COVID – 19, Social Skills 101 for Surviving the Pandemic

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Introduction

I am Jeff Hansen, a pediatric psychologist, working at CAFBHS, Child and Family Behavioral Health Services at Madigan.

It is my pleasure to share with you, in a spirit of great humility, as I do not have all of the answers, some of my ideas on how we, as staff, colleagues, friends, mothers, and fathers, might best manage this unprecedented crisis and live in resiliency. I have entitled my talk*:* **COVID – 19, Social Skills 101 for Surviving the Pandemic**

Never before has so much happened in such a short time. In a matter of weeks, we went from:

a. Enjoying the security of health
b. Financial stability
c. Ability to go about our business and pleasure freely

To:

a. Being sequestered at home with loss of direct connection to our coworkers and patients, our offices, and many of the things that bring structure to our lives.
b. The speed of this event has been so stunning that our minds have barely had time to catch up with the enormity of it all.

Some Neuroscience

Recent neuroscience research teaches us a lot about how we are impacted by threats such as COVID-19 and what we can do to mitigate it. Most specifically, it informs us about how our autonomic nervous system can lead us to potentially maladaptive coping strategies or, alternatively positive, healthy, and connected ones, if we allow it.

Deb Dana (2018), author of her excellent book, *Polyvagal Theory in Therapy,* notes:

"We come into the world wired to connect. With our first breath, we embark on a quest to feel safe in our bodies, in our environments, and in our relationships with others."

"The autonomic nervous system is our **personal surveillance system**, always on guard, asking the question, "Is this safe?" Its goal is to protect us by sensing safety and risk, listening moment by moment to what is happening in and around our bodies and in the connections we have to others."

This listening happens far below awareness and far away from our conscious control. The originator of Polyvagal Theory, Dr. Porges, understanding that this is not awareness that comes with perception, coined the term **neuroception** to describe the way our autonomic nervous system scans for cues of safety, danger, and life threat without involving the thinking parts of our brain.

Briefly stated, our response to threat will move us toward one of **three defensive responses**. Two of which keep us in perpetual defense and one of which moves us toward health and restoration.

"The **sympathetic branch** is found in the middle part of the spinal cord and represents the pathway that prepares us for action. It responds to cues of danger and triggers the release of adrenaline, which fuels the fight-or-flight response."

"In the **parasympathetic branch**, the remaining two pathways are found in a nerve called the vagus. **Vagus**, meaning "wanderer," is aptly named. From the brain stem at the base of the skull, the vagus travels in two directions: downward through the lungs, heart, diaphragm, and stomach and upward to connect with nerves in the neck, throat, eyes, and ears. "

The vagus is divided into two parts: the **ventral vagal pathway** and the **dorsal vagal pathway.**

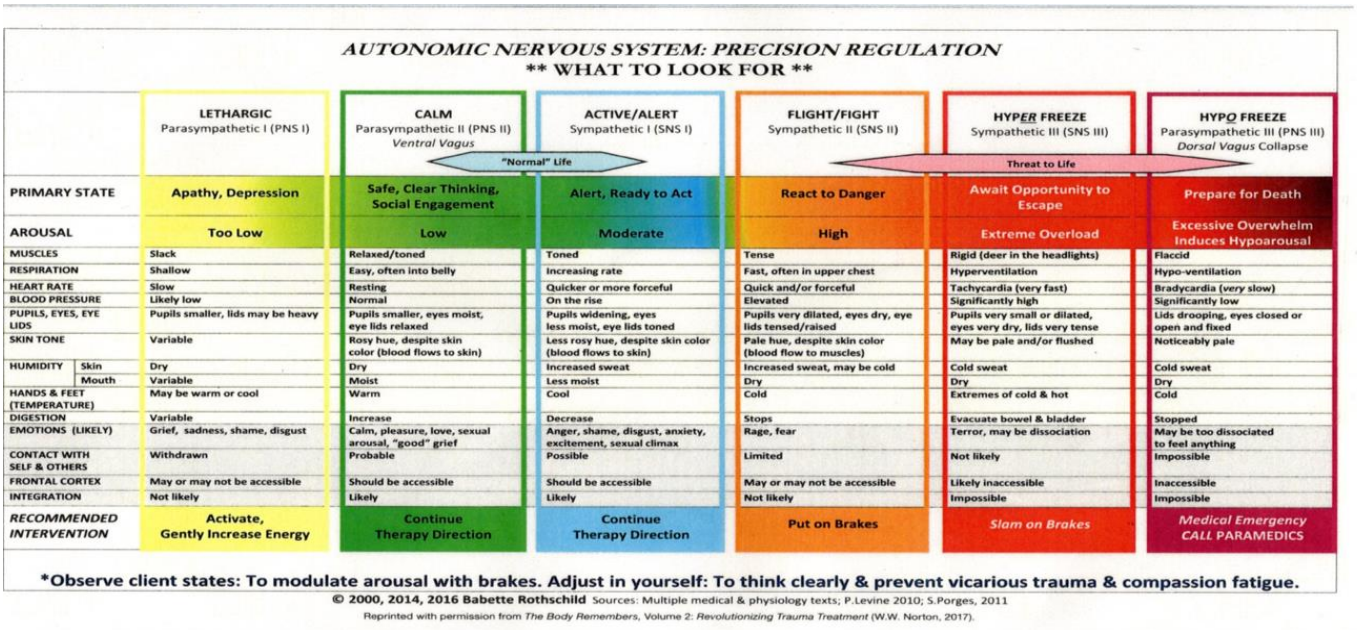
"The **ventral vagal pathway** responds to cues of **safety and supports feelings being safely engaged and socially connected.** In contrast, the **dorsal vagal pathway** responds to cues of extreme danger. It takes us out of connection, out of awareness, and into a protective state of collapse. When we feel frozen, numb, or 'not here,' the dorsal vagus has taken control."

So, our neurosystem, left on autopilot will, when we are faced with an enormous threat such as COVID-19, either catapult us to sympathetic fight or flight which equates to extreme anxiety or dorsal vagal shutdown which leads to slowing down, withdrawal, and possibly even depression. If these modes of coping become excessive, we are at risk for potentially using maladaptive strategies such as addictions (to include alcohol consumption which, by the way has, increased by 50% since COIVID-19) to quell the pain of negative physical symptoms, associated negative emotions, and/or complete withdrawal and possibly self-destructive behavior.

The best response, of course, is to activate our **social engagement system of the ventral vagal pathway** of the parasympathetic branch. In this state, our heart rate is regulated, our breath is full, we take in the faces of friends, and we can tune in to conversations and tune out distracting noises. We see the "big picture" and connect to the world and the people in it.

So, what do we do? The answer is that we become aware of where we are shifting on that automatic continuum as noted in the chart below. We specifically want to be in the Greene Zone on that chart and avoid the slowing down/depression Yellow Zone and the overactivation Orange/Red Zone. We can facilitate ventral vagal connection in ourselves and with others by engaging:

- Kind eyes
- Warm heart – the heart has a measurable electrical energy field of three feet, the brain 2 to 4 inches; so, it literally speaks for us
- Speak with a more melodious voice, full of prosody and life
- Smile not only with your mouth but with your eyes
- Avoid leaning in
- Breathe slowly with exhalations longer than inhalations – breathing out slowly accentuates relaxation and actually can slow our heart rate by 20 beats per minute (vagal brake)



AUTONOMIC NERVOUS SYSTEM: PRECISION REGULATION
** WHAT TO LOOK FOR **

	LETHARGIC Parasympathetic I (PNS I)	CALM Parasympathetic II (PNS II) *Ventral Vagus*	ACTIVE/ALERT Sympathetic I (SNS I)	FLIGHT/FIGHT Sympathetic II (SNS II)	HYPER FREEZE Sympathetic III (SNS III)	HYPO FREEZE Parasympathetic III (PNS III) *Dorsal Vagus* Collapse
		"Normal" Life			Threat to Life	
PRIMARY STATE	Apathy, Depression	Safe, Clear Thinking, Social Engagement	Alert, Ready to Act	React to Danger	Await Opportunity to Escape	Prepare for Death
AROUSAL	Too Low	Low	Moderate	High	Extreme Overload	Excessive Overwhelm Induces Hypoarousal
MUSCLES	Slack	Relaxed/toned	Toned	Tense	Rigid (deer in the headlights)	Flaccid
RESPIRATION	Shallow	Easy, often into belly	Increasing rate	Fast, often in upper chest	Hyperventilation	Hypo-ventilation
HEART RATE	Slow	Resting	Quicker or more forceful	Quick and/or forceful	Tachycardia (very fast)	Bradycardia (*very* slow)
BLOOD PRESSURE	Likely low	Normal	On the rise	Elevated	Significantly high	Significantly low
PUPILS, EYES, EYE LIDS	Pupils smaller, lids may be heavy	Pupils smaller, eyes moist, eye lids relaxed	Pupils widening, eyes less moist, eye lids toned	Pupils very dilated, eyes dry, eye lids tensed/raised	Pupils very small or dilated, eyes very dry, lids very tense	Lids drooping, eyes closed or open and fixed
SKIN TONE	Variable	Rosy hue, despite skin color (blood flows to skin)	Less rosy hue, despite skin color (blood flows to skin)	Pale hue, despite skin color (blood flow to muscles)	May be pale and/or flushed	Noticeably pale
HUMIDITY Skin	Dry	Dry	Increased sweat	Increased sweat, may be cold	Cold sweat	Cold sweat
HUMIDITY Mouth	Variable	Moist	Less moist	Dry	Dry	Dry
HANDS & FEET (TEMPERATURE)	May be warm or cool	Warm	Cool	Cold	Extremes of cold & hot	Cold
DIGESTION	Variable	Increase	Decrease	Stops	Evacuate bowel & bladder	Stopped
EMOTIONS (LIKELY)	Grief, sadness, shame, disgust	Calm, pleasure, love, sexual arousal, "good" grief	Anger, shame, disgust, anxiety, excitement, sexual climax	Rage, fear	Terror, may be dissociation	May be too dissociated to feel anything
CONTACT WITH SELF & OTHERS	Withdrawn	Probable	Possible	Limited	Not likely	Impossible
FRONTAL CORTEX	May or may not be accessible	Should be accessible	Should be accessible	May or may not be accessible	Likely inaccessible	Inaccessible
INTEGRATION	Not likely	Likely	Likely	Not likely	Impossible	Impossible
RECOMMENDED INTERVENTION	Activate, Gently Increase Energy	Continue Therapy Direction	Continue Therapy Direction	Put on Brakes	*Slam on Brakes*	*Medical Emergency CALL* PARAMEDICS

*Observe client states: To modulate arousal with brakes. Adjust in yourself: To think clearly & prevent vicarious trauma & compassion fatigue.

 Sources: Multiple medical & physiology texts; P.Levine 2010; S.Porges, 2011

Action Plan

One - Connection to all good things:

One of my favorite authors of all time, Johann Hari, wrote a wonderful book entitled *Lost Connections.* Johann is an amazing UK journalist who, himself, struggled with debilitating depression during his teen and young adult years and set out on a three-year journey around the world to seek answers to his own depression.

He talked with psychiatrists, epidemiologists, neurologists, neuroscientists, social scientists, and many other experts in their fields of study around the globe and explored different cultures and how they fared with these issues.

He concluded that much of what we have been led to believe about the genesis and treatment of depression and anxiety is off the mark in many ways. He determined that in many cases, depression and anxiety are the result of crucial and growing problems with the way we are living our lives. He

discovered that there are nine underlying causes of these problems which are summarized as follows several of which have great implications for all of us who might be struggling with anxiety and negative mood surrounding COVID-19.

I will discuss three of them:

Stay Connected with Meaningful People:

Dr. John Cacioppo (2006, 2008, 2010), a neuroscience researcher, studied the impact that loneliness has on health. He and his colleagues determined that loneliness causes **cortisol** levels to go through the roof – as much as that caused by some of the most disturbing things that can ever happen in your life.

As Hari (2018) summarizes Cacioppo's research, "Becoming acutely lonely, the experiment(s) found, was as stressful as experiencing a physical attack."

Another researcher, Lisa Bergman, followed both isolated and highly connected people over nine years and found that isolated people were **two to three times more likely to die** during **lonely periods** and that, specifically, almost everything during lonely periods becomes more fatal for lonely people to include heart disease, cancer, and respiratory problems (Pinker, 2015).

In a Ted Talk presentation, Cacioppo (2013) reported a rather shocking meta-analysis study of over 100,000 participants which found increased risks of dying early due to the following:

- Air pollution: 5% increased risk of dying early
- Obesity: 20% risk of dying early
- Alcoholism: 30% risk of dying early
- Loneliness: 45% risk of dying early

Takeaway: The implications of this research are clear; specifically, it is to our benefit that we stop isolating ourselves and connect in positive and fulfilling family and social relationships especially during the COVID-isolating inducing climate.

Stay Connected with Meaningful Work:

Allan et al., (2018) found that engagement in meaningful work correlated with job satisfaction and predicted less depression and stress. Furthermore, the relations between meaningful work and both anxiety and stress were moderated by job satisfaction. Specifically, people perceiving their work as meaningful and satisfying reported less anxiety and stress.

Conversely, poor connection with work promotes unhappiness. Hari (2018) noted that the polling company, Gallup, conducted the most comprehensive study to date on work satisfaction/dissatisfaction between 2011 and 2012 to determine how people across the world felt about their work. Of the millions of workers across 142 countries, Gallop determined that only 13 percent reported that they were "engaged" with their work (Davies, 2016). On the other hand, 63 percent were "not engaged" - meaning no passion in one's work. Finally, 24 percent were "actively disengaged" - which translates to acting-out their unhappiness. In sum, twice as many people hate their jobs as love their jobs. In an effort to better understand high rates of depression and suicide in civil servants, investigators determined that a **lack of control** and little connection between **effort** and **reward** were highly predictive (Marmot et al., 2002).

Takeaway: Make sure that you maintain some form of satisfying work and task completion both in your professional job and in your tasks at home that bring and sense of accomplishment and satisfaction.

Stay Connected with the Natural World:

Our children no longer learn how to read
the great Book of Nature
From their own direct experience or how to interact creatively
with the seasonal transformations of the planet.
They seldom learn where their water comes from or where it goes.
We no longer coordinate our human celebration with
the great liturgy of the heavens.

--Wendell Berry

Chilean primatologist, Isabel Behncke, has spent much of her professional career studying the behavior of chimpanzees and Bonobos in both the wild and in captivity.

She noted that Bonobos in the wild can become sad or depressed but there is a limit to how far they will go. However, in captivity Bonobos often become so deeply depressed to the point that they will scratch themselves until thy bleed and can develop tics or start to rock obsessively, whereas in their natural habitat, these behaviors are never observed (interview with Isabel Behncke cited in Hari, 2018).

Elephants in captivity will often grind their tusks- which is a source of pride – against the walls to the point that they become stumps and some elephants in captivity are so traumatized that they will actually sleep upright for years; all behaviors that are never seen in captivity (Sutherland, 2014).

Isabel Behncke postulated that, similar to the animal world, we too, are more prone toward depression when we starve ourselves from connection to the natural world (interview with Isabel Behncke cited in Hari, 2018). Berman (2012) conducted a study that asked city dwellers to simply take walks in nature and then tested their mood and concentration and predictably found that everyone reported feeling better and noted improved concentration and, most interesting, previously depressed people reported five times greater improvement than non-depressed people.

Richard Louv, who coined the term **Nature Deficit Disorder,** wrote that humans are hard-wired for a genuine nature connection. Louv believes that the exponential increase in emotional and psychological problems in kids today are all related to an erosion of their connection with nature and immersion into the digital world (Louv, 2005). We need to ensure that we are unplugging and going outside to bond with nature, play, and reap the benefits of exercise. Doing this in a social context is even better.

Takeaway: The scientific evidence is noticeably clear that getting out is healthy, and this has never been more important than during COVID-19 sequestering. Even better, add a little exercise, as exercise indeed improves depression and anxiety (Strohle, 2009). For example, Gilbert (2009) reported that both people who run on treadmills in the gym and people who run in nature show a reduction in depression; however, this is significantly higher for people who run in nature.

Stay Connected with your Faith:

"Man is not destroyed by suffering; he is destroyed by suffering without meaning"
--Victor Frankl

Although not specifically mentioned by Hari (2018), I believe that faith can be fundamentally important. Observational studies suggest that people who have regular spiritual practices tend to live longer (Strawbridge et al., 1997).

Another research study investigated 1700 older adults and found that those who attended church were half as likely to have elevated levels of IL-6interleukin (IL)-6 which has been associated with an increased incidence of disease. These authors concluded that religious commitment may improve stress control by affording better coping mechanisms, richer social support, and the strength of personal values and worldview (Koenig et al., 1997).

Spirituality is an essential part of the "existential domain" as measured in quality-of-life scores. Positive reports on those measures, i.e., a meaningful personal existence, fulfillment of life goals, and a feeling that life to that point had been worthwhile, correlate with a good quality of life for patients with advanced disease (Cohen et al., 1995).

Takeaway: It has been my observation in almost 35 years of practice that individuals who have some type of meaningful faith, tend to be more resilient, as well as more able to see the big picture when facing struggles or crises. The reader is encouraged to read Dr. Andy Doan's brave and candid book*, Hooked on Games*, which details how faith saved him from devastating media addiction that almost destroyed his medical career, his life, and his family.

Two - Stay grounded for your kids:

It is important to remember that your children will, at least in part, mirror your emotional state. Think of yourself as a tall building and your child being on scaffolding outside of the building. If you go up with anxiety, or down with low mood, they are highly likely to climb up or down the scaffolding to meet you. Conversely, if you stay regulated, they will tend to meet you there. Bless them with a grounded and safe emotional state with confidence that things will work out.

Three: Reach out for help:

We, at CAFBHS, want to support you should you feel the need for assistance in finding additional resources for resilience and health for family matters. Our point of contact is Nurse Case Manager Ms. Priscilla Kinney. Please feel free to call her at 253.968.5482.

Also, feel free to reach out to me at Jeffrey.e.hansen8.civ@mail.mil or on my office phone 253.968.0440.

Staying healthily connected, we will all get through this together.

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