[IMAGE]

The Science of Happiness

By Bill Reddy, LAc, Dipl. Ac.

Are you happy right now? Whether yes or no, there are a myriad of reasons why you feel that way. A whole academic discipline has developed to find out what causes or obstructs happiness, and how to amplify it.

In modern day America, psychology professionals have their work cut out for them. Depression rates in the U.S. are 10 times what they were in the Great Depression, with no sign of easing up. Most 21st century Americans should be enjoying their prosperity but aren't significantly happier than those polled in the mid-1950s. The study of happiness, also known as "positive psychology," began in earnest in 1998 by Dr. Martin Seligman, professor of psychology at the University of Pennsylvania. Since that time, the psychology profession embraced the concept; today there are more than 200 university courses across the US, a master's degree program at the University of Pennsylvania, and more than 1,000 articles published in peer reviewed journals on the subject.

For the past 60 years, the psychiatry profession functioned within the medical "disease-based" model, i.e. aiming to reduce or eliminate mental illness or distress. The focus was on etiology and pathology and the result, as Dr. Seligman aptly put it, was to get a patient from -5 to zero. He started to wonder under what conditions would humans flourish. How can we get from zero to +5?

Seeking a new tool to measure well-being, Dr. Seligman began to discuss with his colleagues the notion of measuring happiness in a qualitative fashion. Most of those with whom he spoke were dismissive of the concept. Seligman responded "If we can develop standardized subjective measures for depression and anxiety, then we can create them for happiness and well-being too!" So off he went. He realized that objective measures for populations also have great value. For example, University of Chicago's Dr. Norman Bradburn researched how macro level social changes (e.g. changes in education, employment patterns, urbanization or political tension) affected the lives of individual citizens and their collective sense of well-being. Mental health, Seligman reasoned, should be more than the absence of mental illness, and his profession was failing to address the positive side of living in today's society.

It's Not The Economy...

Leaders in the field of happiness all agree that having more money or possessions does not promote happiness to any great degree. When you buy a nice new pair of shoes, the "newness" of the shoes wears off relatively quickly; and your sense of enjoyment fades just as fast. Economist Richard Layard wrote *Gross National Happiness* measuring happiness of countries. He found that average income didn't correlate to level of happiness; however, there was a lower limit of income (above poverty level) that corresponds to a greater level of perceived happiness when a citizen's basic needs are met. What factors do in fact have a positive influence on happiness and general sense of well-being?

What Makes Us Happy?

Questionnaires given to a broad spectrum of people of all ages and cultures began to develop a familiar pattern. Connections among people (friends/family/colleagues) scored high on the list. Religious faith seems to lift peoples' spirits, but it's hard to distinguish if that benefit comes from the actual practice of the religion or the sense of community that parishioners felt from attending services, etc.

Married people are shown to be slightly happier than singles, but it may be that they were happier to begin with and thus attracted a like-minded partner. Gloomy, cloudy and rainy days may make popular song lyrics, but a 1998 survey showed that Midwesterners thought that Californians are happier than the rest of Americans due to the sunny weather. Those in California incorrectly believed that about themselves as well. There aren't any data to support that sunny weather, high IQ, or education paves the way to happiness. (SEE TABLE HERE) The aggregate happiness of a country is not related to the affluence of its populace, average educational level, or the weather for that matter. However, a significant correlation exists between a level of gratitude for what one has and a genuine sense of happiness and well-being. Surveys show that happy and unhappy people have very similar life experiences. The key difference is that unhappy people tend to spend more than twice as much time as happy people ruminating on the negative events in their lives; happy people will seek out information and resources that brighten their overall outlook on life.

Does Happiness Have a Genetic Component?

In a word, yes. David Lykken, a University of Minnesota researcher published a paper in 1996 studying twins and their sense of life satisfaction. He collected data from over 4,000 sets of identical twins born in Minnesota between 1936 and 1955 and concluded that 50 percent of a person's life satisfaction comes from

genetic programming. We have a built-in happiness "set point" (think of a thermostat) similar to our set point for body weight. We may have transient situational ups and downs in our lives but will quickly return to our set point range. The good news is we have the remaining 50 percent to work with.

Even better, our set point was found NOT to be set in stone. Although Lykken made a statement in his 1997 paper that "trying to be happier is as futile as trying to be taller," further research led him to change his position eight years later. An interview with Lykken published in *Time* stated "It's clear that we can change our happiness level widely up and down" based on his most recent findings. Alex Lickerman made an interesting observation in his article in *Psychology Today* entitled *How to Reset Your Happiness Set Point*. He wrote, "If our self-esteem determines the value we assign to ourselves (that is, how much we like ourselves), our sense of purpose determines the value we assign to our lives (that is, how significant or important we find our lives to be). And while a healthy self-esteem is well known to be necessary for happiness, increasing it beyond what's considered "healthy" hasn't been correlated with further increases in happiness (perhaps because any level of self-love beyond "healthy" strays, almost by definition, into the realm of narcissism). In contrast, the greater the sense of purpose we feel, the happier we seem to become." He goes on to say that we're happiest when we're helping others (provided we offer it of our own free will). Moreover, he points out that altruism doesn't just correlate with an increase in happiness; it actually causes it, at least in the short term. Approximately 10% of our "total" happiness is due to our present circumstance, which makes us quite resilient during tough times in our lives.

Can We Objectively Measure Happiness?

Electroencephalography (EEG) measurements demonstrate an increased left hemispheric brain glucose uptake when a person is in a good mood. Conversely, when a person is feeling depressed or dragged down by negative feelings, the right brain will be more active. Furthermore, the amygdala and cingulated cortex light up when visualizing a positive future. Researchers are still pondering how to use these neurological measures for further happiness/well-being investigation.

Current research suggests that as we age, our dopamine receptor sites diminish. We can engage in a pleasurable activity, release dopamine, but still not feel uplifted, exemplary of the "been there, done that" syndrome. Luckily for us, studies are showing that simple daily activities can rebuild dopamine receptors. They will be addressed later in this article.

Recent studies contradicting the dopamine receptor site reduction suggest that people get happier as they age because they exert more emotional control over their present circumstances. They have learned how to avoid/limit negative or stressful thoughts. Additionally, older people tend to put less emphasis on how they are viewed by others, and are less affected by criticism.

Can a Negative Attitude Lead To an Early Grave?

Optimists are "hard wired" to believe the future will be brighter than the past with no real evidence to support it. In 1932, the Mother Superior of an American school, "Sisters of Notre Dame," decided that all incoming nuns would write a biographical sketch. The writings were independently rated by psychologists for positive feelings. Of those nuns still alive in 1991, only 21% of the most cheerful category died in the following 9 years compared to 55% of the least cheerful category. According to a Mayo clinic study evaluating 1,100 people between 1962 and 1965, optimists had a 19% higher chance of being alive 30 years later than pessimists. Similarly, a 9-year study in the Netherlands indicated that optimists had a 55% lower incidence of death compared to their pessimistic pals.

An Australian palliative nurse working with terminally ill patients during the last three months of their lives documented their regrets in life. The top five were:

- 1. I wish I had the courage to live a true life to myself, not the life others expected of me.
- 2. I wish I hadn't worked so hard.
- 3. I wish I let myself be happier.
- 4. I wish I had stayed in touch with my friends.
- 5. I wish I had the courage to express my feelings.

Hindsight is 20/20, so keep these regrets in mind to avoid repeating them when your time has come.

What about post-traumatic growth? People who've had near death experiences that had radically changed their lives, came out happier with greater life satisfaction scores compared to the average population. The five common things these people report are as follows:

- 1. My priorities have changed. I'm not afraid to do what makes me happy.
- 2. I feel closer to my friends and family.
- 3. I understand myself better. I know who I really am now.

- 4. I have a new sense of meaning and purpose.
- 5. I'm better able to focus on my goals and dreams.

These statements may sound familiar. They appear to be the antithesis of the regrets of those who are terminally ill.

Happiness Is Contagious

When you spend time with a friend who's truly happy, you typically leave feeling uplifted. Studies prove this to be true not only for you, but for your friends as well. esearch into the "ripple factor" of happiness confirm that those people who spend time with happy people report feeling on average of 15% happier, their friends in turn report being 10% happier and the friends of friends benefit by 6%. The fourth tier gets nothing. Three levels deep isn't bad. Never underestimate the power of a kind word or time spent with someone who needs a friend.

Healthy Body, Happy Mind

Although there are extremely limited references to this topic in the Positive Psychology literature, physical health is obviously an important contributor to overall happiness. In addition to a healthy and varied diet, patients can benefit from supplementing with a variety of adaptogenic herbs, amino acids, vitamins and minerals, but this topic is outside the scope of this paper. Most, if not all of the following recommendations will contribute to an increase in dopamine receptor sites as we age, thus providing us a happier, more satisfying life.

Behavioral/Lifestyle Recommendations:

1. Don't be a media addict.

While for some, the morning newspaper or evening news program is a source of pleasure, for others, it may increase stress. A patient of mine who works as an editor for a major news source said, "If it bleeds, it leads." A casual glance at any current headlines would prove her maxim. It's a shame that in a country of 300+ million law abiding citizens (containing a small percentage of those who are mentally ill or criminals) that our media chooses to devote a substantial amount of their airtime and print space to report the behavior of few bad eggs, violent weather, and dirty politicians. I canceled my newspaper subscription two years ago and don't watch the news and can honestly say the quality of my life has improved. Studies in stress

management substantiate that watching the news does, in fact, create more stress even if the test subjects state that they "relax and watch TV...". Television can create fear, increase rampant consumerism, and make us unhappy with what we currently have. Researchers Leo Jeffres and Jean Dobes found watching TV can reduce our life satisfaction by up to 50%. Furthermore, excessive TV watching triples our hunger for possessions and reduces our personal contentment by 5% for every hour per day we watch.

Ways To Be More Happy

Make sure to identify what makes you happy. When I present this material to the public, I ask the audience to write down two to three things that bring them joy. I then ask them to write down next to each item how much time they spent doing those activities in the past week. Usually, there's a chuckle of discomfort that ripples through the crowd. Identify what brings you true happiness and then carve time out in your schedule to do it. Hiking is something that I enjoy, but if you asked me how often I hike, I would have said a few times a year. Since my research/study into the field of happiness, I'm pleased to report that I hike several times a month and really enjoy my time communing with nature.

Always focus on gratitude. Apparently there's a lot of power in appreciation. Happy people seem to be deeply grateful for their health, their loving family and friends, and what they have in this lifetime. How can you be like them? Create a "gratitude" journal and write in it at bedtime anything big or small in your day that you appreciate such as finding a parking space right in front of the supermarket, meeting a friend for a cup of tea, or taking the time to enjoy a book you've been meaning to read. This is an extremely powerful practice and studies demonstrate that those who take the time to do this a few minutes a day for 21 consecutive days will have improved happiness for the following six months!

Show appreciation. Think of someone influential in your life; perhaps someone who was there exactly when you needed them, who provided you guidance and support. Put pen to paper and write them a note of gratitude. If they live within driving distance, handwrite or type on nice stationery a description of how they impacted your life in a positive way, and then laminate or frame it. Call that person and ask if you can visit them (without mentioning the letter, of course). When you arrive, read them the letter of appreciation. It's a win-win situation. They're pleased to know that they positively influenced your life, and you're happy to share that with them.

Do things for others. The happiest people surveyed in a number of studies are those who routinely do things for others such as volunteer for a local soup kitchen. We have chosen exceptional fields where we serve our communities every day, but we can still do more. Think about the last time you gave your neighbor a hand in the garden, helped move something heavy down into their basement, or watched their kids when they ran an important errand. You probably felt uplifted afterward.

In our species' early days, the key to survival was cooperation in the small, tightly-knit communities of hunter gatherers. When we assist others, the very act of helping brings us back to who we really are, and a sense of satisfaction and happiness is a direct result. Christopher Peterson, a researcher collaborating with Dr. Seligman said "Giving makes you feel good about yourself" and that "When you're volunteering, you're distracting yourself from your own existence, and that's beneficial. More fuzzily, giving puts meaning into your life. You have a sense of purpose because you matter to someone else."

Studies of geriatrics in assisted living community environments were shown to live longer when they have a small animal or even a plant to take care of, and report a greater life satisfaction than those who don't have anyone or anything (plant or animal) depending on them. You may also consider committing five random acts of kindness per week. This could be as simple as smiling at someone who's looking depressed at the supermarket, helping someone struggling with lifting a heavy box into their trunk at a hardware store parking lot, or mowing your neighbor's lawn while they're out of town. If you wish to take a bit more time you could volunteer for an organization like Habitat for Humanity, read to children at a local hospital, or teach Tai Qi at an assisted living facility. Anything you do for your community will lift your spirits.

I recently went through a toll and told the attendant to pay for the car behind me, suggesting he tell them they're the 5,000th car that day, and they go for free. In a study published in 1998 by Williams, et al., life satisfaction was found to improve 24% with altruistic activities. Psychologist Laura King, known for her research in positive psychology said, "People that want to live a more fulfilling life should quit reading self-help books and start helping others." Winston Churchill was quoted as saying, "We make a living by what we get. But we make a life by what we give."

Exercise. Regular exercise not only tames high cortisol levels, but also has been shown to be as effective as antidepressant medication for those suffering from mild to moderate depression. Our bodies were designed to move. The majority of American adults lead sedentary lives and they can easily slip into mild depression. Start your patient out walking two blocks a day around their neighborhood slowly working their way up to

1-3 miles per day. A nice walk clears the head, increases circulation to all the organs, increases intestinal motility and boosts vitamin D production if it's sunny. One could argue that a brisk walk massages foot reflexology areas as well, contributing to a greater sense of well-being.

A Finnish study reported that overall physical exercise decreased with increasing age, especially women, and about 20% of the subjects (aged 65 to 84 years old) were "no more physically active than was essential for performing their daily activities." The results suggested that "involvement in physical exercise may promote positive perceptions of psychological well-being among the elderly." Get out. Walk. Enjoy it. Not only does regular exercise increase self confidence, it also improves lymphatic and blood circulation and strengthens the immune system.

Schedule your days. A brilliant local acupuncturist shared with me a conversation with a frazzled patient that went something like this: "I wake up exhausted, work all day...and then collapse in bed." My colleague replied "Wow. That sounds incredibly busy. Who makes your schedule...?" With that in mind, take time to reduce your daily activities. In the modern world where "nature abhors a vacuum," we fill up every waking moment with things to do. Instead, identify activities that are relaxing to you and deliberately add those to your schedule, while subtracting time-wasters such as channel-surfing and Facebook.

See humor in everything. A while back, my car broke down on the way to work. I called AAA to be towed, contacted my office to reschedule my first few patients, and pulled a book from my briefcase. It was sunny and 70 degrees in Northern Virginia when tow truck arrived and we chose an appropriate garage in the direction of my clinic. I commented to the driver that he must deal with a lot of angry people and he roared "You don't know the HALF of it! They act like I was the one that poked a hole in their radiator!" Needless to say, the driver had me in stitches all the way to the service station and even took the time to drop me off at my clinic. If I were to get bent out of shape and have the veins stand out on my forehead, it wouldn't change the reality of the situation with my car breaking down, so I might as well make the most of it.

Breathe. Those of you who practice meditation, qigong, tai qi, yoga or any other mind-body self cultivation know the power of proper breathing. When I look carefully at a typical patient on my treatment table, they're taking 2-3 breaths for every one of mine. When you find yourself in a stressful situation, slow down your breathing. Dr. Herbert Benson, author of *The Relaxation Response* wrote, "When the mind is focused, whether through meditation or other repetitive mental activities, the body responds with a dramatic decrease in heart rate, breathing rate, blood pressure (if elevated to begin with), and metabolic rate – the exact

opposite effects of the fight-or-flight response." Inhale with the word "love" to spread throughout your body, and exhale the word "grace." Check to make sure you're not wearing shoulder earrings and relax your jaw, neck and shoulders on the exhale. The situation you're in will probably not lead to an amputation, so relax, breathe, and allow the tension to leave your body.

Identify your strengths. Find where your weaknesses are and work within the framework of your strengths. Dr. Seligman's website www.AuthenticHappiness.com, offers a way you can identify your core strengths through a fairly lengthy questionnaire. People find much more meaning in their lives when they're working within their strengths. For instance, an introvert may not enjoy being a Social worker, but may love to be an editor.

Spend time with your friends. Socializing and interacting with others is a key trait of happy people. They spend more time nurturing relationships and have more friends and associates than unhappy people. Friends of mine refer to me as the "hub" of a wheel, where the spokes are people. They say that I bring people together (for live music, dinner parties, plays, festivals, etc.) Make any excuse to create a sense of community and belonging and surround yourself with like-minded people.

Learn to replace negative thoughts with positive thoughts. As I continue to learn and practice positive psychology, I've become more aware of negative thoughts when they arise. If there's anything on your mind that makes you feel "bad" (angry, scared, concerned, anxious, depressed...), actively replace it with something that feels better. If you relax, close your eyes, and picture a puppy or kitten in your lap, and visualize stroking the animal, you'll start to feel better as the kitten purrs or the puppy's tail wags. Your brain doesn't know the difference between a real animal in your lap and you thinking about an animal in your lap, but the results are the same with regard to the areas of brain activation, neurotransmitter levels and cortisol reduction.

Create your optimal environment. Wear a favorite article of clothing that makes you feel good. Aromas such as cinnamon, nutmeg, Christmas trees, candles, or incense may calm you. Music communicates to us on multiple levels – if that's what moves you, follow your heart. Live plants make a home come alive. Lighting, windows, open spaces, and throw pillows can all contribute to a positive environment. If you've considered getting a pet, you may want to bring one home – the love and companionship more than make up for the cost of food for your four-legged friend.

Get enough rest/sleep. It's hard to be happy when you're exhausted and barely firing on four cylinders. Everyone is aware of getting "eight hours of sleep" for good health, but recent research suggests an average closer to nine hours per night for optimal cognitive function. If you find yourself having a difficult time falling asleep make sure you do one or more of the following:

- 1. Do not check email, watch TV or sit in a bright room before bed. That extra light is enough to stimulate your pineal gland to retard melatonin production and keep you awake.
- 2. Make sure your bedroom is DARK. (See #1)
- 3. Hide your alarm clock. Opening one eye to check the time puts psychological pressure on you that will make your insomnia worse.
- 4. Soak in Epsom salts before bed. It's a sure way to relax all your muscles and pave the way to a good night's sleep.
- 5. Consider supplementing with sublingual vitamin B12 if your blood work results are less than 200 pg/mL. Do not take it too late in the evening.

Studies indicate that those who take a minimum of two vacations per year live substantially longer than those who do not, so make sure you're giving yourself enough downtime away from work as well.

Don't worry, be happy.

Resources

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