Empathische Zeit
News für den sozialen Wandel durch Gewaltfreie Kommunikation

Being Well with Nonviolent Communication: The Research Basis for Improved Immune Function through Empathy

by Sarah Peyton

Our health and well-being starts with our neurons

Emotion that takes us over also wears us down. When we don't have choice about our feelings: whether they are ceaseless anxiety, relentless terror, simmering rage, or unending grief, they erode our well-being and affect our ability to handle stress.

Nonviolent Communication (NVC) encourages a practice of naming what is happening emotionally and what deep currents of needs are fuelling our longings. Research shows that naming feelings helps us to calm and soothe ourselves, changing the electrical flow of energy and information in the brain's emotional center, the amygdala.(Tabibnia et al., 2008)

However, other research shows that most of us don't believe that putting words to our feelings helps us. We don't think that it makes things better to name what's happening, even though the effectiveness of this approach can be seen on fMRI's. (Lieberman et al., 2011) But the experience of naming emotions and understanding their deeper message not only works to calm us down , when it is done with a caring other it can create relationships of warmth and trust, no matter how old we are. Bringing these relationships inside ourselves, (importing them into

our own brain and carrying them there as memory), helps us feel more secure in the world. (Saunders et al., 2011) This can have unexpected long-term benefits, including improving: our immune system; our resiliency in the face of depression or post traumatic stress, and our relationships with others and with ourselves. (Cassidy et al., 2013)

When everything is working well for us as organisms, we experience states of ease, deep rest, delight, excitement, contribution and relaxed social connection. When we experience positive emotions, we have a sense of safety that allows our nervous system to optimize our health and well-being, fully activating our immune response, in particular elevating the activity of peripheral circulating natural killer cells and peripheral dopamine levels. (Matsunaga, 2008) Additionally we see improvements in blood pressure, stress hormones, behavior, and even gene expression. (Barak, 2006)

There is very little research that directly uses NVC empathy in its design and implementation, but there is quite a bit of research about elements of the NVC process and how they contribute to stress management and health. This article integrates this research with our knowledge of the NVC experience to let us infer what may be happening when we see people with a self-empathy practice make long-term, sustainable health gains. In order to bring this material to life, I will illustrate the research with stories from the NVC New Depths program (names and identifying details changed to protect anonymity), which is specifically tailored to teach processes that support health and well-being.

In this article we will look at three experiences that research has shown to calm our nervous systems: warm community; naming emotions; and re-appraisal of difficult situations. We will see how NVC creates these three experiences, and how they contribute a felt-sense of safety and acknowledgment, and can even change the tone of our automatic thinking, known as the brain's default network, in all these ways making significant strides toward health and well-being.

Then we will look at the healing of trauma and how the New Depths focus on using NVC to support memory integration also contributes to health.

Let's start with the three experiences that calm our nervous systems, beginning with the experience of supportive community which can be created in NVC groups:

Regulation experience #1: warm community

As human animals, we are created to be social, and to belong to our family, social and community groups. The need for belonging is so profound that there is a terrible impact on our health when we experience exclusion. A persistent sense of rejection or isolation can even impair DNA transcription in our immune cells. This disruption also impairs thinking, will power, and perseverance, as well as our ability to read social signals and exercise social skills. It also limits our ability to internally regulate our emotions—all of which can combine to trap us in self-defeating behaviors that reinforce the very isolation and rejection that we dread. (Cacioppo, Patrick, 2012) Social rejection is often the precursor to the onset of depression, probably via sustained inflammation that may occur via glucocorticoid resistance, catecholamines, sympathetic innervation of immune organs, and immune cell aging. (Kiecolt-Glaser, 2009; Slavich et al, 2010).

So when we are lonely, there is a fall in endogenous opioids and an increase in cortisol, we are more easily alarmed, and our immune systems suffer. (Panksepp, 2013; Cacioppo and Patrick, 2012)

When we have relationships characterized by mutual interest in the sharing of internal feelings, thoughts, aspirations, and joys, our perception of the world shifts. Things that are usually frightening become less threatening, hills become less steep, and shocks are less painful. (Coan et al, 2013) The more securely we are embedded in warm, supportive community, the safer we feel, the easier it is to self-regulate, the less alarm we experience, and so the better our health is, and as

mammals, the more quickly we may heal (Courtney, 2004). Not only do we do better when we are with our community, we start to import it into us and carry it with us when we are away from it, continuing to use the community's love and care as a long-distance support, even after the people in it have died. (Coan, Beckes and Allen, 2013)

Part of the experience of NVC is a lived experience of being held with warmth, often for the first time in our lives, by a circle like the one below:

Elissa: It's difficult to speak about this, but since my husband died, I haven't been able to laugh. It's like the impulse to enjoy life starts in my belly and moves up, but when it reaches my diaphragm, it dies.

The circle sits in silence for a moment, and then there is a round of gentle feelings and needs guesses:

"Are you sad and needing to mourn?"
"Are you feeling empty and are you longing to know that you still matter?"
"When you think of life's fragility, are you shocked? Do you need resiliency?"
"When you think of your husband, are you lonely and needing companionship?"

Elissa: "Your guesses help me to understand that I'm angry at myself for being relieved that he is gone. I love him but the relationship was complex and hard. Now, sitting here with you, I can speak the truth and I don't have to be alone with the complexity. I can feel the hard line at my ribs dissolving with the self-compassion. Of course it was hard, of course I was relieved, and that doesn't mean I was a bad wife."

Elissa's experience illustrates both the experience of warm community that can arise form empathy, and the relief that comes from naming truth and reframing situations with more self-compassion (our next two sections).

Regulation Experience #2: Naming what is

The brain's emotional alarm system filters all incoming information for any sign of danger. This full-body system is under the control of the amygdalae, which are parts of the inner structure of our brain, deep behind our eyes. Our alarm system continually scans what is happening at the present moment to see if there are any matches with other experiences we have had, and alerts us to all threats. (Fernández, 2013) It is made to be calmed and reassured by the activity of the prefrontal cortex (PFC), the part of the brain located right behind the forehead and the eyes.

Every day we experience small worries and anxieties that set off our emotional alarms, activating the HPA axis and sending flows of cortisol through our bodies to help us rev up and cope with the normal (and more intense) stressors of life. The less able we are to reassure ourselves, the more time we spend in alarm and the more our bodies steal energy away from our capacity to fend off disease and repair our physical beings, in order to route that energy toward our immediate survival. (Kemeny, 2007)

"Putting feelings into words" recruits prefrontal cortex resources whose activity calms the amygdala (Payer et al, 2012). Once we begin to make connections between emotions and words, we see that the activity in the amygdalae decreases, and that in turn decreases HPA and cortisol output, returning us to a state of balance. Verbal expression has a profound effect on our bodies through relaxation of our autonomic nervous systems, as well. (Hoyt et al, 2013)

As warmth and the resonance of naming start to touch us, oxytocin begins to flow. Our emotional alarm system, the amygdala, is regulated by the neurotransmitters oxytocin and GABA (Panskepp, 2012).

We can also express our feelings nonverbally. The spontaneous nonverbal expression of emotion, such as tears, laughter, and the emotional faces that we see in NVC empathy, are shown to immediately reduce autonomic nervous system

activity. The more expressive we are, and the more emotional processing we do, the more we decrease inflammation (ibid.) . Empathy circles, with their structured support of expression, help to compensate for Western society's entrenched inhibition of emotions, which puts its members at increased risk for a variety of health problems. (Berry and Pennebaker, 1993)

Meanwhile when the activity in the PFC, increases, we have more resources for our present time interface with the world. (ibid.) The prefrontal cortex holds our capacity for the executive functioning, decision-making, empathy, and self-regulation that add up to the word "wisdom." (Siegel, 2013) Whenever we activate our capacity for wisdom, we start to change the way we exist in the world, and we move closer to being able to reappraise our situation, as we will see in the next section.

Regulation Experience #3: Reappraisal

When Elissa said, *Of course it was hard, of course I was relieved, and that doesn't mean I was a bad wife,"* she was revealing her own reappraisal, or reframing with self-compassion, as a result of empathy.

Even beyond emotional expression, the capacity to experience depth processes (positive cognitive appraisal change; experiential involvement; self-esteem enhancement; and adaptive coping strategies) contributes hugely to our well-being. All of these aspects of depth processing are outcomes of depth empathy. Depth processing is so beneficial that it supports long-term survival in people with HIV even more than emotional expression does, increasing CD4+ immune cells and decreasing viral load. (O'Cleirigh et al, 2003)

When the amygdala calms in the presence of the difficult memory or experience, another organ of the brain, the hippocampus, is able to come on line to help us with the capacity for reappraisal, which regulates our emotions and contributes to our immune system. Current research suggests that coping strategies that alter

appraisals and emotional responses improve long-term health outcomes. This is especially relevant for stressors that are acute or imminent, threaten one's social status, or require extended effort. (Denson et al, 2009) Each of these types of stressors is helped by a different aspect of depth work. We will now move to the question of providing help for stressors that are acute or imminent: working with trauma.

Integrating the Healing of Trauma

The NVC depth processes that we focus on in New Depths affect three main categories of trauma. The first is present-time or on-going experiences of distress, like a disaster that has just happened, or living with domestic violence, or workplace bullying. The second is single-incident trauma from the past, like a car accident, an earthquake, or a rape. Thirdly, we can be affected by multi-incident (on-going experiences of being abused) or attachment trauma from early experiences of being parented in ways that were challenging.

1. ***Present-Time Trauma: Immediate resonant care and supporting life changes***

One of the most horrifying experiences for anyone providing empathy to another is knowing that the empathy receiver is in a situation of on-going endangerment. This can include active addictions, refusal to treat illness, domestic violence, workplace bullying, and unsafe environments. Obviously such acute danger has an impact on health and well-being.

Empathy processes invite people to find support for life changes, and resources for surviving what cannot be changed. They help to differentiate the powerlessness of the trapped child from the capacities and choices available to many adults.

This last point is essential. Even when everything would appear to be safe and secure to any outside observer, burdens from the past, known and unknown, can make it impossible for us to feel safe on the inside. Instead of experiencing a

neuroception (the neurons' knowing) of safety, we experience an ongoing perception of discomfort or danger that, because it is "known" at a neural level, feels like the absolute truth. We can live in environments in which we are invulnerable to any peril in present time, but we may still find it impossible to relax and let our systems do what they are supposed to do: take in nourishment, fight off disease, heal us, and renew our cells. How can this be so? Why can't we simply prove to ourselves that we are safe by noticing the lack of danger in our world? Let's find out.

2. Simple Past Trauma: Introducing implicit memory

If we understand what is meant by "burdens from the past," it will help us make sense of the paradox of being present-time mammals who are capable of getting lost in memory. We humans are magnificently deluded beings, with the capacity to create our "known" reality out of the 5-7 bits of information that our conscious mind can hold at any one time, while our almost infinitely complex brain is sifting through millions of other possible incoming sensations, experiences and thoughts.

Adding additional complexity, the part of our brain that is doing this sifting and looking for emotional salience, the part called the amygdala, has no sense of time. (Siegel, 2013) For the amygdala, our life has no time-line. Everything that has ever happened to us that was painful or scary or emotionally important is jumbled together with no chronology, organized by similarity of emotion. The growling dog from when we were three is just as important as the angry boss yesterday, and the two are linked, because both are terrifying. And since we were three with the growling dog, we can't tell that we aren't three now with our angry boss. For the amygdala, everything that has ever happened is potentially happening right now.

Happily for our survival, but tragically for our common sense, the amygdala has the capacity to shut down the reasonable parts of the brain in order to ensure our survival. (Siegel, 2013) So events, perceptions and sensations that roughly correspond with painful experiences from our past (events from our non-concious

memory, recorded but not consciously "remembered") can hijack us into present-time emotional reactivity. We believe that what we are reacting to from the past is danger in the present moment.
A weight of evidence is accumulating that shows the effect that painful unprocessed implicit experience has on our health. This overwhelming mass of unprocessed signals of discomfort and danger appears to be responsible for our stress levels, which in turn have a direct effect on our immune system. So by naming experience for both the individual and his or her family, and by working to decrease stress, we can engender profound positive changes in health and well-being.

Here is an example of the trauma healing effect of depth empathy (in the interest of saving the reader time, this process, which took a little over an hour, is abridged):

Don: I notice that I overreact to my wife when she changes our plans at the last minute.
Sarah: Has that happened recently?
Don: Yesterday.
Sarah: So when you think of it happening, it might be fresh enough that you can feel the experience in your body?
Don: Yes, I feel tension in my chest, swimmy vision, immediate anger, and generalized anxiety and confusion.
Sarah: Is that familiar? Is there an earliest age that you can remember being when you felt this?
Don: Yes, when I was 12-13 years old and alone.
Sarah: How do you feel about that boy?
Don: I like him – I feel warmth for him.
Sarah: Let's time travel to him, if that's okay with him.
Don: It is. He's relieved that I'm there.
Sarah: What's your first empathy guess for him?

Don: Are you confused and angry? Do you need to be able to trust? But he can't trust – the adults in his world aren't reliable. They are high on drugs and alcohol, there are kids being abused – he is being abused. His trust is being betrayed.
Sarah: So are you also guessing that he needs acknowledgment of how bad things are? That he might be hurt and scared and needing protection?
Don: Yes. Hes's very glad I'm there. He can tell he can trust me.

With more feelings and needs guesses, and more back and forth dialog, the boy's body calms in the memory at the same time that the adult's body calms in present time. At the end of the process, the boy leaves the past, where he was unprotected, and gets caught up into the man's present, where he feels safe and loved.

Sarah: So let me check in with you about the situation with your wife. When you think of her changing your plans, how does that feel to you now?
Don: I can see that she's just trying to adjust to the flow of life. She's not trying to make me crazy. We'll be okay; we'll survive this.

Here is a common pattern for all of us: the more reactive we are, (which means the more cues of danger that we carry from unhealed trauma), the more cortisol is flowing through our system, and the more our immune system is disabled at every level. As we reduce this load, we improve immune function, from healing scratches and recovering from colds, to fighting cancer, to creating the epigenetic changes that help us cope with stress.

We can take the following research as a clue to what depth empathy is doing: The effect of smell-induced memory accompanied by positive emotions has a remarkable effect on the immune system, reducing proinflammatory cytokines, which are immune-signaling molecules that modulate systemic inflammation. (Matsunaga et al, 2013) Since people are so fully immersed in their past during depth empathy processes, and very often end up experiencing profoundly

positive emotions, I speculate that this immune system effect is a common result of depth work.
Depth work names and reappraises trauma. It allows memory to make the healing transition from being held by the amygdala to being claimed by the hippocampus, taking implicit experience and making it explicit. This is true , not just for single incident trauma, but also for healing from complex and developmental trauma.

3. ***Complex Past Trauma: Multi-Incident and Attachment***

The effects of early life stress and breaking of the mother-newborn bond (early maternal neonatal separation) are profound. Research has shown that some results of attachment trauma can include damage to the natural breathing pattern, the immune response and to the body's general reaction to stress. (Heyda, 2013) When we are working to support health with depth empathy, and attachment trauma is touched upon and reappraisal of relationship happens, breathing patterns often change visibly.
But if we are dealt an epigenetic hand from our early life, what is the hope of change? Once gene expression is affected, can it be changed, particularly for the better? Is healing at the epigenetic level possible? Research is mounting to show that supportive change can happen, particularly in stress regulation. Some of this research has showed positive changes in gene expression in humans (Bhasin et al, 2013).

One common form of developmental trauma is what researchers call "parentification" the role reversal of child caring for parent. Its effects include the understanding that parentified children are more likely to fall prey to substance abuse. (Bekir, 1993) Because this relationship of mother to child is so important, and because the influence of warm mother (internalized self-compassion and self-care) can compensate for the health effects of so much, up to and including socioeconomic disadvantage, transformation in this area is very supportive. As Canadian epigeneticist Moshe Szyf says, "Our mother is written into in every cell of our prefrontal cortex," (Szyf, 2013), so if we can re-write our mothers with the post-

traumatic growth of depth empathy work, we are strengthening our health and immune systems.

As resonant reflection and naming is so calming for the human nervous system, it would make sense that it is important to find ways to use it to heal the pain of multi-incident trauma. Using depth empathy over time, as a regular practice, changes our internalized models of relationship.
In the field of trauma healing, reappraisal after trauma is often called Post-Traumatic Growth, as compared to Post-Traumatic Stress. We have already seen how, with both Elissa and Don, depth empathy facilitates this stage of transformation, be the original trauma single-incident or multi-incident.

Trauma: Post-Traumatic Growth (revisiting Reappraisal)

People who make meaning out of their traumatic experiences are said to be engaging in "Post Traumatic Growth" as opposed to the more well-known response of "Post Traumatic Stress." This happens when the brain is supported enough to continue to be resourced when thinking about the trauma. If we become emotionally overwhelmed, if we dissociate, or if we just go back into replaying the trauma in an endless loop, then there aren't enough resources left in the brain to create meaning. Once the nervous system is brought out of a state of frozen hopelessness, terror, overwhelm, confusion or dissociation (one of the reasons that it is important for constellation facilitators to be trauma-informed), then the brain can regain a sense of time and differentiated self as regards the traumatic incident or relationship, and meaning can be made.

We can tell that people are making meaning, and experiencing post-traumatic growth, when they realize things about the trauma that they never knew; when they have compassion for the other players; or when they begin to think about global effects and consequences of their trauma. For example, one woman who had been raped could not understand how her rapist had caught her. After her depth process, she was able to remember the entire sequence of events. Another

man who was stuck in a car for 4 hours and had to be freed with the huge machinery, "Jaws of Life" had always thought he was alone during that time period. After his constellation, he realized a neighbor had come out and stayed with him as he waited.

Changing the default network

Whenever people stop using their brain in an intentional way, for example as soon as they get done solving a math problem, finish performing surgery, or turn off a movie, they automatically run what is called the "default network." Starting at 2 days old, and continuing throughout our lives, even after as short a pause in mental activities as 2 seconds (Lieberman, 2013) people go back to whatever their habits of social thought are. This network comes on as soon as we wake up, is the background of our days, and is with us until we fall asleep at night.

Depending on people's early experiences with others, and on how much trauma they've lived through without support, (Bluhm et al., 2009) this network can automatically default to self-blame and self-abuse, rather neutrality, or even (almost unthinkably for so many of us) having a positive or encouraging tone. This means people can be in the habit of walking around beating themselves up without even having to take a breath. (Or of blaming others without so much as a conscious thought.)

This unfortunate tendency contributes to human pain. It is part of what fuels depression, anxiety, and any or all of the other standard mental health diagnoses. When the default network is vicious, it makes general unhappiness or diagnosed disorders worse. It makes people devalue themselves, be cruel to others, and brings helplessness and hopelessness in its wake. When people are in the grip of their own savage self-dislike, they can't believe that they are cared for by others, so they can't reach back to build relationship, and isolation is more likely. Changing the tone of the automatic way people speak to themselves is essential to making the world a better place.

Interestingly enough, we can carry this reactivity as an unnoticed baseline state that has us running on cortisol without even realizing that it would be possible for us to feel more relaxed, at ease, and trusting of our world. This is because the interface between our consciously accessible accumulated experience (our explicit memory) and our non-conscious accumulation of experience (our implicit memory) only meets in the liminal space between the two. It is as if our implicit memory lies within us like a glacier, and we can only know its face. As we become aware that we have this unknown ice-field of the non-conscious within us, and turn toward it to explore it, we can see what is closest to our consciousness. When we start to use language to name what we see, what becomes known calves off like icebergs into the sea of our explicit knowing, and a new surface of implicit experience becomes available to us to be discovered and made sense of.

This is hugely beneficial for the receiver, as individuals with a negative affective style (people who are often angry, irritated, sad, depressed or bored) have a hard time getting their immune system to respond, and may be at risk for illness more so than those with a positive affective style. (Barak, 2006)

When we are free from self-blame and the compulsion to blame others, we are less reactive and we have more choice, both about how we are and what we do. From this place, we notice how others are reaching out to us for connection. We have a neuroception (Porges, 2004) (our nerves themselves have a sense) of safety that is our basis for movement in the world of people. We have curiosity about others, and we see people smiling, we see their eyes light up, we notice their social touches and their social laughter that let us know we belong. This transformation particularly supports us to build community and take action based on our passions, our longings and our integrity.

Conclusion: NVC depth empathy as a contribution to a larger picture of healing

The impact of negative emotions and stressful experiences on health has been thoroughly researched, and the role of positive emotions and warm, supportive community in facilitating health is beginning to be investigated, as we have seen in this article. Inflammation that occurs in conjunction with negative emotions has been linked to cardiovascular disease, osteoporosis, arthritis, type 2 diabetes, certain cancers, Alzheimer's disease, frailty and functional decline, and periodontal disease. Additionally, negative emotions contribute to prolonged infection and delayed wound healing. (Kiecolt-Glaser et al, 2002) Emotional expression and the support of active coping have evidenced survival benefits in breast cancer and melanoma. These findings suggest that emotional expression generates balance in the neuropeptide-receptor network and a functional healing system. (Pert, 1998)

There are many other resources and kinds of medical support that contribute to health and well-being, and depth empathy is a powerful practice to promote long-term stability and warm connections with self and others. Although NVC depth empathy has not been directly researched, resources that we know to be discovered and strengthened through this work facilitate relationships that diminish negative emotions and enhance health with their positive impact on immune and endocrine regulation.

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BIO

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