenomenon of the study, according to Strauss and Corbin. The researcher asks herself: What is my research all about? What phenomena are reflected over and over again in the data? What stands out in this study? The conceptualization of the story is the story line, and the core category.

The Descriptive Narrative

The story inherent in the data seems to tell me that methods other than drugs can help to control asthma. Specifically, asthma flare-ups can be reduced via a holistic art therapy
program, the components of which are journal-writing and group "therapy" sessions involving visual art and visualization/guided imagery. The effects of this program on the participant are relaxation, stress relief, a renewed sense of self, and decreased use of inhalers.

However, two out of the nine candidates in this study did not meet with all the aforementioned effects. Both found relaxation, one found stress relief, but neither found decreased use of puffers or a renewed sense of self. Why was this? What were the other candidates doing that these two were not? If success of the program is defined as a perceived reduction in asthmatic symptoms/flare-ups by the candidate, then the program was a failure for these two girls, but a success for the other seven. What is the key? Upon reviewing the data, what the seven girls shared was one critical attribute: a sense of responsibility for their own health. The two girls who claimed the program did not help their asthma did not possess this.

The first one seemed to disassociate herself from her asthma. After claiming at the beginning of the program "asthma = restrictions", she shocked me in the final interview by giving the impression that her asthma wasn't really a serious hindrance to her, practically denying that she had it at all. How could the program work if she didn't believe she was sick and needed to help herself, despite overwhelming evidence to the contrary, most of which she furnished? She would not assume responsibility for her role in her own good health if she could not admit she was sick.

The other subject admitted to being under tremendous stress all the time, yet continued to take on more activities which she said increased her stress levels. She labelled her asthma as "hell", and that there was "nothing I can do to get away from it". This is a very
telling statement, demonstrating her desire to flee versus confronting the disease. She cites meeting her real father as a potential solution to the asthma. Perhaps she keeps her asthma until that day arrives when she does meet him. Subconsciously perhaps she retains the excuse for the knight in shining armour to come rescue her. When a disease serves a purpose, it will remain until the purpose is served.

The Core Category

The next step beyond the description of the story was its conceptualization. Was there one category broad enough to encompass them all? None were deemed suitable to perform this role; therefore the core category was termed Empowering Self-Healing. This is what occurred in the broadest terms in those who believed they shared in the responsibility for their own good health. Empowering describes the breadth of the role each candidate played in achieving the healing -- each had the power to make it fail or succeed -- and the resultant sense of accomplishment. Self-healing is what happened for seven of nine candidates who, through their own dedication and perseverance, started to heal their asthma.

In the next chapter, Chapter Five, the properties of the core category will be determined, and the core category will be validated against the other categories, and the data itself, completing its grounding, according to Strauss and Corbin.
Chapter Five: Interpretation and Discussion

Introduction

Chapter Four's data analysis generated four categories and eleven subcategories, which eventually led to the core category: *Empowering Self-Healing*. This was the phenomena experienced by each subject who took responsibility for her own health, and entailed results such as relaxation, stress reduction, a stronger sense of self, and a measure of disease control, as indicated by the reduced need for inhalers to control asthma.

In Chapter Five, I will illustrate the properties of Empowering Self-Healing, relating each to the four major categories. The descriptive narrative in Chapter Four will yield these properties, according to Strauss and Corbin, if it is told correctly. Then I will pose a "hypothetical statement regarding relationships among the categories" (Strauss and Corbin, 1990, p.129), which will, in its turn, be validated against the data by means of a subject profile for each candidate. This process should determine the extent to which the statement accurately reflects the experiences of each participant.

Properties of the Core Category

This study's story yielded two properties: commitment and perception. The property of commitment carries a dimensional scale of high to low, while the property of perception carries a dimensional scale of positive to negative.
Property 1: Commitment

Commitment denotes the subjects' commitment to the program in general. Some subjects were highly committed: writing in their journals every day, attending and actively participating in every group session, and taking the time to seriously reflect, which was clear in the interview whether or not they had. Degree of commitment, as perceived by the researcher, was gauged using the above criteria, and subjects ranged from high to low commitment, which will be explained in further detail in subject profiles. All four categories directly support the property of commitment, for it would be difficult to attribute relaxation, stress relief, a stronger sense of self, and disease control to a program in which a subject did not participate. However, the degree of success in each of these categories would certainly be affected, and it is clear from the subject profiles which follow that those with a higher degree of commitment to the program had higher results in all four categories.

Property 2: Perception

The subjects' perceptions of their disease both prior to and during the program affected each category of stress relief, relaxation, sense of self, and disease control. If they perceived that asthma could be stress-induced, then they understood the role of diminishing stress and relaxing in controlling asthma. If they were open to the concept that the disease could possibly be controlled by means other than drugs, then the program could work more quickly and effectively, because they would not be fighting the concept. If they perceived themselves as capable of playing a role in their own health rather than as a perennial victim of circumstances, then the program had a better chance of having positive results. If the
asthma was not fulfilling a need or a purpose in them any longer, then it had a stronger possibility of being controlled by the will of the individual.

**Hypothetical Statement**

The hypothetical statement generated from the perceived relationships amongst the properties and categories would be the following:

When asthmatic individuals perceive that they have a role to play in controlling their disease and thereby commit to a program involving holistic art therapies, they experience *Empowering Self-Healing*, which entails conquering stress, relaxation, a stronger sense of self, and ultimately a degree of disease control.

At this stage, this theory must be validated against the data to see if it is true for each participant. This will be accomplished via subject profiles, which will reveal how each individual's results relate to the hypothetical statement.

**Subject Profiles**

**Subject #1** had a moderate commitment to the program, but a negative perception of her ability to change the status of the disease in her life. In fact, she ended the program by denying the restrictions which she had claimed asthma imposed on her life, almost as if she would not accept that she had a disease which even needed her help to control it. Her interview was relatively short, and the depth of her answers proved she had not made a connection between the program and her asthma control. However, she did feel that the aspects of the program relaxed her, and this is a degree of success if she achieved even this.
Hopefully she will continue to utilize these methods, like journal-writing, with continued positive results, both those perceived by her, and perhaps some which are not.

Subject #2 demonstrated a high level of commitment and a very positive perception of her role in fighting this disease. As a result, she experienced high levels of relaxation, stress-relief, pride in her accomplishment and a new-found sense of her own abilities. The use of puffers to control her asthma diminished by two thirds. The answers to her interview questions showed the reflection and time she had invested in the program.

Subject #3 had a moderate to low level of commitment to the program, and a very negative perception of her ability to help control her disease. She is the only candidate who felt her asthma had become worse over the course of the program, although, she felt, not because of the program. I suggested that the program had perhaps focused more attention on her asthma than she was used to, which had perhaps panicked her subconsciously, aggravating her asthma in a vicious circle. She agreed that this was a possibility, thereby acknowledging the role of stress in asthma. Her interview seemed to focus mostly on the amount of stress she was under at all times, and how hard it was to find time for the program because of her busy schedule. The positive effect of the program for her was she did perceive its aspects as relaxing, although her stress levels seemed to remain the same.

Subject #4 displayed a very high level of commitment to the program, and had a very positive perception of her role in fighting asthma. Her interview answers were succinct and decisive, demonstrating a keen understanding of how the program had positively benefited her in each category, and of how especially important relaxation was in combating her
disease. She knows her asthma has been helped because she breathes more easily -- a fact she attributes to a general state of relaxation which came with the program.

**Subject #5** also had a very high level of commitment to the program, and a positive perception of the responsibility she could assume in the fight against her asthma. This subject was the most pro-active in terms of suggestions for program modifications, demonstrating her faith in the concept as a whole. She felt the program should continue for a longer period of time to see "alot more of a difference", and that the group sessions should be semi-weekly instead of once a week. She noticed an improvement in her asthma, and welcomed most the stress relief she achieved through expressing herself in her journal.

**Subject #6** had a low level of commitment to the program, evidenced by her lack of attendance at group sessions and her relatively few journal entries. However, she demonstrated a very positive, proactive perception of her own role in her disease control, recognizing her need for outlets and down time to simply do nothing if she wanted to stem the onset of asthma. It seems that, while she acknowledges the relaxation inherent in journal-writing, her involvement in aerobics seems to be a major outlet for her also, and cannot be ignored as a factor in her significantly reduced usage of inhalers (from four times a day to once every two weeks). However, she is very content to attribute much of her success at relaxation to the program, to whatever degree she followed it.

**Subject #7** exhibited a very high level of commitment to the program, as evidenced by her frequent journal entries and attendance at all sessions. She also held a positive perception of her ability to help fight the disease. She found the journal writing and visualization specifically helped her to relax, and had a reduction in her need to use her
inhalers. Her responses to the interview questions were similar to those of Subject #4's: succinct, decisive, and convinced of her experiences.

Subject #8 had the longest interview and demonstrated the highest degree of perception of all the candidates in terms of her understanding of the mind-body connection, and the role of the arts in self-expression. It is perhaps for this reason that she was afraid to continue the program at one point for, having suffered an undisclosed trauma as a child, feelings and memories were resurfacing via the program's various outlets which she did not necessarily wish to face. However, she persevered. Her journal became such a source of personal outpourings that she did not wish anyone to see it, so she retained it. Her commitment to the program was moderate in terms of attendance at sessions, but from what she described about her journal, it is my impression that she wrote frequently and meaningfully for her. She has learned to "slow down" in order to control her asthma.

Subject #9 demonstrated a high level of commitment to the program in terms of her journal, if not in terms of her attendance at group sessions. I believe she surprised herself by her response to the program, as evidenced by the excitement and wonder she displayed in the interview and throughout the twelve weeks. However, it was obvious she had a positive perception of the role she could play in her own health, or she would not have grasped the program as wholeheartedly as she did, becoming so excited at the progress she was making in controlling her asthma that she would seek me out at school to tell me her news. For her, the program was an alternative to always "lugging my inhaler around"; it was "something to calm it down".
Role of Group Facilitator

It is important to note that I believe the subject-group facilitator relationship plays a role in the success of the program to one degree or another. The probability of high school students' voluntarily assuming what would appear at the outset to be "more work" with no credit in terms of marks, for example, is somewhat unlikely. My enthusiasm and gratitude was, I believe, a certain catalyst in their agreeing to join the group. As the program progressed, because we were developing a rapport and cohesion as a group, this perhaps helped keep members on track, and I believe the members did not want to disappoint me or their colleagues by a lack of participation. The human dynamics cannot be ignored when analyzing the data, and I acknowledge their potential role in the degree of success of the program.

Conclusion

The research indicates that the hypothetical statement is true: when asthmatics take responsibility for their own health and embark in a holistic art therapy program, they will have results such as relaxation, stress-relief, a stronger sense of self, and a degree of disease control, evidenced by their decreased dependency on inhalers. The degree to which they will experience these results will vary based on their commitment to the program, and their perception of their disease and their role in its care.

The next and final chapter will examine the implications of this study for education, recommendations stemming from the study for further research, and a summary of the study as a whole.
Chapter Six: Conclusion

Implications for Education

This holistic art therapy self-healing program proved itself effective with secondary school students who accepted the possibility of altering their condition. This age group was deliberately chosen from which to select the treatment group, because I wanted to verify if a program of this nature was appropriate for school-aged children, and it was. Therefore, it could be a viable part of the secondary curriculum if certain conditions were in place.

First, it would be appropriate to not only teach the skills inherent in the program to teachers in order that they may pass them on to students, but to allow teachers to partake in the program themselves first. We learn best by doing, and this would provide them with a much better understanding of that to which they are subjecting their students. More importantly, we cannot expect healthy learning environments for our children if their teachers are not nurtured to the same degree we expect for students. This is a role of administration -- to nurture their staff in well-being. This program is a means of doing so.

Once teachers are aware of the benefits of a holistic art therapy program, should they wish to try it with their students, they would want to decide how it complemented the existing curriculum. For example, would it provide a unit of study in its own right within perhaps a Family Studies or Religious Education program? Or would it be part of the skills taught in conjunction with curriculum content, much like how to study for an exam, or how to organize one's time? Teachers would have to decide which was most appropriate. If they decided to implement the program, they would then have to ensure that they were
sufficiently familiar with its goals, procedures and potential results prior to ever commencing with students, otherwise the focus could be lost and the children would not necessarily benefit -- in fact, harm could be done if the teacher did not understand the emotions which could be evoked via self-expression, and pushed students to produce when maybe they were not comfortable doing so.

Workshops by teachers experienced in holistic art therapies, such as myself, would be critical in ensuring teachers were well-prepared, and this would require support from the school principal, as well as from the school board if the initiative was more wide-spread. A proposal to board trustees and superintendents at an education committee meeting would be an appropriate avenue for this introduction and explanation. If I believe that teachers should be providing skills to students which help them to manage stress in their lives--in whichever form that stress may come--I should play a proactive role in helping them deliver these skills. They as adults would benefit from them as well, for it was not until I was an adult myself that I became asthmatic and then learned to control it.

The implications for our educational system should the benefits of holistic art therapies become firmly entrenched in teachers' minds are vast. Suddenly, we would have a school population who would have the skills needed to cope with the stress life brings in its many forms. What does this mean? For those who choose to use those skills--a critical part of the process, as this study clearly demonstrated--less illness, higher achievement in school, fewer unresolved or even violent conflicts with other students, siblings, parents, et cetera, and a higher tolerance for stress in general may result. It can only be a positive change.
Recommendations for Further Research

Possibly the next treatment group for this study could come from the junior or intermediate divisions of elementary school. There would probably have to be some modifications in the types of interview questions posed, but the rest of the program would be very appropriate. This would demonstrate the applicability of the program across various age groups.

It would also be interesting to vary the socio-economic background of the participants. Those of the middle class, who were the participants for this study, most likely had some prior awareness of the "new age" material so en vogue in middle-class society at this point in time, and therefore were perhaps more receptive to the mind-body connection than they would have been had they been from another stratum of society, or even had this study taken place ten years ago. Perhaps research could compare the responses to the program by various ethnic origins, for the values and attitudes maintained by a culture could significantly affect results. In this study, all participants were of western European origin, and all were at least second generation, white, middle-class Canadians--a very homogeneous group.

Further study could also involve a follow-up with the treatment group of this study after a certain time period to discern whether or not they have successfully maintained the program or any aspects thereof. If they have, have they noticed any further progress in their asthma control? If they have not, have they noticed any regression? If I were to attempt this program again, I would definitely make the duration longer than the twelve weeks of this study, as per the recommendation of Subject #5. I believe that she is correct: while the
results of the program were most encouraging and positive, a longer time period might have produced even stronger evidence of self-healing.

It would be fascinating to apply this program to various other stress-induced illness. Given that modern medicine is attributing more and more illness or aggravation of illness to stress, this could encompass a vast array of disease. My grandmother died of lupus in the early 1970's, and, given the stress component in that disease, it would be of particular interest to me to study the effects of this program on a group of subjects with lupus.

Summary

The number of asthmatics in this country is increasing at an alarming rate. This is a life-threatening disease if not quickly and effectively controlled. Modern medicine attacks asthma primarily with inhalers, either of a steroid or a bronchodilator variety. This is a stop-gap measure -- it does not reach the root of the problem. If we understand that asthma can be stress-induced, then we understand that to seriously treat this disease we must help the patient cope with stress before an asthma attack takes hold, when it is usually irreversible except via the use of puffers or hospitalization.

By their own observations, the holistic art therapy program utilized in this study helped most subjects to conquer their stress, to relax, to gain a stronger sense of themselves, and to control their disease. If they believed they could take responsibility for their own health care--which did not entail shunning modern medicine but rather working in a partnership with it--then they met with success in the program, to one degree or another. The
degree of success was largely dependent upon the degree of commitment shown to all aspects of the program.

There are other solutions than being the perennial victim of a disease. There is no shame, nor is there any blame attached to being ill. Sometimes we have very little influence over what the fates choose to hand us. However, we do have a choice as to how we handle the cards we are dealt. This program, and others like it, will only become more frequently utilized as the word spreads that we can empower ourselves to heal ourselves.
References


Appendix A
Dear Students,

You are invited to participate in a study for a Master's thesis of the way in which asthmatic students respond to a self-healing program. This program is holistic in nature, meaning it encompasses both the mind's and the body's wellness, believing at its foundation that your brain can have a great impact on your body's ability to heal itself. Specifically, the program is based on holistic art therapies, thereby employing the arts as tools for healing. Since asthma is a proven stress-related disease, the implications for your mind's ability to control asthma by controlling stress are vast. The holistic art therapy program is designed to control stress on many levels; hence its use in this study.

However, the purpose of this study is not to malign modern medicine or refute its benefits. No student will be encouraged to reject using any asthma-controlling drugs which have been prescribed for him/her by his/her doctor at any time. Rather, the purpose is to determine whether or not holistic art therapies can control asthma attacks prior to their onset.

You have been chosen because you are asthmatic and have shown an initial interest in being involved. Should you decide to participate, the expectations of you would be as follows:

a) to keep a daily journal, including both written expression and visual art, for 12 weeks, commencing Monday, March 17th, and ending Monday, June 9th, 1997, which you hand in to Mrs. Chapman at the end of this time frame.

b) to participate in a group discussion session every Tuesday at 12:00pm for 12 weeks, commencing Tuesday, March 18th, and ending Tuesday, June 3rd, 1997. Group sessions may include guided imagery and visualization.

c) to use meditative prayer every day for 20 minutes, with or without background music, for these same 12 weeks, and to use the journal as a possible means of reflecting on this experience.

d) to have an interview with Mrs. Chapman the week of June 9th - 13th, at a mutually convenient time to be arranged at a later date, which will be tape-recorded.

The information gathered in this study will be maintained in the strictest confidence. Students will not be forced to participate verbally in the group sessions should they choose not to do so; rather they might wish to actively participate by listening attentively. In the actual written thesis, only a pseudonym chosen for you will appear, meaning that only Mrs. Chapman will know who you are. All information which could be identified with you (locations, other names, et cetera) will also be given pseudonyms to assure the utmost confidentiality.
There are no right or wrong answers in this study and no tricks - this is simply your observations of your personal response to the program, both mentally and physically, if any. Please know that your decision whether or not to participate will not prejudice your relationship with me. This is completely and freely your choice. Should you wish to withdraw from the study at any point in time, you are certainly free to do so. It is my hope that you will enjoy the program, that you will enjoy taking the time out of your day for yourself that you deserve.

Please discuss this with your parents. Should you have no further questions after the orientation session and after reading this letter, and you indeed wish to participate, please sign the form below; have your parents sign it also if you are under 18 years of age, and return it to Mrs. Chapman by Friday, March 7th, 1997. Should you or your parents have any questions, comments or concerns, please do hesitate to contact me. A copy of this form will be provided for you once I have the requisite signatures upon it.

Sincerely,

Mrs. Anne Marie Chapman

________________________________________________________

You are making a decision whether or not to participate. Your signature indicates that you have read the information provided above and have decided to participate. You may withdraw at any time without prejudice after signing this form should you choose to discontinue participation in this study.

__________________________________________ (Signature of student) _______________________ (Date)

Your signature indicates that you have read the information provided above, and permit your child to participate in this study.

__________________________________________ (Signature of parent) _______________________ (Date)
February 24, 1997

Dear Principal,

Ten students of your school will be invited to participate in a 12-week program, the nature of which is self-healing using holistic art therapies. These students have been chosen because they are asthmatic, and have expressed an initial interest in doing so. Please see the attached letter of consent which each will receive, outlining the program and my expectations of them. Also, please see the attached "Ethical Review Protocol" which I have completed in accordance with OISE/UT mandate. I hope this will provide you with all the information you need.

I am currently working on my thesis in order to complete my Master of Arts in Holistic Education, and the data from this program with these students will provide me with the research base needed to complete it. Your support in this endeavour would be most appreciated. If you choose to approve this program, you are free to withdraw your support at any time without prejudice. Please do not hesitate to contact me should you have any questions, comments or concerns.

Sincerely,

Anne Marie Chapman

Please sign below if you allow permission for this study/program described in the attached documents to be implemented in your school's environment. You are free to withdraw your support from this program at anytime without prejudice after signing this consent form.

Principal ____________________________________________________________________________ Date ____________________________________________________________________________
Appendix B
Appendix C
Final Interview Questions

1. In what ways, if any, did you find that the journal-writing helped you?

2. Pick out moments or times from your journal where you felt there were break-throughs in your condition.

3. Is there something in your journal that you consider to have particular importance to you? (She shows it.) Why is it important to you?

4. Are there any drawings that you particularly like or that struck you in a meaningful way? What do they mean to you?

5. Can you see progress in the journal from the start to now?

6. Did you notice any change in your ability to relax from the beginning? If so, what?

7. Did you notice any change in your general sense of well-being? If so, what?

8. In what ways, if any, did the group sessions help you?

9. Did you do any other relaxation techniques outside of the journal-writing? If so, what were they?

10. How would you describe your asthma? (Show her first picture) Tell me how this picture depicts your illness and its solution. (Show her second picture) Tell me how this second picture depicts your asthma and its solution. What differences do you notice between the 2 pictures?

11. Did you notice any change in your asthma from the beginning of the program?
Field Notes

Session #1

Tuesday, March 18, 1997

Attendance: all present

Activity: drawing a picture of their illness (asthma) and its solution

Notes:
- all were somewhat nervous at first
- more gregarious ones like Subject #3 became quite chatty. Subject #3 was very curious as to what the others were doing, sometimes laughing but not unkindly as she encouraged their work
- however, I redirected her energies to her own work by stating that she was certainly having no difficulty finding images to represent what she wanted to say, and why did she not think she could draw when it was excellent?
- I was concerned the quieter ones were going to be afraid to create if they felt they were being evaluated, even informally
- talk very shortly became focused more on socializing and school work, as energies were directed to their own work -- this helped enormously, and the frowns of concentration in between comments signalled that they were "into" what they were doing
- comments on what poor artists they were and embarrassed glances came my way as they were handing them in to me, and I tried hard to reassure them of their efforts, and the lack of evaluation
- I noticed how quiet most of them were except for Subject #2, Subject #3, Subject #8 and Subject #9, who were the older girls and the ones who socialized amongst themselves the most at and outside of school
Appendix E
March 7, 1997

Dear Students,

First of all, I would like to sincerely thank you for agreeing to participate in this study. I am very excited, and hope that this will be most meaningful for everyone.

My thesis advisor, who is the professor at the University of Toronto in charge of overseeing my research, and myself have decided to modify our program by eliminating the meditative prayer component. Research has come to light which already links improvement of asthma with meditative practices, therefore we feel it is best not to duplicate this research, and thus focus more specifically on the arts component of the self-healing program. To accommodate this change, our group sessions will also include the visual art and music therapies you will already be doing at home in order to emphasize that area, in addition to the guided imagery and visualization already planned. Therefore, you will no longer have to use meditative prayer every day for 20 minutes; you are simply writing and/or drawing in your journals everyday, and attending group sessions once per week on Tuesdays. Thank you for your adaptability.

Before our asthma and holistic art therapy study starts, it is important that I, as a researcher, gather some comparative data. This means that in order to determine if your asthma has been positively affected by this study, I must be familiar with how your asthma behaves prior to the study. Please fill in the attached questionnaire and return it to me by Monday, March 17, 1997. You might wish to have your parents help you with some of the answers. I encourage you to share with them what you experience in this study at any time should you wish to do so. Thank you very much for your time, and I look forward to our first group session on Tuesday, March 18th at noon sharp!

Sincerely,

Mrs. Chapman
Your name: ________________________________

1) What are the medications which your family doctor prescribes for your asthma? (Please list all medications by brand name.)

______________________________

______________________________

2) Approximately how frequently do you take these medications? (eg. daily, weekly)

______________________________

______________________________

3) When does your asthma seem to act up? Are there particular time periods, activities, situations which seem to provoke it?

______________________________

______________________________

4) How often does your asthma seem to act up? (This includes episodes where you take medication and those where you do not.)

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______________________________

5) Have you ever been hospitalized for your asthma? If so, how many times, and approximately what are the dates of these hospital visits? (Give month and year if you can recall, or just the year, as this helps establish frequency of visits.)

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______________________________

6) How would you classify your asthma? (Circle one)

   Severe       Moderate       Mild

7) Are there any other comments you wish to share? If so, please feel free to do so below.

______________________________

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Appendix F
Today began as any other day. It's the first day back after Spring Break and everyone seemed a little tired and sluggish, including me. The school day went by fine, all my classes were okay. Accept I spent the day extremely annoyed with Jake (my boyfriend). Jake sometimes has a tendency to get angry and say mean things to me if he thinks I've done something wrong. I'm getting really sick of him acting the way he has been. Things have changed in our relationship and I find myself wondering if he really cares. I'm getting pretty fed up.

Anyway after school I went out for coffee and was home for the rest of the night. I still feel annoyed, hurt and confused. Hopefully tomorrow will be better. I'm used to feeling this way though, it's been this way all my life.

MAR 18, '97

Today was crazy! I'm still in shock and I feel so weird. School was school, I spent the day still confused about Jake. Then after school I went to the coffee shop with Jake and another friend and Jake got really angry at me because of something I did earlier today. I didn't do anything wrong but he thinks I did.

So, I left the coffee shop and came home. Soon after Jake called and we started fighting. Suddenly I had a call on the other line and when I clicked over I couldn't believe who it was. It was someone who I hadn't talked to in ages, my ex-boyfriend of 2 years, Bob Green. I couldn't believe it. He talked for a while and then he left me with all these different emotions I'd been holding inside. It was like re-opening an old wound, and yet some part of me is happy too. Now I'm left feeling weird.
Jake was madder than ever at me now. When I woke up this morning I had this nonchalant attitude, if Jake was gonna be angry at me over something so ridiculous, I'll just go on about my day without letting him bother me. So that's what I did.

Tonight I went out with one of my best friends, Tim Bailey. I knew Jake would be mad, but I wasn't doing anything wrong. Sure enough he's furious but I don't really care. That's his problem.

As I write I am home doing nothing at 10:30 on a Friday night. Originally Jake and I were supposed to go out with friends of ours, but there was a misunderstanding with driving arrangements and we ended up without a ride.

So Jake came over and he was all depressed and disappointed. Whenever I tried to cheer him up he'd just snap at me. Then he called more friends of ours and we went to meet them at a school nearby. They were going bowling and they said we could come but there was only room in the car for one of us. Jake volunteered himself. Then they all left with me standing there by myself.

God, I can't believe it. I feel like crap. I want to cry and scream in anger at the same time. Well I hope he's having a good time. Good enough to sacrifice a year's relationship for.
Appendix G
The following is a selected sample of "Meditation 2" from Dr. Bernie Siegel's Peace, Love & Healing, found on pages 264-266:

Take a few deep breaths. Breathe in some oxygen and life. Give yourself a gift; you deserve it for being the kind of person you are. So breathe in peace and life and love and oxygen. And allow yourself to settle down. When you're ready look up and let your eyes close gently. Let a wave of peace move down through your body releasing the tension in your muscles. Breathe in peace and breathe out conflicts and fears and worries. Then remember what it's like to erase the slate, to clean the slate, cleanse your mind. You know where we're headed.

(Pause)

Once more we'll go off to the middle of nowhere, to your corner of the universe. And each time you visit be aware. Is it different? Are the colors any more vivid, have the sounds changed, the aromas and textures, the feelings you have as you arrive there? Find your nest or den again, and curl up for a moment. This moment is just for you. To absorb the energy of the earth and the sun and to heal your body and your mind. Take a moment to eliminate any problems in this special safe place.

(Pause)

When you feel cleansed and ready for the journey, dress yourself. And each time you do this you will see if the weave and texture and fabric of your life have changed any. And if they have, then know you're changing and growing, and that repairs in the fabric of your life can be made continuously with love.

(Pause)

And then cross the bridge that connects you with our part of the universe. Be aware of how strong and long and wide that bridge is, and of any changes in the connection since the last time you were here. And as you start on your path, know you will always take the turns that feel right for you. Wherever the path divides, you will know which turn is yours. Sometimes you may go left and sometimes you may go right, but whichever way you go will be right.

As you walk along the path you will see a child coming toward you and you'll realize that the child is you. Give the child what it needs. Go with the child and be a child. Perhaps you'll find a playground or a park. Or you may want to go for a run in the woods or a field. Go wherever your child wants to go to feel free and experience some joy. Take a moment to be a child and have a happy childhood.

(Pause)
Appendix H
AMC: In what ways, if any, did you find the journal-writing helped you?

Subject #2: Well, it helped me get out my feelings a lot, 'cause I tend to keep to myself in that way, I don't complain to anybody or whatever, so it was easy to sort of complain to. And it was also an outlet for creativity, 'cause I did a lot of drawing and I did poetry and stuff like that, and I found as I went along I did more and more poetry and all that, so it was like good progression.

AMC: Are there moments or times in your journal when you felt there were break-throughs for you -- like, something changed for you, or you noticed something was different?

Subject #2: Well, yeah, sort of. There was a time when I was upset, then I wrote and then I felt "Why am I getting so upset?" 'Cause I read it over and I wondered why was I getting so upset, it's not going to last forever and stuff like that, and then I sort of carried that on into my whole life. It was a big break-through, actually. (laughter)

AMC: Absolutely! Is there something in your journal that you feel has particular importance to you? It can be anything -- a particular poem or song or drawing -- anything.

Subject #2: I think all the poetry is a big thing for me. It's like feelings, and things that I think, and it's like a really important thing to me -- all the poetry in there.

AMC: Are there any particular drawings that struck you in a meaningful way or have particular importance for you?

Subject #2: Well there's one drawing with this guy looking up to the sky and it's raining and stuff, and that was when I was so upset and that has a lot of emotion in it. I wouldn't want anyone to see it out in the open or whatever.

AMC: Don't worry, it's safe. You have already spoken that you saw a lot of progress. Can you expand on that a little more?

Subject #2: I sort of started off writing more about what I did during the time period, then as I went on I incorporated more feelings and all that. I started talking about meditation and how that was helping me, too, so it was more into feelings.