

Improvement In Happiness Index and Energy Index – Methods & Techniques

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Abstract – This paper is a brief description of Happiness and Energy Indexes. Here, in this paper I have tried to explain how both Happiness and Energy terms can be inter-related. One can firstly detect one's energy index or happiness index via various techniques presented in the paper. Then accordingly, one can work on the both the indexes and then increase both from the initial level. It is clarified from the readings that if a person have high energy, then he/she is bound to be happy and same is true vice-versa.

Indexed Terms – Happiness Index, Energy Index, Sustainable Development, Manufacturing Capita Index, Human Capita Index, Natural Capita Index, Social Capita Index, Aura, Chakras, Crystals.

I. INTRODUCTION

THE terms happiness and energy may sound different but both have a deep inter-relation.

Let us first try to understand how the term happiness index is coined? Happiness Index is a subset of Sustainable Development. Sustainable Development deals with optimal use of resources with efficient and effective development process. Sustainable Development comprises of:

1. Physical Infrastructure – As the name suggests, it deals with the developments of physical domains like buildings, roads etc.
2. Economy – Economic state is determined by the literacy level, health and per capita income of the individuals.
3. Social Development -> Human Development -> Gender Development – This is the most important of all as this consists of MMR (Maternal Modernity Rate) and IMR (Infant Modernity Rate) which indicates gender development.

If the above cases are in right proportions, then we

measure the “Happiness”. Let us first see what few people think about happiness by a survey performed by me. Happiness according to the people who left their comments is as follows:

- Happiness is all about inner peace... Nobody no Money no material can make u happy unless you have Peace in your Heart.
- When I make my family happy and achieve my goal.
- Satisfaction.
- Happiness is when your thought, words and actions are in alignment!
- It's not how much we have, but how much we enjoy that makes happiness.
- A joy which make your body n soul alive n makes you realize about something that surrounds you.
- The feelings after you achieve something difficult and which relieves all your pain in nano sec.
- When your mind says dude you have done it.
- Contentment.

If a community is good or progressing well in physical infrastructure and economy both but lagging behind in terms of social development, then the term happiness index is introduced. So, if a community is progressing => People are doing hard work => Severe consequences like headaches, migraine => Health issues => No time for being Happy.

Now, let us focus on the Energy Index. Energy index is directly related to happiness index. But the question that arises is HOW???

Consider the following flow chart:



All the quantities in the flow chart are defined as total capita index.

$$K_{\text{Total}} = K_M + K_H + K_N + K_S$$

where K_M = Manufacturing Capita Index

K_H = Human Capita Index

K_N = Natural Capita Index

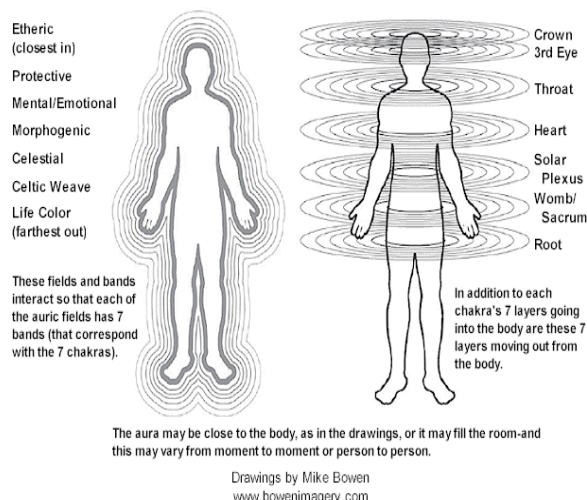
K_S = Social Capita Index

- If K_M & K_N are high but $K_H \Rightarrow K_S$ are low, then there is a need for measuring the happiness index.
- If a person has low happiness index \Rightarrow He / She is bound to have health related issues.
- If there are health related issues then this implies person will be low in energy.
- Thus, we could say:
Happiness Index \propto Energy Index

The paper organization is as follows. In the next section, we will deal with the human aura. What does it consist of? Human aura is a vital part in measuring the happiness and energy indexes. In the later section, i.e. section III, the various methods to measure the energy from the aura are defined. These includes mainly via Medical Equipments and Crystals. The concept of Chakras is described in this section. Further, in section IV, techniques to energize the chakras via crystals are provided. In section V, description to hormones that are useful for determining and improving the energy index is provided. And then, in section VI, I would brief about a few other techniques and methods to detect and improve on the energy index. These methods may be useful in improving the happiness index of an individual. Lastly, I would be concluding in the section VII.

II. UNDERSTANDING THE HUMAN AURA

In scientific terms, human aura can be explained in many ways. Every human being is composed of different elements (for example: blood has hemoglobin that contains iron). There are atoms inside the human body and we know that atoms have subunits called electrons. We also know that moving charges produces both electric and magnetic fields. This is also true for human body. There are two kinds of auras inside the body and their intensities describe the energy level inside the body. Human body has an aura of energy around it which can be described through a diagram as follows:



WHAT IS THE AURA?

The aura is the electromagnetic field that surrounds the human body (Human Energy Field-HEF) and every organism and object in the Universe.

The Human Energy Field as a collection of electro - magnetic energies of varying densities that permeate through and emit or exit from the physical body of a living person. These particles of energy are suspended around the healthy human body in an oval shaped field. This "auric egg" emits out from the body approximately 2-3 feet (1 metre on average) on all sides. It extends above the head and below the feet into the ground.

WHAT DOES AN AURA CONSIST OF?

The aura consist of seven levels/layers/auric bodies . Each one of the subtle bodies that exist around the physical body, has its own unique frequency. They are interrelated, and affect one another and the person's feelings, emotions, thinking, behaviour, and health as well. Therefore a state of imbalance in one of the bodies leads to a state of imbalance in the others.

THE AURIC BODIES AND YOUR NEEDS ON EACH LEVEL OF AURIC FIELD

- 1) Physical auric body - Physical sensations. Simple physical comfort, pleasure, health.
- 2) The etheric auric body - Emotions with respect to self. Self-acceptance and self love.

- 3) Vital auric body - Rational mind. To understand the situation in a clear, linear, rational way.
- 4) Astral (emotional) body - Relations with others. Loving interaction with friends and family.
- 5) Lower mental auric body - Divine will within. To align with the divine will within, to make commitment to speak and follow the truth.
- 6) Higher mental auric body - Divine love, and spiritual ecstasy.
- 7) Spiritual (intuitive) body - Divine mind, serenity. To be connected to divine mind and to understand the greater universal pattern.

Thus, we can say that the human aura is capable of determining the energy index in an individual. However, the measurement techniques are provided in the next section.

III.MEASUREMENT OF ENERGY

The energy index can be measured mainly by :

- 1> Medical Equipments : Machines records the intensity of the aura and rates the body accordingly.
- 2> Crystals : Power of crystals will be defined later and energy index is measured accordingly.

Let us now focus on the medical equipments as to how they can help in measuring the human aura.

REIKI NEWS ARTICLE

The International Center for Reiki Training^[1]

Science Measures the Human Energy Field

Energy is a theme that permeates many areas of complementary health care, including Reiki. For historic and emotional reasons, two key words have not been mentionable in polite academic research society: "energy" and "touch." Hence it is not surprising that Reiki therapy has been neglected by mainstream biomedical science.

This picture is changing rapidly because of exciting research from around the world. The tale of how concepts of "healing energy" have swung from suspicion and ridicule to respectability is one of the most fascinating and clinically significant stories that can be told.

As in many other areas of investigation, what we were absolutely certain about 20 years ago has changed dramatically. For example, in a few decades scientists have gone from a conviction that there is no such thing as an energy field around the human body, to an absolute certainty that it exists. Moreover, we have begun to understand the roles of energy fields in health and disease. Most people are simply not aware of this research, and persist in the attitude that there is no logical basis for energy healing.

The main reason for the change in outlook is that sensitive instruments have been developed that can detect the minute energy fields around the human body. Of particular importance is the SQUID magnetometer which is capable of detecting tiny biomagnetic fields associated with physiological activities in the body. (Figure 1) This is the same field that sensitive individuals have been describing for thousands of years, but that scientists have ignored because there was no objective way to measure it.

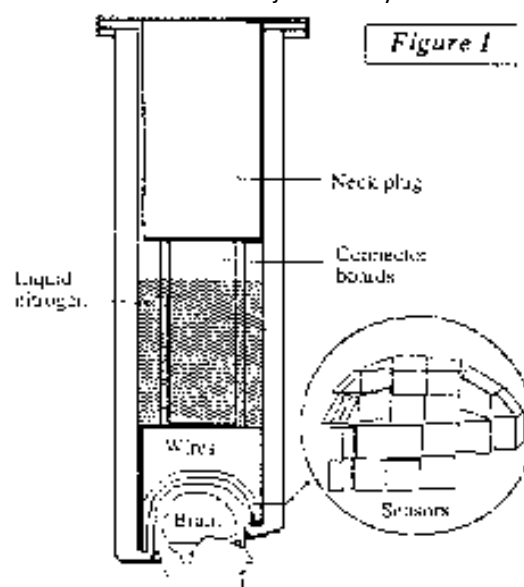


Figure 1. A SQUID magnetometer: the 122-channel SQUID magnetometer, NeuroMag-122, built in Helsinki. The sensors are wrapped around the head, and can be used to record the brain's magnetic fields.

To summarize the discoveries that have been made, the editors of a new international journal commissioned a review of the concept of "healing energy". While we have been researching this topic for some 15 years, the preparation of an in-depth review led to a thorough reexamination of the subject, with some unexpected conclusions.

For the most part, key discoveries are not being made by scientists studying methods such as Reiki, TT and HT. Instead, traditional scientists, following customary logic and scientific methods, have begun to clarify the roles of various kinds of energy in the healing process. Hence the picture that is emerging has the same scientific foundations that underlie modern clinical medicine.

The Human Energy Field.

It has long been known that activities of cells and tissues generate electrical fields that can be detected on the skin surface. But the laws of physics demand that any electrical current generates a corresponding magnetic field in the surrounding space. Since these fields were too tiny to detect, biologists assumed they could have no physiological significance.

This picture began to change in 1963. Gerhard Baule and Richard McFee of the Department of Electrical Engineering, Syracuse University, Syracuse, NY detected the biomagnetic field projected from the human heart. They used two coils, each with 2 million turns of wire, connected to a sensitive amplifier.

In 1970, David Cohen of MIT, using a SQUID magnetometer, confirmed the heart measurements. By 1972, Cohen had improved the sensitivity of his instrument, enabling him to measure magnetic fields around the head produced by brain activities.

Subsequently, it has been discovered that all tissues and organs produce specific magnetic pulsations, which have come to be known as biomagnetic fields. The traditional electrical recordings, such as the electrocardiogram and electroencephalogram, are now being complemented by biomagnetic recordings, called magnetocardiograms and magnetoencephalograms. For various reasons, *mapping the magnetic fields in the space around the body often provides a more accurate indication of physiology and pathology than traditional electrical measurements.*

Pathology alters the biomagnetic field

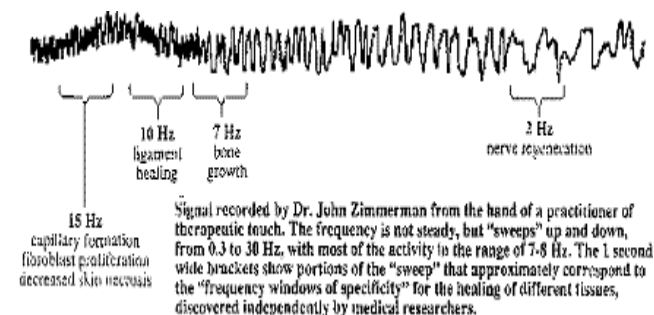
In the 1920's and 1930's, a distinguished researcher at Yale University School of Medicine, Harold Saxon Burr, suggested that diseases could be detected in the energy field of the body before physical symptoms appear. Moreover, Burr was convinced that diseases could be prevented by altering the energy field.

These concepts were ahead of their time, but are now being confirmed in medical research

laboratories around the world. Scientists are using SQUID instruments to map the ways diseases alter biomagnetic fields around the body. Others are applying pulsating magnetic fields to stimulate healing. Again, sensitive individuals have been describing these phenomena for a long time, but there was no logical explanation of how it could happen.

Projection of energy from the hands of healers.

In the early 1980's, Dr. John Zimmerman began a series of important studies on therapeutic touch, using a SQUID magnetometer at the University of Colorado School of Medicine in Denver. Zimmerman discovered that a huge pulsating biomagnetic field emanated from the hands of a TT practitioner. The frequency of the pulsations is not steady, but "sweeps" up and down, from 0.3 to 30 Hz (cycles per second), with most of the activity in the range of 7-8 Hz (Figure 2). The biomagnetic pulsations from the hands are in the same frequency range as brain waves and scientific studies of the frequencies necessary for healing indicate that they naturally sweep back and forth through the full range of therapeutic frequencies, thus being able to stimulate healing in any part of the body.



Confirmation of Zimmerman's findings came in 1992, when Seto and colleagues, in Japan, studied practitioners of various martial arts and other healing methods. The "Qi emission" from the hands is so strong that they can be detected with a simple magnetometer consisting of two coils, of 80,000 turns of wire. Since then, a number of studies of QiGong practitioners have extended these investigations to the sound, light, and thermal fields emitted by healers. What is particularly interesting is that the pulsation frequency varies from moment to moment. Moreover, medical researchers developing pulsating magnetic field therapies are finding that these same frequencies are effective for 'jump starting' healing in a variety of soft and hard tissues,

even in patients unhealed for as long as 40 years. Specific frequencies stimulate the growth of nerves, bones, skin, capillaries, and ligaments. Of course Reiki practitioners and their patients have daily experiences of the healing process being "jump started," and academic medicine is now beginning to accept this therapy as logical and beneficial because of these new scientific findings. In Figure 2 we have bracketed portions of the signal that correspond to the frequencies used in medical devices that stimulate the healing of particular tissues. Individual differences in energy projection and detection.

To study the projection of energy from the hands of therapists, scientists must first recognize that there are huge individual differences between people. Repeated practice of various techniques can enhance the effect.

There are logical neurophysiological and biophysical explanations for the roles of practice and intention. [Editors note: It would be interesting to use these detection techniques to measure the effect of a Reiki attunement on the strength and frequency of biomagnetic energies coming from the hands and also to measure how therapeutic frequencies may change when treating various conditions in the body.]

It is not widely understood that "brain waves" are not confined to the brain, but actually spread throughout the body via the perineural system, the connective tissue sheathes surrounding all of the nerves. Dr. Robert O. Becker has described how this system, more than any other, regulates injury repair processes throughout the body. Hence the entire nervous system acts as an "antenna" for projecting the biomagnetic pulsations that begin in the brain, specifically in the thalamus.

Moreover, waves that begin as relatively weak pulsations in the brain appear to gather strength as they flow along the peripheral nerves and into the hands. The mechanism of this amplification probably involves the perineural system and the other connective tissue systems, such as the fascia that are intimately associated with it.

In this brief summary, I have shown how some of the experiences of energy therapists have a basis in biology and physics. After centuries of neglect, energetic therapies can take their appropriate place in clinical medicine. The great discoveries of biologists and of sensitive bodyworkers are being integrated to give us a deeper understanding of life, disease, and healing. Science cannot take away the ultimate mystery of life, nor can it detract from the spiritual component of healing. We believe that

research on the energy therapies can lead to much a more complete understanding of life, disease, and healing.

Crystals

Now, we move our focus to the crystals. Crystals are considered to be a stone or a healing tool that has a tremendous amount of energy trapped inside it. This energy can be classified as positive energy. Now, the question arises- What is positive energy and negative energy? The answer to this question can be explained physically by understanding the polarization concept. Technically, changing the orientations of light gives rise to left handed and right handed polarized light. So, according to these polarizations, considering the aura of a human, these may be useful or harmful. Accordingly, when the energy is useful, we term as positive energy and vice-versa.

Crystals are very delicate shiny materials that can be easily controllable by a human mind. It can be, kind of, programmed to perform certain tasks. The crystals can be used to detect human energies by programming them and then finding out the energies at individual chakras. Let's try to understand what exactly are the chakras.

The concept of **chakra** features in tantric and yogic traditions of Hinduism and Buddhism. Chakra are believed to be centers of the body from which a person can collect energy. They are connected to major organs or glands that govern other body parts.

Chakras correspond to vital points in the physical body but are generally understood as being part of the "subtle body" which cannot be found through autopsy. While breath channels (nāḍis) of yogic practices had already been discussed in the classical Upanishads, it was not until the eighth-century Buddhist Hevaira Tantra and *Caryāgiti*, that hierarchies of chakras were introduced.

Etymology of Chakras - Bhattacharyya's review of Tantric history says that the word *chakra* is used to mean several different things in the Sanskrit sources:

1. "Circle," used in a variety of senses, symbolizing endless rotation of shakti.
2. A circle of people. In rituals there are different *cakra-sādhana* in which adherents

assemble and perform rites. According to the *Niruttaratantra*, chakras in the sense of assemblies are of 5 types.

3. The term chakra also is used to denote vantras or mystic diagrams, variously known as trikoṇa-cakra, aṣṭakoṇa-cakra, etc.
4. Different "nerve plexus within the body."

In Buddhist literature the Sanskrit term *cakra* (Pali *cakka*) is used in a different sense of "circle," referring to a Buddhist conception of the Cycle of Rebirth consisting of six states in which beings may be reborn.

Cognates of "chakra" still exist in modern Asian languages as well. In Malay, "cakera" means "disc," e.g. "cakerva padat" = "compact disk."

Characteristics:

The following features are common:

- They form part of a subtle energy body, along with the energy channels, or nadis, and the subtle winds (vayus), or pranas (Thai: ปราณส์).
- They are located along the central channel (sushumna/avadhūtī).
- Two side channels cross the center channel at the location of the chakras.
- They possess a number of 'petals' or 'spokes'.
- They are generally associated with a mantra seed-syllable, and often with a variety of colors and deities.
- Chakras are more subtle than the physical body but their state of balance will reflect in our physical and mental health^[2].

The seven important chakras known chakras are as follows^[4]:

1. **Sahasrara: The Crown Chakra**
2. **Ajna: The Brow Chakra**
3. **Vishuddha: The Throat Chakra**
4. **Anahata: The Heart Chakra**
5. **Manipura: The Solar Plexus Chakra**
6. **Swadhisthana: The Sacral Chakra**
7. **Muladhara: The Root Chakra**

Lower chakras :There are said to be a series of seven chakras below muladhara going down the leg, corresponding the base animal instincts, and to the Hindu underworld patala. They are called atala, vitala, sutala, talatala, rasatala, mahatala and patala.

Atala : This chakra is located in the hips, it governs fear and lust. The opposing attribute to balance this chakra is governed by the right to be sexual.

Vitala : Located in the thighs, it governs anger and resentment. The opposing attribute to balance this chakra is forgiveness.

Sutala : Located in the knees, it governs jealousy. The opposing attribute to balance this chakra is the right to be self-confident.

Talatala : Translated as 'under the bottom level', it is located in the calves, and it is a state of prolonged confusion and instinctive wilfulness. The opposing attribute to balance this chakra is the right to be conscious.

Rasatala : Located in the ankles, it is the centre of selfishness and pure animal nature. The opposing attribute to balance this chakra is the right to be charitable.

Mahatala : Located in the feet, this is the dark realm 'without conscience', and inner blindness. The opposing attribute to balance this chakra is the right to be expansive and unimpeded.

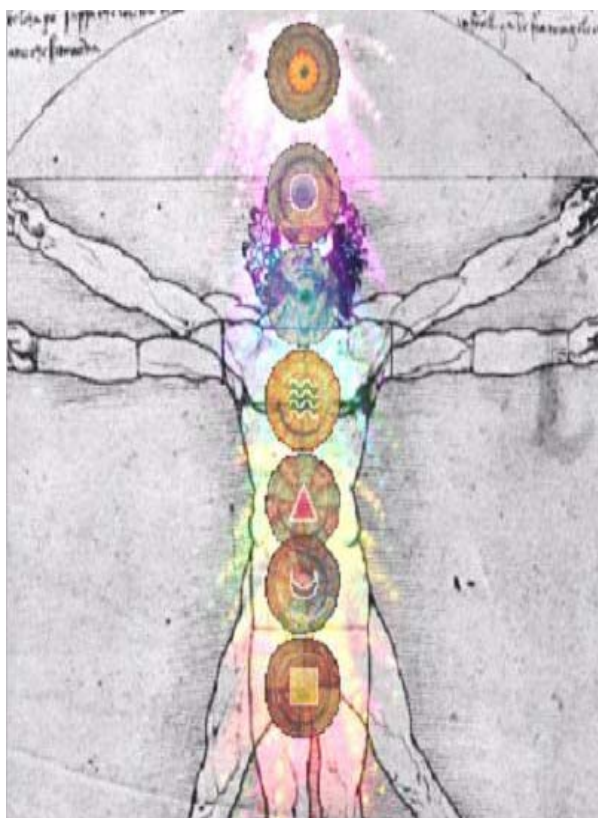
Patala : Located in the soles of the feet, this is the realm of malice, murder, torture and hatred, and in Hindu mythology it borders on the realm of Naraka, or Hell. The opposing attribute to balance this chakra is the right to be empathetic and understanding.

Others : There are said to be 21 minor chakras which are reflected points of the major chakras. These 21 are further grouped into 10 bilateral minor chakras that correspond to the foot, hand, knee, elbow, groin, clavicular, navel, shoulder and ear.

The spleen may also be classified as a minor chakra by some authorities despite not having an associated coupled minor chakra.

Keeping in mind, about the chakras, the practitioner places crystals on different parts of the body, often corresponding to chakras, or places crystals around the body in an attempt to construct an "energy grid", which is purported to surround the client with healing energy.

When the stones are placed in the area of the chakras, the color of the stones may correspond



to the color which is said to be associated with the corresponding chakra. Going from the tail bone to the top of the head, the colors are red, orange, yellow, green, blue, indigo, violet. Stones may also be used at the feet in an attempt at grounding the individual, or held in the hands. Practitioners may also use tools such as crystal wands, which are placed near the receiver's body, or near a certain 'blocked' chakra, or use to perform psychic surgery, normally conducted with laser quartz wands.

IV. ENERGIZING THE CHAKRAS

Energizing The Chakras

Energy is a theme that permeates many areas of complementary health care, including Reiki. For historic and emotional reasons, two key words have not been mentionable in polite academic research society: "energy" and "touch." Hence it is not surprising that Reiki therapy has been neglected by mainstream biomedical science^[3].

Crystals and the Chakras

Using Stones and crystals to balance the body's Chakras

Crystal energy is emitted as a vibration, which interacts with the electromagnetic energy field in and around us, in ways that may seem imperceptible. For example, the crystal may emit subtle vibration color frequencies, or sound vibrations that resonate outside of our conscious awareness to fine-tune our electromagnetic field. In essence, the energy frequency (or resonating life force) of a crystal is like a wave song that evokes an association, memory or emotion.

"Specific frequencies and patterns of electromagnetic radiation regulate DNA, RNA and protein syntheses, alter protein shape and function, and control gene regulation, cell division, cell differentiation, morphogenesis (the process by which cells assemble into organs and tissues), hormone secretion, nerve growth and function." 111, ~ Bruce Lipton, Biology of Belief.

Crystal therapy practitioners state that sickness, stress, and impurities alter the natural frequency of the body, causing some areas of the body to be unable to receive the necessary energy. Therapists assert that crystals have pure and constant vibrations. Therefore, they are able to correct the imbalance in the human body; the Frequency given off by stones is able to balance, clean, and re-energize the energy field of humans. .

It is easy to dismiss the idea of a chakra science, especially if you are one of a completely rational, or really scientific, mind. But the true genius will take the time to see how these ideas relate to each other and not how one is "right" or "wrong." As the scientific knowledge grows, the understanding and power of our chakras grows as well.

Crystal healing pendants can help you measure the flow of electromagnetic energy around the body. Healers often use crystal pendants to detect energy blocks in the chakras. The movement of the

pendulum indicates whether or not a chakra is functioning properly.

In a typical crystal healing session, the therapist or healer holds the pendulum over each chakra point, and the flow of energy through that chakra causes the pendant to swing. If the pendulum swings in a wide motion, it means the chakra is open; conversely, if doesn't swing at all it indicates the chakra is closed. Limited swinging motion of the pendulum is a sign of a partially blocked chakra.

Most therapists use their intuition to decide whether or not an open chakra needs grounding. If the chakras are closed or partially blocked, relevant crystals are used to expand and ground them.

If you wish to use a crystal healing pendulum to check your own chakras, hold the string of the pendulum lightly between your thumb and forefinger as you hold it over your chakra points, remembering to keep your wrist relaxed.

Healing pendants can also be used to find out if energy patterns are enclosed as well as open areas like rooms, houses, and gardens. The swing of the pendant can tell you which areas have negative energy concentrations or where all do you need to rebalance energy. You may use either Reiki techniques to correct the energy balance or place a crystal like lapis lazuli, citrine, or onyx, etc., in the area to infuse it with positive energy.

Crystal pendants are also often used by hypnotherapists who work with children, as they can help in relaxing a child's hyperactive mind and put her in a trance-like state. Most therapists find pendulums more effective than guided meditation for healing children through hypnotherapy.

Healing pedants typically use clear quartz, amethyst, or lapis lazuli crystals. To choose the one that will work best for you, you need to follow the voice of your intuition. When you visit a crystal store to buy a pendulum, look around to see which pendulum draws you toward it or attracts you the most; that, perhaps, is the best way to listen to your intuitive guidance^[9].

Thus, crystals are a major breakthrough in determining and improving upon the Energy Index.

V.HORMONES AS INDICATORS

Can hormones make you happy?

The feelings we experience are nothing more than chemical reactions taking place inside our bodies. Each and every emotion we experience is the result of the release of certain hormones inside our bodies. Some hormones are responsible for making us feel good, some are responsible for making us feel bad while some others are responsible for the feelings we get when we fall in love with someone.

The important question now is, can someone become happy if he alerted these hormones inside his body?

Yes that will certainly work however you must put in mind that unless you deal with the root cause of your problems your happiness won't last for prolonged periods.

For example if you had a fight with your best friend then doing any of the actions that stimulate the release of happiness hormones might help you feel good for a short period of time but in the end your bad feelings will return.

So if the hormones won't help you feel good for prolonged periods of time then why its still recommended that you learn how to weaken them? Simply because they can help you ease your pain and feel better until you deal with your problems Read this article to know how to force release the hormones that can make you happy^[6].

Hormones that make you happy^[5]

- **Serotonin:** Serotonin is sometimes called the happiness hormone. Serotonin regulates the mood, prevents depression and makes you feel happy. Serotonin can be released by getting exposed to sunlight, by eating foods rich in carbohydrates and by exercising.
- **Endorphins:** Endorphins can make you feel good, reduce your anxiety and your sensitivity to pain. Endorphins are released by exercising
- **Dopamine:** Dopamine helps you to feel mentally alert. The lack of it might cause lack of attention, lack of concentration and bad moods. Dopamine can be released by eating foods that are rich in protein.

- **Phenylethamine:** Phenylethamine is the hormone that results in the feelings we get in the early stages of a relationship. Cocoa beans contain Phenylethamine. eating chocolate might be helpful too.(E.g.Why do women love chocolate so much?)
- **Ghrelin:** Ghrelin is a hormone that reduces stress and can help you become more relaxed. Ghrelin is released when we become Hungry that's why eating too much is not always a good idea. Just eat according to your body's needs and never fill your stomach completely in order to maintain good Ghrelin levels.

Serotonin

Serotonin (or 5-hydroxytryptamine (5-HT) is a monoamine neurotransmitter. Biochemically derived from tryptophan, serotonin is primarily found in the gastrointestinal (GI) tract, platelets, and in the central nervous system (CNS) of animals including humans. It is popularly thought to be a contributor to feelings of well-being and happiness.^[5]

Approximately 90% of the human body's total serotonin is located in the enterochromaffin cells in the alimentary canal (gut) , where it is used to regulate intestinal movements.^{[6][7]} The remainder is synthesized in serotonergic neurons of the CNS, where it has various functions. These include the regulation of mood, appetite, and sleep. Serotonin also has some cognitive functions, including memory and learning. Modulation of serotonin at synapses is thought to be a major action of several classes of pharmacological antidepressants.

Serum Serotonin Level?

Serotonin is a chemical produced by nerve cells. The serum serotonin level is a blood test to measure the amount of serotonin in your body.

How the Test is Performed?

Blood is typically drawn from a vein, usually from the inside of the elbow or the back of the hand. The site is cleaned with germ-killing medicine (antiseptic). The health care provider wraps an elastic band around the upper arm to apply pressure to the area and make the vein swell with blood. Next, the health care provider gently inserts a needle into the vein. The blood collects into an airtight vial or tube attached to the needle. The elastic band is removed from your arm. Once the blood has been collected,

the needle is removed, and the puncture site is covered to stop any bleeding. In infants or young children, a sharp tool called a lancet may be used to puncture the skin and make it bleed. The blood collects into a small glass tube called a pipette, or onto a slide or test strip. A bandage may be placed over the area if there is any bleeding.

How the Test Will Feel?

When the needle is inserted to draw blood, some people feel moderate pain, while others feel only a prick or stinging sensation. Afterward, there may be some throbbing.

Why the Test is Performed?

This test may be done to diagnose carcinoid syndrome. Many patients with carcinoid syndrome will have high levels of serotonin in blood and urine.

Normal Results

The normal range is 101-283 nanograms per milliliter (ng/mL).

Note: Normal value ranges may vary slightly among different laboratories. Talk to your doctor about the meaning of your specific test results.

The examples above show the common measurements for results for these tests. Some laboratories use different measurements or may test different specimens.

What Abnormal Results Mean?

Higher-than-normal levels may indicate carcinoid syndrome.

Risks

Veins and arteries vary in size from one patient to another and from one side of the body to the other. Obtaining a blood sample from some people may be more difficult than from others.

Other risks may include:

- Excessive bleeding
- Fainting or feeling light-headed
- Hematoma (blood accumulating under the skin)
- Infection (a slight risk any time the skin is broken)

Alternative Names

5-HT level; 5-hydroxytryptamine level; Serotonin test

VI. OTHER METHODS AND TECHNIQUES

Let us see the tables below and describe about few other techniques that can help in detecting and improving on the energy index.

Values^[6]

Average lung volumes in healthy adults			
Volume	Value (litres)		
	In men	In women	
Inspiratory reserve volume	3.3	1.9	
Tidal volume	0.5	0.5	
Expiratory reserve volume	1.0	0.7	
Residual volume	1.2	1.1	

Lung capacities in healthy adults			
Volume	Average value (litres)		Derivation
	In men	In women	
Vital capacity	4.6	3.1	IRV plus TV plus ERV
Inspiratory capacity	3.8	2.4	IRV plus TV
Functional residual capacity	2.2	1.8	ERV plus RV
Total lung capacity	6.0	4.2	IRV plus TV plus ERV plus RV

- **Forced vital capacity (FVC).** This measures the amount of air you can exhale with force after you inhale as deeply as possible.
- **Forced expiratory volume (FEV).** This measures the amount of air you can exhale with force in one breath. The amount of air you exhale may be measured at 1 second (FEV1), 2 seconds (FEV2), or 3 seconds (FEV3). FEV1 divided by FVC can also be determined.

- **Forced expiratory flow 25% to 75%.** This measures the air flow halfway through an exhale.
- **Peak expiratory flow (PEF).** This measures how quickly you can exhale. It is usually measured at the same time as your forced vital capacity (FVC).
- **Maximum voluntary ventilation (MVV).** This measures the greatest amount of air you can breathe in and out during one minute.
- **Slow vital capacity (SVC).** This measures the amount of air you can slowly exhale after you inhale as deeply as possible.
- **Total lung capacity (TLC).** This measures the amount of air in your lungs after you inhale as deeply as possible.
- **Functional residual capacity (FRC).** This measures the amount of air in your lungs at the end of a normal exhaled breath.
- **Residual volume (RV).** This measures the amount of air in your lungs after you have exhaled completely. It can be done by breathing in helium or nitrogen gas and seeing how much is exhaled.
- **Expiratory reserve volume (ERV).** This measures the difference between the amount of air in your lungs after a normal exhale (FRC) and the amount after you exhale with force (RV) ^[7].

What Abnormal Results Mean

Abnormal results usually mean that you may have some chest or lung disease ^[10].

Some lung diseases (such as emphysema, asthma, chronic bronchitis, and infections) can make the lungs contain too much air and take longer to empty. These lung diseases are called obstructive lung disorders.

Other lung diseases make the lungs scarred and smaller so that they contain too little air and are poor at transferring oxygen into the blood. Examples of these types of illnesses include:

- Extreme overweight
- Fibrosis of the lungs
- Lung cancer
- Sarcoidosis and scleroderma

A **spirometer** is an apparatus for measuring the volume of air inspired and expired by the lungs. It is a precision differential pressure transducer for the measurements of respiration flow rates. The spirometer records the amount of air and the rate of air that is breathed in and out over a specified period.

A Tank-type spirometer works on the same principle as the gas meter. A canister of soda is usually attached to absorb carbon dioxide and a kymograph trace is produced to record changes in total volume gas. From this, vital capacity, tidal volume, breathing rate and ventilation rate (=tidal volume x breathing rate) can be calculated. From the overall decline on the graph, the oxygen uptake can also be measured.

Spirometer is one of the equipments used for basic Pulmonary Function Tests (PFTs). It is useful as a preliminary test of the health condition for patient's lung. Lung diseases such as asthma, bronchitis, and emphysema can be ruled out from the tests. In addition, it is often used for finding the cause for shortness of breath, assessing the effects of contaminants on lung functions, effect of medication, and progress for disease treatment.^[1]

Some other techniques included improvement on the basis of surveys, practicing pranayamas, sudarshan kriya(practiced in the Art of Living) etc. These practices directly influences the oxygen supply in the body. Once oxygen reaches the body in a good amount, then body is bound to be happy and once you are happy, energy index automatically increases^[8].

VII.CONCLUSION

In conclusion to the paper, I would like to point out that one can detect the energy index of a human being by various methods. As pointed out and proved already, Happiness Index \propto Energy Index, we could clearly say that if we increase any one of the happiness or energy indexes, we can get a sweet healthy life. Or we can say that once a person gets sweet and healthy life, he/she is bound to be happy. Thus, we need to work on either of the two : Energy Index or Happiness Index to live a happy, sweet and healthy life. This paper may help people to work and improve on their happiness and energy indexes and bring back the "SMILE" to the faces,

which are needed most in this so called busy world^[11].

VIII.REFERENCES

- [1] www.reiki.org/reikinews/sciencemeasures.htm
- [2] <http://altered-states.net/barry/newsletter507/>
- [3] <http://www.divinecaroline.com/22188/113630-crystal-healing-pendants#ixzz2CvrrqNPIE>
- [4] "www.wikipedia.org" – Online Encyclopedia.
- [5] "www.google.com" – For searching key terms.
- [6]http://www.xtremepapers.com/revision/gcse/biology/the_respiratory_system.php
- [7] **A Corpus-based Approach to Finding Happiness** by **Rada Mihalcea** -Computer Science and Engineering, University of North Texas, rada@cs.unt.edu and **Hugo Liu**, Media Arts and Sciences, Massachusetts Institute of Technology, hugo@media.mit.edu
- [8] **How Happiness Affects Choice**
Author(s): Cassie Mogilner, Jennifer Aaker, and Sepandar D. Kamvar
Source: Journal of Consumer Research, Vol. 39, No. 2 (August 2012), pp. 429-443
Published by: [The University of Chicago Press](http://www.jstor.org/stable/10.1086/663774)
URL: <http://www.jstor.org/stable/10.1086/663774>
- [9] **The Shifting Meaning of Happiness**
Cassie Mogilner, Sepandar D. Kamvar, and Jennifer Aaker.
URL : <http://spps.sagepub.com>
- [10] **The Happiness of Giving: The Time-Ask Effect**
WENDY LIU and JENNIFER AAKER.
URL : <http://faculty-gsb.stanford.edu/aaker/pages/documents/Happinessofgiving.pdf>
- [11] **Some Key Differences between a Happy Life and a Meaningful Life** by Roy F. Baumeister, *Florida State University*, Kathleen D. Vohs, *University of Minnesota*, Jennifer L. Aaker, *Stanford University*, Emily N. Garbinsky, *Stanford University* .URL : http://faculty-gsb.stanford.edu/aaker/pages/documents/SomeKeyDifferencesHappyLifeMeaningfulLife_2012.pdf
- [12] **Leave Them Smiling: How Small Acts Create More Happiness than Large Acts** by Melanie Rudd and Jennifer Aaker - Stanford University and Michael I. Norton Harvard Business School. URL : http://faculty-gsb.stanford.edu/aaker/pages/documents/LeaveThemSmiling_RuddAakerNorton12-16-11.pdf