The Evidence-Based Power of Mindfulness in Veterinary Practice
Steve Noonan, DVM, CPCC
Effecti-Vet Corporation
Campbellville, ON

The purpose of this article and accompanying discussion is to share some of my own experiences with happiness and positivity, look at the evidence-based science that shows the benefits of positivity in the workplace and in our personal lives, and then offer some research based strategies that have worked for thousands, including me. While we enjoy this conference it is an opportune time for reflection. Modern life has created a hectic treadmill where the demands of commerce and technology have torn us mercilessly in many directions. Everyone wants to be happy yet excessive, destructive stress is prevalent for many members of our profession. I believe the pursuit of happiness and positivity is important for many reasons. In no particular order here are a few:

1. Clients gravitate to a pleasant environment – people want to do business with happy, positive people
2. A positive business environment is conducive to higher profitability, higher client satisfaction and greater team productivity and performance
3. Happiness and positivity are clearly linked to physical, mental and emotional health and any efforts to improve this for ourselves and our loved ones is an effort well-spent
4. The evidence-based strategies for developing positivity work not only to help someone who is languishing lift themselves from depression and negativity, but also to help someone who is already doing well do even better and flourish.
5. Happiness and positivity are contagious to the point that we can become an ‘epi-center’ of positivity, radiating and infecting those around us, creating a ripple effect to help make the world a better place

My vet school visits to nursing homes with dogs back in 1980 were heartwarming and humbling. The most memorable thing for me was a woman who was bed-ridden and seemed catatonic to me. My dog started nuzzling her hand and she started moving and talking, even though incoherently. Her caregiver was brought to tears as she said the woman hadn’t moved for weeks. Two things dawned on me later. First that it was better to give than to be selfish, but more importantly it was then I realized we weren’t just in the business of animal health but we were in the business of happiness. If we could keep animals healthy so they could bring this much joy to people then what we did was exceedingly important.

I used this new found knowledge to support me in vet school. I knew I would graduate because I had a higher calling, to keep animals healthy so they could help make people happy. What could be more important than helping people be happy?

As a young veterinarian and business owner I became intrigued with happiness and positivity because I noted that business success seemed to be intricately linked with happiness. The positive owners I met were more likely to have successful businesses and they had cheerful team members. The ones who were negative or sour just didn’t seem to be as successful, plus they seemed miserable. I took a Dale Carnegie course, then helped teach it, and read positive motivational literature by authors like Norman Vincent Peale, Napoleon Hill, Dale Carnegie – How to Win Friends and Influence People, The Amazing Results of Positive Thinking, Think and Grow Rich. And the results were pretty good. Diane and I had 3 veterinary clinics by the time we were 27 and by most measures were pretty successful. In hindsight our clinics exuded positivity and attracted positive employees and clients.

Fast forward 25 years and I became so consumed by life, family, practice and veterinary association work that I forgot all the positivity I had learned and the success it had helped create. Eventually I became burned out and retired from active practice. It turns out I was not alone. Surveys in our profession report very high levels of stress. The suicide rate for veterinarians is 4-7 times that of the general population. In a large Harvard study people reported being unhappy 47% of the time.

For the past 6 years I have been a consultant relying on my business skills to help clients. Perhaps it was because of the experience I had been through, but I found I was spending more time helping the owners deal with their unhappiness than their business. During this time I have studied positive psychology, how to work on one’s happiness and how to cope with stress. Seeking more tools, I became a certified life coach and attended a number of courses on stress reduction through mindfulness. In my studies I uncovered lots of work showing how deliberate efforts to improve positivity created happiness, but also improved business success.

Whereas the early positive thinking that I had read about in the 80’s was anecdotal and opinion-based, the new positive psychology and business literature was rigorously evidence based. There are many people in veterinary medicine talking about how stressed we are, but very few talking about what we can do about it. There is plenty of work on positivity in the workplace but few are talking about how critical this is to the success of a veterinary team.

Harvard researcher Shawn Achor describes research about the relationship between positivity and success. A team of researchers studied 60 business teams for several years. Research assistants were trained to code every single statement made during business meetings as to whether they were positive or negative. Positive statements (P) tended to be more uplifting, other-focused and based on inquiry whereas negative statements (N) were deflating, self-focused and self-advocating. It was determined the high-performing successful teams had significantly higher P/N ratios vs those low performance teams.
In one specific example, a mining company was losing 10% per year and the ratio was 1.15:1. The researchers trained the executives to increase their praise and positive comments. The company profits improved by over 40% when the ratio increased to 3.56:1. It was shown there was a direct correlation between positivity and current and future business success in not only this company but many others. Companies with low ratios also had very few resources to cope with adversity. One major business hurdle like an economic turndown, a new competitor or loss of a key client may be all it would take to topple these companies with low positivity.

Studies show positive teams make higher sales, have better customer satisfaction and perform better on 360-degree reviews. Negotiators are more successful when trained to be positive. It’s not all that surprising when you think of it. Subsequently it has been shown in studies at numerous business schools that positivity fuels creativity, energy, motivation, resiliency, engagement and productivity, all precursors to success. Efforts of management to foster positivity using techniques such as Appreciative Inquiry are successful not only in team-building but financially as well.

University of North Carolina positive psychologist Barb Fredrickson has studied positivity extensively for almost 20 years. She defined, quantified and has been able to create in the laboratory 10 positive states, namely: joy, gratitude, serenity, hope, interest, pride, amusement, inspiration, awe, and love. She is renowned for her ‘broaden and build’ theory which proves that positivity broadens ones mental, psychological, physical and social resources and that positivity enables one to create/build a better future life.

She sought to determine the relationship between positivity and negativity and whether a higher P/N would separate those who are truly flourishing from those who are merely existing (languishing)? First she conducted a survey with participants to determine their baseline psychological state. Next, over a period of several months she tallied the ratio between the number of positive and negative emotions participants experienced each day. She found a similar phenomenon to that of the successful companies. In order to flourish emotionally, one must experience at least 3 times as many positive emotions as negative. She then worked with those participants with scores lower than 3:1 to increase their positivity using a number of tools described below and was successful in doing so. Other researchers have duplicated these results and provided additional information regarding the relationship between positivity and mental well-being.

Positivity and happiness are terms that are often used interchangeably. What is happiness? Wikipedia calls it a state of positive well-being ranging from contentment to intense joy. According to University of California psychologist Sonja Lyubomirsky, author of “The How of Happiness”, about 50% of our happiness is genetically predetermined, 10% is due to current circumstances and about 40% by intentional activities. Some of us are genetically pre-programmed to have higher dopamine and serotonin levels than others and therefore be more positive than others. There is nothing we can do about this 50% genetic set point.

The next portion of our happiness is the 10% of our happiness related to our current circumstances. I find this work fascinating. As one might imagine it’s easier to be happy while on holiday than while un-plugging the toilet. But all the studies have shown that happiness OR unhappiness, related to circumstances, is temporary. The most telling study as described by Harvard psychologist Dan Gilbert compared mega-lottery winners with acute paraplegics. While understandably there was a large increase in the happiness of the lottery winners and a large decrease in the happiness of the paraplegics, within 6 months each group settled back to their original genetic set point of happiness. In other words, adversity or good fortune had no lasting effect! Other studies have shown that age, health, education, geography, sex and many other variables have no lasting effect on happiness. To say, I’ll be happy when, I get that job, if I was more beautiful, younger, more intelligent or lived in a better climate, is only true temporarily – one will revert back to the basic level of happiness. That’s why people fall madly in love only to separate a few months later. A change in circumstance will only buy a few months happiness at best. One study showed that the thrill obtained from buying something may only last for as little as 11 minutes. This can be seen perfectly at holiday resorts. In the beginning people are delighted to be there and to be waited on and have delicious food and beverages. ……. but within a few days we see righteous indignation while waiting a few extra seconds for a beer, or IMAGINE forgetting our dessert fork, or the maid did not leave a mint on the pillow!

To recap 50% of our happiness is predetermined genetically and 10% is circumstantial. This leaves 40% that we CAN do something about. We CAN intentionally increase our happiness, by using the large number of evidence-based tools that have been proven to improve happiness and positivity, help people to feel fulfilled and improve well-being. We can change how our brain works and new findings in neuroscience substantiate this.

NEUROSCIENCE: it is very well evidenced now that our nervous system is plastic and the term neuroplasticity is recognizable. It used to be thought that once we reached adolescence our intelligence and reasoning abilities were cast in stone; we could only look forward to diminishing capacity with aging. This is not true. This is the very reason why brain training companies like Luminoity exist. Extensive research has shown that we absolutely can modify our nervous system, our thought processes, and subsequently our feelings and emotions.

If one considers that when we multiply the number of neurons times the number of synapses and interneuronal microtubules there are 10 x 27th possible interneuronal connections. That’s more than the 10 x 23rd stars that Google estimates are in the universe. There are so many possible firing sequences and each time we learn a new thing and habitualize it, be it piano or a surgery technique or learning to appreciate things more often, new neural pathways are being created that can be documented by fMRI. My analogy is this is like creating a new trail through deep snow. Each time we pass through this trail the path becomes easier to traverse.
It is now known we can and do grow new brain cells. Just as we replace skin and blood cells, there are neural stem cells in the hippocampus and lateral ventricles that differentiate into neurons as required. Essentially we replace all the cells in our body every 3 months so that we become a ‘new person’! Some people have hypothesized as we retrain the brain we are essentially training new cells?

We can train new pathways for our emotions just as we can for motor skills. Functional magnetic resonance imaging/fMRI shows different areas of the brain lighting up after training. The best example of this is the Stanford Tibetan monk study where monks laid in MRI machines and meditated on loving kindness. They had 4 standard deviations greater left pre-frontal cortex activity than is normal or average, suggesting that thinking about love and compassion will forge a new neural pathway. It is said in neuroscience, ‘neurons that fire together, wire together’.

It is now known that happiness activates the vagus nerve which controls and calms heart rate and respiration ie improves ‘vagal tone’. Vagal activation triggers the secretion of oxytocin, the ‘bonding hormone’ which creates warm feelings of attachment and inclusiveness. Oxytocin dampens the amygdala, the trip switch that enables our brain to flip from cool logical thinking into panicked flight and fright and as a result cortisol production is reduced. A happy person, one with a strong positivity ratio, has better health, is calmer and is able to think more clearly.

Neuroscience says and researchers have proven that positivity and happiness can become a habit. Because we have developed and worked on them, we have created new neural pathways to support them, and the benefits to us are greater contentment, better health and greater success in our life and business.