Polyvagal Exercises *for* Safety *and* Connection

50 CLIENT-CENTERED PRACTICES

Deb Dana

A NORTON PROFESSIONAL BOOK

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FOREWORD BY STEPHEN W. PORGES

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This e-book contains some places that ask the reader to fill in questions or comments. Please keep pen and paper handy as you read this e-book so that you can complete the exercises within.

To my fellow travelers on this autonomic journey...

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FOREWORD

As a professor whose research career has spanned five decades, I have had ample time to contemplate personal goals. During my career, I have observed the trajectories of my colleagues as they matured and transitioned through the academic ranks. Some welcomed becoming emeritus and continued to be actively involved in their science through research, writings, and presentations. Others seamlessly left the academic world and retired.

Being a professor is a demanding position that includes managing laboratories, teaching undergraduate students, mentoring graduate students and junior colleagues, writing grants and generating resources for research, networking within a discipline, welcoming professional tasks such as reviewing colleagues, manuscripts, and grant proposals, and serving on committees within institutions. Some of us also have served in administrative roles within institutions and professional societies, while others have built liaisons with government agencies and industry.

This complex portfolio of experiences has given me insight into how I developed and accepted the specific benchmarks that define my personal goals. As I observed my colleagues, I realized that many professors were frustrated at the end of their careers. They seemed to feel that they were not successful and had not accomplished anything meaningful. This self-evaluation was often structured by their institutions encouraging them to retire, their sense that they had not received the recognition that they felt that they deserved. They felt

that no one remembered them and their contributions. My colleagues had spent decades defining themselves in terms of the structure of academic evaluations, and when they were no longer able to fund their research through federal grants, they felt abused and neglected. Basically, from a Polyvagal perspective, the academic world with its chronic evaluation strategies had triggered the bodies and minds of my colleagues into a chronic state of defense. For many who did not have a positive transition narrative, the experience of being a professor ended up abusive and isolating. Consistent with Polyvagal Theory, these experiences of vulnerability and chronic defense would retune autonomic state, leading to mental and physical health issues. Thus, we see that the experience of being a professor shares many attributes with abusive families and relationships. However, there is an important distinction: the experience of being a professor provides a powerful skillset that may be applied outside the university. Thus, if the professorial experiences are internalized as preparatory—enabling the scientist to deal with the challenges of the world outside of the university—then the personal narrative changes from one of abuse to one of adaptive resilience. This resilience is associated with autonomic states that may lead not only to better mental and physical health, but also to bold expansive thinking and rewarding social interactions.

Metaphorically, professors age out within the university. In professional circles, their peer group starts to disappear due to retirements and health. This change in social interactions marginalizes professors and their narratives become negative. When I was about 50, I started to think about personal transitions within academics. I realized that a passive stance toward what the institution defined as success would lead only to disappointment and frustration as I aged. I started to operationalize what I, personally, needed to accomplish to feel that my journey was successful. I focused on the realization that for me, the translation of my ideas into practice was my personal goal. However, I was ill-prepared to take my research ideas and move them

into clinical practice, education, or public awareness. Thus, as an academic, I had structured my narrative to apply the tools that I had and focused on having an opportunity to archive my ideas and methods. I set my personal goals to publish papers that would present an integrative theory and provide the methodology to study the theory.

At the time I was contemplating the dimensions of academic success, I developed the initial formulation of the Polyvagal Theory. The theory stimulated interest in the clinical world and rapidly gained traction in the study and treatment of trauma. This good fortune supported my personal need to move ideas into practice. During the 25 years since the initial presentation of the theory, I have had the good fortune to have the opportunity to support insightful and talented therapists who have embraced Polyvagal Theory as a manual outlining the body's responses to safe, danger, and life-threat. These bold, passionate, and compassionate therapists have used this information to help their clients organize and make sense of their reactions to danger and life-threat. As therapists embraced Polyvagal Theory, their therapies became Polyvagal-informed.

Deb Dana is one of these special therapists. Her books take the principles of Polyvagal Theory and provide therapists with a toolkit of therapeutic skills designed to enable the client—and often the therapist—to explore their bodily responses; to become reacquainted with a body that may have become numb. Through her clear and brilliant translation of Polyvagal Theory into practice, the client is guided to honor both the adaptive numbness that follows severe trauma, and vulnerabilities that are experienced when the portals to the nervous system are awakened through cues of safety. Through her exercises, the client is able to experience an unacknowledged intelligence of the nervous system as it initially rejects the validity of cues of safety. This skeptical reaction illustrates the disparity of the personal narrative with the narrative of the body (i.e., nervous system). The personal narrative that brings the client into therapy pleads for trusting relationships, while the narrative of the body emphatically screams that it will not be fooled again and will protect

emphatically screams that it will not be fooled again and will protect the survivor by not trusting that cues are truly well-intentioned cues of safety.

In this book, *Polyvagal Exercises for Safety and Connection*, Polyvagal Theory becomes a living, felt process that can be shared with clinicians and clients. Deb Dana provides exercises that systematically unwrap the adaptive layers of neural regulation of the autonomic nervous system that shift, and at times distort, our perspective of events and others. Through these exercises we shift autonomic state and start to have an understanding that the personal narrative is not a documentary of events, but a documentary of feelings. This does not minimize the importance of events, but it emphasizes the importance of feelings in distorting, amplifying, or buffering the impact of events.

It is through Deb's creative and compassionate vision and the welcoming, expanding family of Polyvagal-informed therapists that Polyvagal Theory is being translated and embedded into tools that are transforming the practice of trauma-informed therapies. As a witness of this process, I am humbled by the impact that a vision of understanding our evolutionary heritage can, in the hands of Deb Dana and other gifted therapists, have on reducing the burden of personal pain and suffering that survivors of trauma have experienced. I am looking forward to Deb's continued brilliant insights in translating the principles of Polyvagal Theory into an accessible language and useful toolkit for therapists.

—Stephen W. Porges
Author of *The Polyvagal Theory*

ACKNOWLEDGMENTS

There are “before and after” moments in life. These are the moments when the world we are inhabiting changes and we find ourselves in uncharted territory. The publication of my first book, *The Polyvagal Theory in Therapy*, was, for me, one of these life-changing moments. People read about my way of working and wanted to know more. I started traveling and teaching and my small polyvagal family grew into a global polyvagal community. In person and through email, I heard clinical case descriptions and personal stories of suffering. What all of these had in common was the recognition that looking through the lens of the autonomic nervous system changed the way people understood their stories and engaged with the world.

I came to realize that the simple activities of daily living offered ongoing opportunities for autonomic shaping. Everyday practices to nurture the nervous system are the foundation of *Polyvagal Exercises for Safety and Connection*, so it’s only fitting that this book was written not in quiet, uninterrupted stretches of time that is my preferred writing rhythm, but in smaller moments I lay claim to in the flow of my daily life. In the process of writing, I became a student of my own system; discovering patterns I wanted to savor and patterns I was ready to change. I learned from personal experience that shaping the nervous system in new ways requires patience, persistence, and is possible.

Writing *Polyvagal Exercises* was an autonomic adventure I couldn’t have navigated without the support of many people. There is

a special place in my heart for the participants in my workshops who were willing to be my test pilots. Together we learned that some exercises were helpful in theory, but didn't translate to practice, and others worked well with a bit of revision. Tina Zorger has been with me on this adventure since the beginning and was the person I trusted to listen to my frustrations and help me find a way forward. She knew when I needed to slow down and savor and how to support me in continuing to create. My trusted guide Linda Graham invited me to see beyond the places I was stuck and trust my inner wisdom. Fellow author Gary Whited brought his gift of deep listening to our connection, offering me a safe place to talk about my writing challenges. My friend Marilyn Sanders shared my love of early mornings and many mornings, wherever we each woke up in the world, we would start our day with a cup of coffee and a polyvagal-inspired conversation.

This book would not have been possible without the support of my wonderful editor, Deborah Malmud, and her great team at Norton. She believed in this work, connected me with Trish Watson (who helped me organize the exercises so they would be easy to understand and access) and was always open to exploring new ideas. Deborah understood my moments of dorsal vagal despair and never failed to respond with a message of ventral vagal hope.

My life has been shaped in wonderful and unexpected ways by my friendship with Stephen Porges. Steve was always ready to help me understand the science of connection in a more nuanced way, showed up without question to offer a much needed moment of co-regulation when I lost my way, and continues to shape my world with invitations to join him on new polyvagal-inspired adventures.

My deepest appreciation is for my husband Bob who supported me every day during what often felt like a never-ending book writing adventure. He was there to celebrate with me when I found just the right words and helped me keep going when I was ready to give up. His love continues to fill my heart with joy.

While writing *Polyvagal Exercises*, countless people showed up with an offer of connection just when it was most needed. Friends checked in, colleagues tried out practices, and people shared their stories. To everyone who joined me on this journey, may your days be filled with ventral vagal abundance...

INTRODUCTION

"What if your neurophysiology could support safety and connection?" This is a question I ask my clients as we begin our treatment journey. Although there are many diagnostic possibilities in the *Diagnostic and Statistical Manual* (*DSM-5)*, fundamentally clients come to treatment suffering from a compromised ability to regulate their autonomic responses. A polyvagal approach to therapy is based on the knowledge that the autonomic nervous system is shaped by early experience and reshaped with ongoing experience, that habitual response patterns can be interrupted, and that new patterns can be created. Teaching your clients to safely listen to their autonomic stories and shape their systems toward safety and connection is possible.

Learning is a process of both discovery and mastery, and the ways to promote discovery are often different from the ways to encourage mastery (Gopnik, 2005). The therapy hour invites discovery and the time between sessions can be used to encourage mastery. A polyvagal approach begins with helping your clients explore the ways the autonomic nervous system is both creator of, and witness to, their lived experience, and then guiding them to become active operators of this essential system. The therapy session is the time in your clients' week when they predictably experience co-regulation and connection to your ventral vagal state and can safely explore experiences of mobilization and collapse. The process of autonomic reorganization that starts in therapy is strengthened with practice between sessions.

Polyvagal Exercises for Safety and Connection offers you ways to help your clients tune into their nervous systems and begin to reshape their responses through a variety of experiential practices that can be introduced in sessions and implemented between sessions.

Incremental change leads to transformational change. Kok and Fredrickson (2011) identified an upward spiral in which small, and often fleeting, moments of ventral vagal regulation accumulate and compound over time leading to increased autonomic flexibility. These micro-moments, what I call glimmers, build the foundation for your clients' physiological and psychological well-being. Tipping points happen when a state of equilibrium is disrupted and replaced with a new state of equilibrium. These are the magic moments when a threshold is crossed (Gladwell, 2000). The exercises in this book give you a way to use the time between sessions to support your clients' progression toward a ventral vagal tipping point.

Polyvagal Exercises for Safety and Connection is organized in two sections and an appendix. Section I presents the organizing principles of Polyvagal Theory. This section is meant to be read first in order to build a theoretical foundation for the exercises presented in Section II. For those of you who have read *The Polyvagal Theory in Therapy* (2018), you'll find Section I offers new ways to explain and explore hierarchy, neuroception, and co-regulation. If this is your first introduction to Polyvagal Theory, Chapters 1–3 provide a polyvagal informed understanding of the organization and actions of the autonomic nervous system. Whether you are new to the polyvagal perspective or a seasoned polyvagal guided therapist, take the time to complete the mini exercises that are included in each chapter. These boxed prompts are designed to connect the organizing principles of Polyvagal Theory to your personal experience and create a solid foundation for working with your clients through the lens of the autonomic nervous system.

Research about how people develop habits shows that it takes an average of 66 days of practice for an action to become automatic,

missing a day here and there is not a setback, and continued support over this time period is an important ingredient for success (Lally, Van Jaarsveld, Potts, & Wardle, 2010). Studies show that spaced learning produces long-lasting effects and that ongoing experiences spread out over time help learning generalize to new situations (Kang, 2016). Combining this information with the knowledge that enjoyment motivates you to want to learn (Lucardie, 2014), *Polyvagal Exercises for Safety and Connection* invites you and your clients into the practice of what my colleague, Amber Gray, calls *home-pla*y (Gray, 2018). Rather than homework, which can be experienced as a stressor and activate autonomic actions of protection and myriad stories of failure, home-play captures your client's interest with an open invitation to enter into, and enjoy, gentle practices of autonomic listening and skill building.

Based on this understanding of the ways people learn, Section II offers exercises designed to complement clinical work and keep your clients actively engaged in the process of autonomic reorganization beyond the therapy hour. Section II builds on the basic mapping sequence in *The Polyvagal Theory in Therapy* (2018) and complements the tracking and toning exercises presented in that text. The introduction offers an overview of the BASIC (Befriend, Attend, Shape, Integrate, Connect) framework and explores how to use the exercises presented in the section to help your clients build the capacity to safely connect to their autonomic responses and navigate their daily experiences in new ways. Chapters 4–8 focus on one element each of the BASIC framework, presenting a variety of exercises to use with your clients to enhance learning between sessions. Each chapter begins with an overview of the research that informs the section, followed by a series of exercises. The exercise format describes the exercise and its intended use, presents a bit of background for clients, describes the steps of the exercise, and includes tips for therapists.

Section II presents the BASIC framework in a sequence that

builds from one chapter to the next. Begin with Befriending and go through the sections in order. Each chapter includes a number of different exercises to choose from, with the understanding that clients will be drawn toward some and find others less engaging. For clients new to the polyvagal perspective, the exercises are an invitation to autonomic connection. If you have been working in this way and your clients have a beginning understanding of their autonomic patterns, the exercises will deepen their experience. Whether your clients are novices or polyvagal-informed, the exercises offer a pathway to autonomic reorganization.

The Appendix completes the book, offering personal progress trackers for each of the BASIC components and presenting the exercises in a format that can be copied and shared with your clients. One important predictor of change is the perception of moving toward a goal. Studies show that even when you identify a goal as important and meaningful, you don't automatically track changes and, when you do, you tend to take in some pieces of information and ignore others (Webb, Chang, & Benn, 2013). Having a way to see and measure progress supports change. The personal progress trackers for Chapters 4–8 are simple evaluation tools designed to help your clients bring explicit attention to the subtle shifts that show their autonomic nervous systems are reorganizing. The trackers are intended to be used at regular intervals, first while working with the exercises in the chapter and later to see how ongoing autonomic change is continuing to impact behaviors and beliefs. Complete them in your sessions, return to them later as an ongoing check-in, and invite your clients to use them at home on their own.

Polyvagal Exercises for Safety and Connection gives you a way to help your clients keep the process of autonomic awareness and reorganization alive outside of the therapy hour. The organizing principles outlined in Section I will help you understand how the autonomic nervous system works and create a platform for teaching the exercises in Section II. The BASIC exercises will help your clients

attend to the actions of their autonomic nervous systems between sessions, begin to reshape their autonomic pathways, and strengthen their movement toward safety and connection. “Joy lowers the neural threshold for perceiving life events as being positive and hopeful, while raising the threshold for perceiving events as negative and hopeless” (Lucardie, 2014, p. 440). With this book, you and your clients have a guide to building the autonomic foundation for ventral vagal–inspired joy.

SECTION I

THE AUTONOMIC NERVOUS SYSTEM: PATTERNS AND PATHWAYS

I realized that there was a thrilling undiscovered country to be explored in the mechanisms of the mammalian nervous system.

—WILDER PENFIELD

The ability to respond to and recover from the challenges of daily living is a marker of well-being and depends on the actions of the autonomic nervous system. When you think about the autonomic nervous system, where do your thoughts go? Perhaps you have a fuzzy memory of biology learned long ago and a feeling that this system is somehow important to survival. With the development of Polyvagal Theory, Stephen Porges has provided a modern map of the territory of the autonomic nervous system and a new understanding of the ways it shapes moment-to-moment experiences of connection and

protection.

The three organizing principles of Polyvagal Theory are:

1. **Autonomic hierarchy**
   The autonomic nervous system is divided into three parts, each with its own set of protective actions.
   - The earliest dorsal vagal system brings strategies of immobilization.
   - The sympathetic system, next to arrive, adds fight and flight.
   - The most recent ventral vagal system offers the ability for safety through connection and social engagement.
   - Recognizing where on the hierarchy your client's autonomic nervous system has taken them is fundamental to the success of therapy. When the autonomic nervous system has moved into a dysregulated dorsal vagal or sympathetic state, your client's body and brain have been hijacked and they are held in a survival response. When the ventral vagal state is active, body and brain work together, and processing and change are possible.
2. **Neuroception**
   Neuroception, detection without awareness, describes the way the autonomic nervous system interfaces with the world.
   - Working below the level of awareness, the autonomic nervous system listens inside the body, outside in the environment, and in the relationships between people.
   - Reshaping the autonomic nervous system involves first making the implicit experience explicit by bringing perception to neuroception and then adding context through the lens of discernment.
   - Neuroception is at work in every moment of the therapy session. The ability to tune into the implicit autonomic conversations that are happening between you and your clients is an essential part of creating therapeutic presence

and building trust in the therapy process.

3. **Co-regulation**
   Co-regulation is a biological imperative. It is essential to survival.
   - The ability to self-regulate is built on ongoing experiences of co-regulation. Through co-regulation we connect with others and create a shared sense of safety.
   - With a reliable, regulating other, we engage in the rhythm of reciprocity and build experiences of safety in connection. For many of your clients this earliest experience of being with a safe person in a safe place is missing.
   - As a therapist, you are responsible for being a regulated and regulating presence for your clients. Without your predictable, ongoing offer of co-regulation in the therapy session, your clients will struggle to engage in the therapeutic process of change.

Over the course of evolution both the brain and the autonomic nervous system have grown and changed. John Hughlings Jackson proposed a hierarchy of brain structures in which higher levels regulate the function of lower levels; he defined *dissolution* as a sort of evolution in reverse that happens when higher brain structures no longer inhibit lower structures (Franz & Gillett, 2011; York III & Steinberg, 2011). You see this when your client's prefrontal cortex shuts down in response to a situation that feels overwhelming, leaving their limbic system to mount a response. The autonomic nervous system can likewise be seen through the lens of hierarchy and dissolution. Looking at the evolution of the autonomic nervous system, there is an emergence of a three-part system that is distinct and measurable, creating a predictable hierarchy of response (Porges & Carter, 2017). The autonomic nervous system also follows a predictable pathway of dissolution, moving from ventral vagal safety and connection down the hierarchy into the sympathetic mobilization

of fight and flight and finally to the earliest state of dorsal vagal shutdown.

Using images, you can feel the flavor of each autonomic state. Humans evolved from ancient reptiles similar to turtles (Porges, 2015a). The image of the turtle hiding in its shell is an apt one for the dorsal vagal state of disconnection. Continuing to the sympathetic nervous system, imagine the darting movements of a fish reacting in an instant to avoid a predator. Finally, arriving in the uniquely mammalian ventral vagal state, picture people talking and smiling in a shared moment of connection.

Darwin understood that the brain and the heart were connected and engaged in a two-way conversation through what was then known as the pneumogastric nerve, now called the vagus or Cranial Nerve X (Darwin, 1873). William James (1890) wrote that, “A purely disembodied human emotion is a nonentity” (p. 194) and that intellectual feeling must be connected to “a bodily reverberation of some kind” (p. 201). This early understanding of the two-way conversations between the body and brain was abandoned in favor of envisioning the brain as the dominant force directing daily experience. Polyvagal Theory reestablished the understanding that through bidirectional pathways, psychological processes influence body state and body state colors your perceptions (Porges, 2009). Sensory fibers send information to the brain and motor fibers bring information back, initiating a response. Corticobulbar (cortico for cortex and bulbar for a region of the medulla) pathways connect the brain’s motor cortex to the autonomic nervous system via the vagus, giving the cortex a way to exert some control over brainstem responses (Porges, 2011).

Until recently, scientists had no way to understand this brain-heart connection except through using animal models to test hypotheses and postmortem study of body systems. Researchers are now able to study the autonomic nervous system and patterns of brain activity in living humans in real time. Through the use of EEGs, biofeedback, and wearable devices, we can listen in on the conversations that travel the

pathways between the autonomic nervous system and limbic and cortical networks. Heart rate variability, the naturally occurring changes in the beat-to-beat rhythm of the heart, is indicative of the state of the autonomic nervous system and might be a biomarker of general stress and health (Evans et al., 2013). High and low variability is associated with changes in the ability for the brain (prefrontal region) to promote cognitive and emotional self-regulation (Park & Thayer, 2014). Another rhythm, respiratory sinus arrhythmia, tracks the changes in heart rate associated with breath patterns (Sahar, Shalev, & Porges, 2001). This beat-and-breath rhythm shifts in response to both physical and psychological needs. In clinical work, you sense body-brain communication in how deeply your clients respond to an experience, how long their response lasts, and how often it occurs. You see your clients' body-brain conversations in action. As technology advances, you may soon be able to see changes in autonomic state as a session unfolds through numbers tracking moment-to-moment shifts and changing colors that illustrate the autonomic experience. It is interesting to consider what a dual lens of observing your client's body and behaviors in combination with the next generation of physiological measurement tools might bring to the clinical interaction.

The autonomic nervous system shapes the way you experience your life. Beliefs, behaviors, and body responses are embedded in the autonomic hierarchy. Physiology and psychology are interconnected. State and story work together in a persistent and, if not interrupted, enduring loop. Polyvagal Theory invites you into the science of feeling safe enough to fall in love with life and take the risks of living. By bringing explicit awareness to the implicit workings of the autonomic nervous system you can learn to become a regulated and regulating resource for your own well-being and for the people around you. In the next chapters we'll look beneath the behaviors and beliefs and begin to answer the question of how physiology can create the conditions that support safety and connection.

CHAPTER 1

THE AUTONOMIC HIERARCHY

The body will reorganize when it feels safe.

—STEPHEN PORGES

Everyday living is a complex experience of autonomic navigation. Trauma, which might be thought of as "what happens to a person where there is either too much too soon, too much for too long, or not enough for too long" (Duros & Crowley, 2014, p. 238), creates an autonomic demand that shapes the system away from connection toward protection. The autonomic nervous system responds moment to moment to what are often competing needs to survive and to be social. In a state of protection, survival is the only goal. The system is closed to connection and change. In a state of connection, health, growth, and restoration are possible.

IN SERVICE OF SURVIVAL

Clients are faced with the dilemma of balancing the drive to survive with the longing to connect. The responses that were necessary and

[illegible] adaptive for survival in the past bring suffering in the present. Trauma stories are held in autonomic pathways that are tuned to a low threshold–high intensity pattern of responding. A question to ask when your client feels the rise of an adaptive survival response is, “Does this autonomic shift feel familiar?” The activation in the present moment often leads them back to the autonomic origin in their past.

The autonomic nervous system learns through experience. Even before birth, this system is taking in and responding to the environment. Prenatal exposure to a variety of adverse experiences including socioeconomic hardship, inadequate social support, and the use of substances influences the baby’s autonomic function (Alkon et al., 2014; Fifer, Fingers, Youngman, Gomez-Gribben, & Myers, 2009; Hambleton et al., 2013). Maternal mood is transmitted, with anxiety and depression impacting the developing baby’s level of activity and heart rate (Kinsella & Monk, 2009). First in the womb and then in the family, early experiences influence the autonomic nervous system, creating habitual response patterns. Through repeated experiences of co-created regulation, the intimate interactions between mother and baby shape the baby’s system (Ostlund, Measelle, Laurent, Conradt, & Ablow, 2017). Mother and child “sharing at the autonomic level” create the experience of attunement (Manini et al., 2013, p. 2). Held in a relationship with a responsive caregiver, the dyadic dance of connection, falling out of connection, and a return to connection, creates the foundation for a regulated nervous system. With a reliably regulated and regulating person, rhythms of reciprocity build experiences of safety in connection. When family dynamics are based in experiences of autonomic misattunement, there is little chance for experiences of repair. When the adults in a family carry their own patterns of dysregulation, habitually triggered into states of protection and unable to return to regulation and offer the safety of connection, the child’s autonomic nervous system responds by creating its own patterns of protection. “Without the experience of an organizing other,

the nervous system is stunned" (Fisher, 2014). Without intervention, a legacy of dysregulated autonomic organization is passed from one generation to the next.

Trauma survivors often suffer from unpredictable, rapid, intense, and prolonged states of dysregulation. This autonomic imbalance and lack of flexibility leads to health problems. Physical problems include impaired immune function, digestive problems, respiratory problems, diabetes, increased risk of heart disease, stroke, and chronic fatigue (Andersson & Tracey, 2012; Dorrance & Fink, 2015; Mazur, Furgała, Jabłoński, Mach, & Thor, 2012; Merz, Elboudwarej, & Mehta, 2015; Thayer & Sternberg, 2006; Vaillancourt et al., 2017; Van Cauwenbergh et al., 2014). In addition to physiology, psychology is impacted. Social isolation and loneliness, a vigilance for angry faces, distraction from tasks, inability to discern meaningful cues from trivial ones, and increased depression and anxiety are some of the consequences of an out-of-balance autonomic nervous system (Grippo, Lamb, Carter, & Porges, 2007; Hawkley & Cacioppo, 2010).

The hopeful news for you and your clients is that since the autonomic nervous system learns from experience, ongoing experiences can reshape the system. Habitual response patterns can be interrupted and new patterns can be created. Autonomic flexibility is a hard-won outcome of therapy as you help your clients discover their autonomic vulnerabilities and together look toward resourcing autonomic resilience.

THE EVOLUTIONARY HIERARCHY

As illustrated in Figure 1.1, the autonomic nervous system is made up of two branches (parasympathetic and sympathetic) and, with the division of the parasympathetic system, three distinct pathways, each working in service of survival. As each new pathway emerged, the older one was retained, continuing to bring its unique survival response (Porges, 2006). When you follow the evolution of the three

pathways of the autonomic nervous system, you see the autonomic hierarchy, the first organizing principle of Polyvagal Theory, and find the emergent properties and adaptive strategies for each of the three autonomic states.

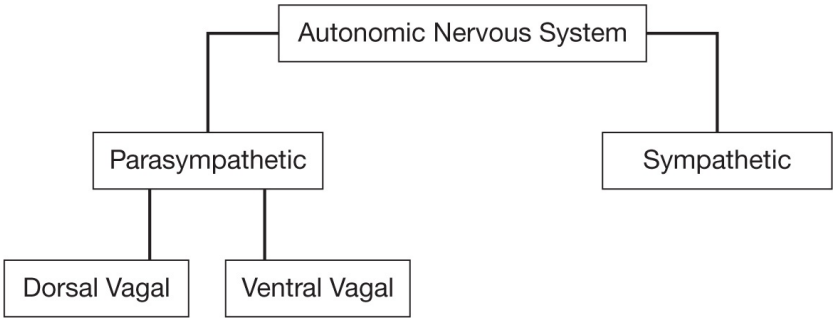

FIGURE 1.1. The Shape of the Autonomic Nervous System: Two branches–Three pathways

Imagine the autonomic nervous system as a nested system. Over the course of evolution, what began as a single dorsal vagal system of immobilization that our reptilian ancestors used for survival was added onto first with the sympathetic system of mobilization and options for fight and flight and then with the ventral vagal system of social communication and connection. As each new system was built and the older system retained, the autonomic hierarchy emerged (Figure 1.2).

The earliest dorsal vagal system runs in the background, regulating organs below the diaphragm, including the digestive system. The sympathetic nervous system, next to arrive, works to circulate blood, shape normal heart rhythms, regulate body temperature, respond to changes in posture, and provide energy to the system to support passion and play. The most recent system, the ventral vagal system, brings the ability for connection and social engagement. The ventral vagus is tasked with overseeing the autonomic nervous system, metaphorically holding the sympathetic and dorsal vagal systems in a warm embrace. When the newest autonomic pathway is directing the system, healthy homeostasis is the

autonomic pathway is directing the system, healthy homeostasis is the result.

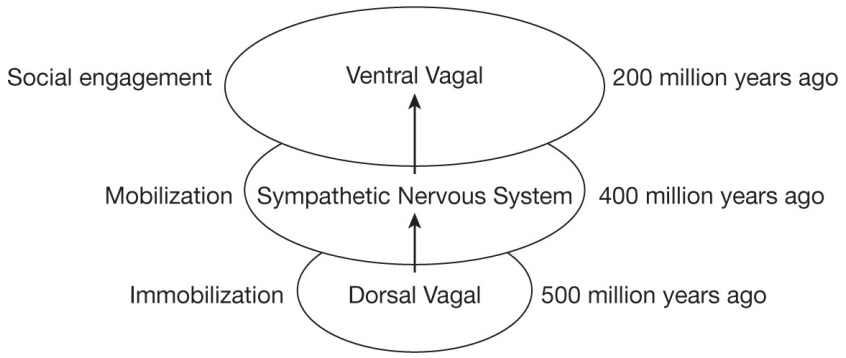

FIGURE 1.2. Nested Evolutionary Relation of Three Pathways

The vagus nerve is the major component of the parasympathetic branch of the autonomic nervous system. Not a single nerve, the vagus is actually a "family of neural pathways" that wander (vagus means wanderer in Latin) throughout the body (Porges, 2011, p. 27). Beginning in the brainstem, the dorsal vagus primarily influences organs below the diaphragm and the ventral vagus mainly affects organs above the diaphragm. Through the dorsal and ventral vagal pathways, messages are sent in two directions. Sensory information travels from the body to the brain and motor information returns from the brain to the body, making this a rich, bidirectional information highway. The two vagal pathways represent either end of the evolutionary history of the autonomic nervous system. The oldest dorsal vagal (our reptilian ancestors) and the newest ventral vagal (uniquely mammalian) are at opposite ends of the continuum of response from dorsal vagal immobilization and disconnection to ventral vagal social engagement. This is reflected in the maturation of these pathways in a developing baby. Autonomic function develops over the course of pregnancy, dorsal vagal and sympathetic systems emerging first and the ventral vagus myelinating during the last trimester of pregnancy and over the first year of life (Fukushima, Nakai, Kanasugi, Terata, & Sugiyama, 2011; Porges & Furman,

2011).

Activity of the ventral vagus, often referred to as vagal tone, can be measured through heart rate variability. While heart rate measures the number of beats per minute, heart rate variability measures the variation in time between heartbeats. A high level of variability indicates the ventral vagus is active and results in a flexible autonomic nervous system and the ability to adjust to the demands of daily living (Laborde, Mosely, & Thayer, 2017). In recent years heart rate variability measurement has moved beyond laboratories and expensive ECGs to the general public with widely available, low-cost, user-friendly devices that can be worn during daily activities (Georgiou et al., 2018). There is increasing understanding about the impact of the autonomic nervous system on well-being and the need to attend to ventral vagal pathways.

Where sympathetic and dorsal vagal states activate an either/or experience constricting the ability to see beyond limited options, the ventral vagal state at the top of the hierarchy brings alive the expansive world of both/and that is filled with possibilities and choices. The ventral vagal experience is one of being a part of the world, connected to self, able to reach out to others, open to change and willing to look at possibilities. Here, solitude and social connection, excitement and rest, joy and sadness, and frustration and flow are found. The glue for the diverse ventral vagal experiences is a sense of safety.

MINI EXERCISE

– Is there an experience of ventral vagal energy that comes to mind?

– By yourself? With others?

Philosophers and poets have long memorialized the face as the

Philosophers and poets have long memorialized the face as the mirror to the soul. What is felt in the heart can be seen in the face. As the autonomic nervous system evolved and the ventral vagus emerged at the top of the hierarchy, the roots of five cranial nerves (trigeminal, facial, glossopharyngeal, accessory, and vagal) came together in the brainstem to create an integrated social engagement system. The ventral vagal pathway from the heart connected with pathways that control muscles of the face and head, regulating how you see, hear, speak, express emotions with your face, and turn and tilt your head, forming a “face-heart” connection (Porges, 2003). This social engagement system is both a sending system and a receiving system, constantly uploading and downloading information about connection. You are continuously posting information about yourself and gathering information about others. Each individual element of the social engagement system sends signals either inviting or discouraging connection and at the same time tunes into other social engagement systems looking for signs of warning or welcome.

Imagine the social engagement system as your autonomic safety circuit. Your eyes send signals of safety and look into other eyes for signs of welcome. Your ears tune in to conversations, listening for the sounds of friendship while your voice broadcasts the meaning underneath your words. Your shoulders move, your head turns and tilts, sending signals that you are safe to approach. When you encounter looks, sounds, and gestures that invite connection, you move closer. Meeting looks, sounds, and gestures that send signals of unsafety, you move into watchfulness. The social engagement system, with its exquisite ability to sense moment-to-moment actions in other systems, filters the stream of cues inherent in social interactions and responds by welcoming or discouraging physical proximity and social engagement (Porges & Furman, 2011).

MOVING DOWN THE HIERARCHY

Events are sometimes beyond the capacity of the ventral vagus to

regulate the system. Illness and traumatic events predictably tax the system, but everyday experiences can also trigger dysregulation. Feeling alone, having too many responsibilities in a day, working in a challenging environment, and being in a distressed relationship are just some of the experiences that can overwhelm the ventral vagal system.

MINI EXERCISE

– What are some of the ordinary difficulties that predictably overwhelm your system?

– Is there an extraordinary distress that is too great a challenge for your system?

Following the predictable path of the autonomic hierarchy, when your ventral vagal capacity is depleted, you move one step down the hierarchy and enter the energy of the sympathetic nervous system and the experiences of fight and flight. This survival response is fueled by adrenaline and cortisol. Here you are a system in motion, or more accurately a system in commotion. Flooded with mobilizing energy, you no longer look for connection; you are now focused simply on survival. The body moves into action while the ability for complex, flexible reasoning is impacted (Maran et al., 2017).

MINI EXERCISE

– What does mobilization look like for you?

– Where does mobilization take you?

– Into fight? Into flight?

It is when mobilization doesn't bring a resolution to the distress that the autonomic nervous system takes the final step down the hierarchy collapsing into dorsal vagal lifelessness. Sometimes called the primitive vagus, the dorsal vagal response takes the entire system offline and into conservation mode. The dorsal vagal experience is a response to what seems inescapable. The autonomic nervous system creatively finds a way out through numbing, disconnection, and dissociation. From a dorsal vagal state, it is difficult to find the way back to ventral vagal connection. In the beginning move out of dorsal vagal collapse, there is a moment of mobilization from the sympathetic nervous system. If not regulated, this necessary infusion of energy elicits the more typical sympathetic actions of fight and flight. Without a regulating influence (internal resourcing, connection with another person, an organized way to use the energy) the onset of mobilization is too much. Rather than moving through action into ventral vagal connection, there is a return to dorsal vagal shutdown.

MINI EXERCISE

– Is the experience of dorsal vagal shutdown familiar to you?

– How does the sense of disconnection happen for you?

MEETING THE DEMANDS OF THE DAY

The ability to return to regulation is the essence of resilience. When you establish and resource pathways to ventral vagal regulation, you recover your innate abilities for resilience. The ventral vagus connects with the heart's pacemaker—the sinoatrial node—that regulates the rhythms of the heart. This pathway has been named the vagal brake because it describes the actions of the ventral vagus to slow down or speed up the heart, supporting a flexible response to the challenges of

everyday living (Porges, 2017a). A well-functioning vagal brake brings the ability to rapidly engage and disengage, energize and calm, and experience ease in making these transitions. With a flexible vagal brake, you can reflect and respond rather than react. (See Chapter 7 for a full description and a vagal brake exercise.)

In describing five stages of neuroplastic healing, Norman Doidge (2015) identifies the influence of the autonomic nervous system on neuromodulation and restoring the balance in a busy brain. With the ventral vagal system overseeing sympathetic and dorsal vagal responses, the brain quiets and there is a powerful healing effect. Doidge says the state of parasympathetic rest and repair " . . . also recharges the mitochondria, the power sources inside the cells . . . reenergizing them" (p. 111). The ventral vagal system truly powers the journey to well-being.

The natural healing force within each one of us is the greatest force in getting well.

—HIPPOCRATES

MINI EXERCISE

Use the following prompts to consider your autonomic nervous system. Spend a few moments exploring this important and often unacknowledged relationship.

– My autonomic nervous system is . . .

– When I think about my autonomic nervous system I . . .

– I'm grateful to my autonomic nervous system for . . .

– I wish my autonomic nervous system would . . .

CHAPTER 2

NEUROCEPTION

Listen to the wind, it talks. Listen to the silence, it speaks. Listen to your heart, it knows.

—NATIVE AMERICAN PROVERB

Since humans first appeared on earth, we have been finding ways to safely move through the world. From ancient navigational aids like the North Star and the Viking sunstone to 20th-century machines that use echoes of radio waves, sound, and light, we map what is unseen and navigate to safety. Using the process of neuroception, the second organizing principle of Polyvagal Theory, the autonomic nervous system listens intently, searching for cues of safety and watching for signs of danger to help you orient and take action.

BENEATH AWARENESS

Through neuroception, the autonomic nervous system is listening

inside to what is happening in your internal organs; *outside*, scanning the environment; and *between*, sensing the connection to another nervous system. Cues of life-threat bring a shift into a dorsal vagal state of immobilization or collapse. With cues of danger you step into sympathetic fight and flight. Cues of safety activate the ventral vagal branch and the social engagement system. A pang of hunger, the size and temperature of a room, the feel of a chair, a face with a smile or a frown are just some of the experiences that are taken in by the process of neuroception and bring an autonomic response.

MINI EXERCISE

Consider your personal neuroceptive cues.

– What is a cue of safety or unsafety from inside your body?

– From the environment?

– Between you and another person?

Neuroception is a passive pathway always running in the background moving your clients up and down the autonomic hierarchy. Beneath awareness, neuroception assesses present moment demands initiating some actions while inhibiting others. A neuroception of safety calms, connects, and dampens the need for protection. By first regulating the passive pathways of neuroception, a platform of safety is created that provides support for engaging the voluntary pathways involved in the process of change (Porges & Carter, 2017).

Neuroception is a deeply subcortical experience that happens below the realm of conscious thought and outside of awareness (Porges, 2017a). This internal surveillance system takes in a constant stream of information and responds by making autonomic adjustments that move you either toward connection or into protection. Always

working in service of survival, neuroception activates “the most adaptive [behavior] as interpreted by the nervous system” (Porges, 2017a, p. 176). Long before the information reaches the brain to form a thought, biology has taken action. While you are often unaware of the cues of safety or danger, you feel the autonomic response. Reactions are felt on the inside, (e.g., warmth in the heart, ease of breathing, stomachache, or dry throat) and are sometimes seen on the outside (e.g., smiling, blushing, a relaxed or stiff posture).

MINI EXERCISE

Consider some of the ways you experience autonomic reactions.

– Which are known only to you?

– Which are visible to others?

SAFETY VERSUS DANGER

Neuroception is tuned through individual experience to take in cues in particular ways as safe, dangerous, and life-threatening. Based on interactions with people and places, neuroception creates habitual patterns of connection or protection. Over time, your internal radar is calibrated to respond in particular ways. Shaped in an environment that is safe and supportive, the system reads cues accurately and inhibits defense systems in safe environments or activates them when there is risk (Porges, 2004). Shaped in an environment that is unpredictable and filled with unexpected events, an environment in which you feel unsafe or unseen, neuroception is biased toward protection which leads to a mismatch between autonomic state and actual safety or risk (Porges, 2015a). This mismatch activates strategies that keep you from accurately sensing safety and inhibiting defense responses, or identifying danger and initiating protective

responses. These early autonomic patterns live on through neuroceptive tendencies that create an autonomic profile.

A neuroception of safety is incompatible with a neuroception of danger or life-threat, making this an either/or experience (Porges, 2015a). Through neuroception, your autonomic nervous system is either open to connection and the possibility of change or locked in a protective response and stuck in a survival story. Patterns of connection arise from cues of safety that the down-regulate your defense systems and activate the social engagement system (Porges 2015a). Research has shown that health effects of positive affect, including greater longevity and better immune function, are more than the absence of negative affect (Segerstrom & Sephton, 2010). An embodied sense of safety requires both the reduction or resolution of cues of danger and the experience of cues of safety (Porges & Lewis, 2009). One without the other may not be enough to move out of a state of protection into readiness for connection. The nervous system needs the active appearance and experience of cues of safety (Porges, 2015a).

The hopeful message from Polyvagal Theory is that autonomic patterns and autonomic profiles can be reshaped. While early experiences shape the system, ongoing experiences can reduce or even resolve cues of danger. Cues of safety, often missed in the midst of cues of danger, can be recognized and over time become more abundant. One of the ways to reshape your system is to first bring perception to neuroception and then add context through the lens of discernment. Bringing attention to the present moment invites you to consider the origins of cues of danger. Has a cue from the past reached into the present? While it was a necessary survival response when it first activated, is it needed now?

MINI EXERCISE

Stop for a moment to notice your neuroception. Take in the

environment through sight and sound. See the people and things around you.

What are the cues of safety and danger? Are there enough cues of safety to bring you into a readiness for connection? Or do the cues of danger keep you poised for protection?

Use this question to look through the lens of discernment: In this moment, with this person, in this place, surrounded by these things, are you actually in danger, or are you safe?

BACK TO BEGINNINGS

Neuroception launches a cascade of embodied events that become a story. When entering into an autonomic state, the information about that state travels up the autonomic pathways to the brain. There, a story is created to make sense of the experience. The physiological state creates a psychological story. Using the metaphor of a river, imagine the flow of experience. At the river's source is neuroception and at the river's mouth is the story. In between lie perception, autonomic state, feelings, and behaviors (Figure 2.1).

FIGURE 2.1. From Neuroception to Story

We're accustomed to entering the river downstream with feelings, behavior, or story. But neuroception happens at the farthest point upstream. You need to make your way back to the starting point, leaving behind story, behavior, and feelings to identify the state and bring perception to neuroception. It is when you travel back upstream to consider neuroception that you become aware of how your internal surveillance system begins the sequence of events that eventually leads to the way you are feeling, acting, and thinking.

Attitudes, actions, and the way you see the world are the result of the autonomic nervous system moving between states of connection and protection. The stories you inhabit begin far away from the thinking brain in the autonomic nervous system with a neuroception of safety, danger, or life-threat.

MINI EXERCISE

Bring to mind an experience and make your way to the river's source. Bring perception to the neuroception that was the starting point. What was the cue of safety or danger that you followed downstream into feeling, behavior, and finally story?

Through understanding the process of neuroception, you can begin to honor the ways the autonomic nervous system listens and acts in service of your safety and survival. Knowing that neuroception shapes the first part of your story, you can begin to listen in new ways and learn to become a skilled story editor.

CHAPTER 3

CO-REGULATION

We cannot live only for ourselves. A thousand fibers connect us.

—HERMAN MELVILLE

Connection is a biological imperative, vital to our survival (Porges, 2015a). Through our biology, we are wired for connection. Our autonomic nervous system longs for connection with another system and sends signals out into the world, searching for signals in return. By means of co-regulation, the third organizing principle of Polyvagal Theory, we connect with others and create a shared sense of safety.

WIRED FOR CONNECTION

Belonging to a group or being part of a tribe has been a survival strategy throughout evolutionary history. Humans are social beings "and our nature is to recognize, interact, and form relationships" with others (Cacioppo & Cacioppo, 2014, p. 1). We find purpose in our

social connections and when our belongingness needs aren't met, we feel less meaning in our everyday lives (Stillman et al., 2009). Connection is a wired in biological necessity; isolation, or even the perception of social separateness, leads to a compromised ability to regulate our autonomic states and impacts our physical and emotional well-being (Porges & Furman, 2011). When we feel alone in the world we suffer. When that feeling is chronic, medical and mental health risks multiply. Cardiovascular disease and death, an exaggerated inflammatory response, cognitive decline, sleep disturbance, and depression are just some of the consequences of being stuck in a loneliness loop (Cole et al., 2015; Hawkley & Cacioppo, 2010).

Beginning with the way we are welcomed into the world the autonomic nervous system starts to build a story about relationships. How much of that story is about connection and how much is about protection depends on whether we have regulated and regulating people surrounding us. At birth we move from anatomical connection through the umbilical cord to autonomic connection through face-to-face, nervous system to nervous system co-regulation. Kangaroo care, skin-to-skin contact between mothers or fathers and babies, has become common practice in hospital nurseries and neonatal intensive care units. Positive outcomes for babies include heart, breathing, and temperature stabilization; more organized sleep; rapid improvement in state organization; and parents report feeling more sensitive to their babies and more able to adapt to their baby's signals (Jefferies, 2012). In these earliest interactions, babies depend on their caregiver to bring a regulated nervous system to the connection.

In attuned parent-child relationships, parents recognize their child's changing autonomic needs and respond appropriately. In this co-regulation of autonomic states, there is a shared autonomic experience, a shared emotional experience, and a shared experience of safety. The attuned dyad creates a biological synchrony that forms the foundation for navigating interpersonal relationships (Manini et al.,

2013). Uninterrupted attunement isn't necessary to develop a regulated autonomic response system. In fact, that match needs to happen only about a third of the time (Ostlund et al., 2017; Tronick & Gianino, 1986). The essential ingredient is what happens after the mismatch. A regulated, flexible, and resilient system is built when the ruptures are recognized and repairs are made.

The ability to self-regulate is built on ongoing experiences of co-regulation. Yet, even as we develop self-regulating capacities, the need for social interaction and co-regulation remains throughout our lifetime (Porges & Furman, 2011). We depend on the people around us for co-regulation and try to offer experiences of co-regulation in return. Sometimes, however, rather than a co-regulating experience we find we are engaged in mutual dysregulation. We follow a friend into anxiety, lose hope along with our partner, or find ourselves in a state of opposition to others.

MISSED CONNECTIONS

When there is ongoing misattunement, when ruptures aren't recognized and repaired, the autonomic experience of persistent danger shapes the system away from connection into patterns of protection. Loneliness is a subjective experience. It emerges not from the objective facts of social isolation but out of a perception of social isolation (De Jong Gierveld & Van Tilburg, 2010). Loneliness is a common human experience. A study of 20,000 people in the United States (Cigna U.S. Loneliness Index) found that 46% reported feeling lonely sometimes or always, 46% reported feeling left out sometimes or always, and only 27% feel as if they belong to a group. A 2017 survey in Britain (Jo Cox Commission on Loneliness) found over nine million people reported feeling often or always lonely. Loneliness prompts us to reach out to others but can also activate patterns of protection (Cacioppo & Cacioppo, 2014). We feel both the pull to connect and the fear of rejection. Cues of danger and life-threat

interrupt the ability for co-regulation and the creation of relationships (Porges & Carter, 2017). When we move into hypervigilance for threat, it's difficult to send signals of welcome to others. Through the cues of safety and danger we send out into the world people feel our *social temperature*—warm and welcoming, hot and bothered, or cold and calculating (Ijzerman et al., 2012).

MINI EXERCISE

Think about the people in your life and consider which connections are most often co-regulating and which more often bring mutual dysregulation.

– When do you feel an autonomic match?

– When do you feel an autonomic mismatch?

Social connection is the subjective experience of being connected to others (Seppälä, Rossomando, & Doty, 2013). Social support on the other hand may be an exchange relationship in which services, information, and advice are offered. While social support has a necessary place in your life, if you don't also experience social connection, you can feel a deep sense of loneliness. In fact, in studies of social support it appears that it is the quality and not the quantity of the support that impacts life satisfaction (Utz & Breuer, 2017). Interestingly, studies indicate that *perceived* social support shows higher correlations with well-being than *received* support (Utz & Breuer, 2017). When offers of social support and acts of social interaction include the sense of companionship, then co-regulation and social connection ease the sense of loneliness. When social support is being delivered from a state of misattunement, then the autonomic experience is one of needing protection from harm (Porges, 2012). It's the "perception of safety [that] is the turning point in the

development of relationships . . .” (Porges, 2003, p. 39).

MINI EXERCISE

Take a moment to consider the people around you. Notice which category (support or connection) people belong in. Some people may be in one category while others may be in both.

– Who is in your social support network?

– Who do you feel socially connected to?

RECONNECTING

The research on loneliness proves what your autonomic nervous system knows; you need social connection and suffer both physically and emotionally when you don’t experience enough of it. The UCLA Loneliness Scale, a 20-question survey that you can locate easily on the internet, assesses the perception of social isolation and is used extensively in research. One way to begin to consider your experience of loneliness is with the short, three-item version of this scale:

On a scale of Hardly ever, Some of the time, Often,

1. How often do you feel that you lack companionship?
2. How often do you feel left out?
3. How often do you feel isolated from others?

According to Porges (2016, p. 5), “Survival is dependent on opportunities to successfully co-regulate.” With enough experiences of co-regulation you become able to successfully self-regulate as well. He goes on to state that “ . . . a history of successful and predictable co-regulation tunes the nervous system to be sufficiently resilient to function during periods of separation” (Porges, 2016, p. 6). With this

understanding of co-regulation and self-regulation comes the recognition that being alone does not always equate with feeling alone and being alone is not always an experience of suffering. When you suffer from loneliness, being alone means being isolated, but with a foundation of social connection and predictable opportunities for co-regulation, you can safely enter into the experience of solitude. “[Language] has created the word ‘loneliness’ to express the pain of being alone. And it has created the word ‘solitude’ to express the glory of being alone” (Tillich, 1963). What are the autonomic differences between isolation and solitude? Isolation arises from a state of protection. This may be the sympathetic nervous system mobilizing a desperate search for connection or the dorsal vagal system bringing a collapse into despair and disconnection. On the other hand, solitude is a ventral vagal–resourced experience of choosing to be alone and feeling a sense of peace in the separateness.

MINI EXERCISE

– When do you feel lonely?

– When do you feel the sweetness of solitude?

If a core component of well-being is the predictable opportunity for co-regulating relationships, then trauma might be described as the chronic disruption of connectedness (Porges, 2014). Trauma creates ongoing adaptive survival responses that keep the autonomic nervous system from finding safety in connection. Without experiences of co-regulation, and without trust that ongoing opportunities for co-regulation are available, the autonomic pathways that support moving out of protection into connection aren’t exercised and strengthened. The autonomic nervous system remains on guard, ready to act in service of survival. When two people co-regulate and share a state of

safety, their autonomic nervous systems create the possibility for health, growth, and restoration. Within a co-regulated relationship, your quest for safety is realized and you can create a story of well-being.

SECTION I **SUMMARY**

> *If civilization is to survive, we must cultivate the science of human relationships.*
>
> —FRANKLIN D. ROOSEVELT

Life is experienced from the inside out through neuroception and state changes and from the outside in through co-regulating or dysregulating connections with others. Experiences are carried in autonomic pathways: trauma stories rooted in states of sympathetic and dorsal vagal dysregulation and stories of well-being anchored in the ventral vagal state of safety and connection.

The autonomic nervous system is designed to help you successfully navigate the challenges of daily living. Formed through the history of human evolution and individually shaped by day-to-day experience, the autonomic nervous system continuously assesses risk, inhibiting some responses while initiating others, all in service of survival. Cues of safety and danger, often outside of your awareness, activate autonomic states that are translated into patterns of protection or connection. Through the lens of Polyvagal Theory, these experiences of moving toward or away from people, places, and things become understandable and predictable.

The autonomic nervous system shapes the ways you experience your life. Through your physiology, you hear the call to connect and feel an autonomic response. Where does your autonomic nervous system take you? Moving toward or backing away? Extending a hand or clenching a fist? When you learn to partner with your autonomic

nervous system, you can reshape the system and rewrite your stories. When you are anchored in a state of ventral vagal safety, you can open the door to change.

SECTION II

NAVIGATING AUTONOMIC PATHWAYS: THE BASIC APPROACH

There is more wisdom in your body than in your deepest philosophy.

—NIETZSCHE

OVERVIEW: THE BASIC FRAMEWORK

How can you recruit the power of the autonomic nervous system not only in service of survival but also in service of healing? Using the same physiological processes that shape the system, it is possible to move out of habitually activated reactions and bring flexibility back to a system that has become rigid in patterns of protection. Following the organizing principles of Polyvagal Theory, you can help your clients reshape their systems and rewrite their stories.

The BASIC framework—Befriend, Attend, Shape, Integrate,

Connect—helps your clients develop skills in autonomic regulation leading to increased flexibility of response and resilience. Repatterning the nervous system depends on bringing explicit awareness to implicit experiences, interrupting automatic response patterns, and engaging the ventral vagal safety circuit.

Befriend. Transient experiences of disconnection from the body are common in the general population and prevalent with your clients who have experienced traumatic events. The greater the awareness of body-based feelings, the more control your clients have over their lives. Befriending is learning to *tune in and turn toward* autonomic state and story with curiosity and self-compassion.

Attend. Attending practices create the ability to name autonomic states, track the movement between states, and develop a moment-to-moment habit of noticing large shifts and nuanced changes. Learning to attend to these autonomic experiences sets the stage for shaping the system.

Shape. Trauma interrupts the ability to regulate autonomic state and flexibly transition between states. Just as the brain has the capacity to rewire, the autonomic nervous system can also establish new patterns. Shaping the system away from habitual survival responses into patterns of connection involves bringing mindful attention to practices that increase the capacity for staying anchored in the ventral vagal system.

Integrate. Through the lens of the autonomic nervous system, resilience is the ability to return to ventral vagal regulation following a move into sympathetic mobilization or dorsal vagal shut down. Autonomic state shifts in response to the challenges of daily living are a normal and expected experience. For many

people, the shifts are slight, and even in the moments of large-scale changes there is enough resilience to return to a regulated state. For others, the response is extreme and a return to regulation is unreachable. Integrating brings attention to the new autonomic patterns that are emerging and engages them to shape new, resilient pathways.

Connect. The autonomic nervous system shapes the way we connect. The way your clients experience self, create relationships, and move through the world is built through their autonomic pathways. With new abilities for regulation, creating safe connections is possible.

When the autonomic nervous system has been shaped by trauma, there is often a disconnection between physiological state, psychological story, and behavioral response. Cues of danger seem to be everywhere and the smallest reminder of a traumatic experience activates a survival response. The ability to find regulation in the ventral vagal state is compromised. This leaves your clients unable to either become quiet and calm or activated and outspoken without moving out of connection into a state of protection (Williamson, E. C. Porges, Lamb, & S. W. Porges, 2015). When the regulating influence of the ventral vagal system is missing, your clients feel as if they are locked in a state of protection, unable to either reach out or let anything in. Interrupting the automaticity of a response pattern through awareness supports the process of change (Neal, Wood, Wu, & Kurlander, 2011). Bringing perception to neuroception mobilizes higher brain structures and stimulates awareness. With awareness, your clients can see cues in present time rather than through the lens of the past.

It’s important to help your clients cultivate a ventral vagal–powered attitude of self-compassion when working with the BASIC exercises. Self-compassion can reduce sympathetic activity and bring

increased ventral vagal flexibility in responding to stressful situations (Homan & Sirois, 2017; Kirby, Doty, Petrocchi, & Gilbert, 2017; Luo, Qiao & Che, 2018). Self-criticism activates ancient defense systems that take your clients out of safety into a state of protection. From a survival state, access to higher levels of thinking is impaired, reflection is replaced with reaction, and the ability to engage in the process of change is shut down. Self-compassion offers your clients a safe pathway to explore their autonomic response patterns.

HOW TO USE THE EXERCISES IN THIS SECTION

Research on the way humans make and sustain change highlights the importance of having confidence in the ability to change, having positive beginning experiences of change, and having a belief that with practice change takes less effort to sustain (Lally, Wardle, & Gardner, 2011). Following a process of making and repeating small changes brings these possibilities to life.

Chapters 4–8 offer exercises to introduce to your clients during sessions, with the intention that they will continue to work on their own between sessions. The exercises are designed to bring autonomic patterns into explicit awareness, and it is helpful for clients to use a notebook or journal as a way to track changes. Grounded in the clinical philosophy that therapists don't ask their clients to do anything they have not already tried I encourage you to complete the exercises yourself before inviting your clients to try them. The BASIC framework is designed so the exercises in one chapter build the foundation for the next. A natural confidence emerges as your clients begin to engage new autonomic patterns that support well-being. My suggestion is that you go through the chapters with your clients in order. Sometimes, though, you may decide that a client would benefit by engaging in a specific exercise at a certain point in your work. You could choose to introduce the exercise out of sequence and then return to earlier exercises. The exercises are not meant to be a one-and-done

activity. The goal is for your clients to use the exercises over time to create competence and confidence with a specific skill and then select certain ones to become ongoing autonomic practices.

Personal progress trackers for Chapters 4–8 are found in the Appendix. These are designed to track the subtle shifts that are an integral part of autonomic change. Invite your clients to use the personal progress trackers on their own and also follow your clients' progress by periodically using the trackers to check in during your sessions. Change is not an event but rather a lifelong process and autonomic reorganization is ongoing. The personal progress trackers are a way for your clients to routinely check in with the ever-changing state of their systems.

EXPECTED OUTCOMES

The BASIC framework guides your clients into a new experience of actively engaging with their autonomic nervous systems. The exercises offer opportunities for your clients to experiment with skills to navigate differently. Over time, new skills become sustainable practices. As your clients learn to partner with the autonomic nervous system, they feel more competent and more confident, and they experience the well-being that comes from living with an integrated body-mind system. With greater capacity for staying anchored in ventral vagal regulation, clients discover they have an expanded ability to feel safe and connect to the inherent wisdom of the autonomic nervous system. For many clients this is the longed-for therapeutic outcome and once they are able to predictably regulate, they are ready to move on. For other clients, this is the platform that supports moving deeper into trauma processing. For all clients, engaging in the Befriend, Attend, Shape, Integrate, and Connect exercises builds the ability to look through the lens of the autonomic nervous system and recognize what is happening, find a toehold in ventral to be able to regulate and respond in a different way, and begin

to write new stories of safety and connection.

CHAPTER 4

BEFRIENDING THE AUTONOMIC NERVOUS SYSTEM

The first step toward change is awareness. The second step is acceptance.

—NATHANIEL BRANDEN

How do you help your clients learn to tune in and turn toward their bodies and, in particular, the autonomic nervous system? Befriending establishes the ability to safely feel autonomic states, identify individual aspects of each state, and activate and maintain curiosity and compassion during the process. Many of your clients live in their stories, disconnected from the body states from which those stories emerge. And as van der Kolk (2014) reminds us, "You can be fully in charge of your life only if you can acknowledge the reality of your body, in all its visceral dimensions" (p. 27).

By putting things in categories, your clients' perception of them changes and they gain expertise in recognizing and differentiating between them (Petersen, Schroijen, Mölders, Zenker, & den Bergh,

2014). “Sensing, naming, and identifying what is going on inside is the first step to recovery” (van der Kolk, 2014, p. 68). Recognizing sympathetic mobilization and dorsal vagal immobilization as adaptive survival responses triggered by too many cues of danger and not enough cues of safety helps your clients reappraise their responses as actions in service of survival. Research shows that rethinking states of arousal as functional responses reduces the intensity of activation and supports a connection to regulating resources; thinking about physiological activation as a resource to meet a challenge brings positive outcomes (Jamieson, Nock, & Mendes, 2011). The simple act of labeling responses impacts autonomic activity and likely supports vagal function (Kanbara & Fukunaga, 2016).

When your clients learn to mindfully meet their autonomic nervous systems, bring compassion to their embodied experiences, and honor each autonomic response, they have begun to befriend the nervous system. The befriending exercises are presented in three categories: Accurate Autonomic Awareness, the Art of Befriending, and the Practice of Reconnecting. Accurate Autonomic Awareness presents one exercise to help your clients create personal archetypes of each state and a second exercise that brings ventral vagal experiences into concrete usability. The Art of Befriending offers your clients exercises to deepen the connection to their autonomic hierarchy through the use of art, writing, and movement. The final section, the Practice of Reconnecting, offers four exercises to explore the range of responses possible within each autonomic state.

ACCURATE AUTONOMIC AWARENESS

Before your clients can explore new ways to regulate, they first need to recognize their autonomic state. The ability to regulate is dependent on how accurately incoming information is interpreted. Being able to correctly identify autonomic states is the necessary first step in the process of shaping the system in a new way.

EXERCISE

Autonomic Landmarks—Stories of Landmark Moments

This exercise is a good way to introduce clients to recognizing autonomic responses by focusing on key experiences. Clients can write their experiences in their journal and share them with you during a future session.

BACKGROUND

Landmarks give structure to our environments, forming cognitive anchors, marking points of orientation, and becoming references for communication. Autonomic landmarks are the internal reference points that mark the experience of states. We have personal landmarks that represent the embodied experience of a state and are stored in our memory. This is a moment that stands out from all the others, a moment you can look back on as a defining experience of an autonomic response. Identifying the landmark moment for each state is a way to quickly bring the properties that personify the state to mind.

STEPS

1. What are the stories of your dorsal vagal (collapse or shutdown), sympathetic (fight or flight), and ventral vagal (safe and connected) landmark moments? To make it easier to think about your states, you can give them descriptive names in addition to the physiological ones. Take time to look back and locate the moments in your memory. Find the times that stand out and become the archetype for each state.
2. Landmarks are recognizable by their names and characteristics. Write a story describing the landmark moment. Make sure to identify the concrete details of what happened, how you responded, what your body felt like, and what you thought.
3. When you are done, read through the story and identify the crucial moment. Use this to give the story a name.

TIPS

Identifying clients' key autonomic moments and giving them a name can create useful anchors to use during therapy sessions as you explore your clients' experiences. Your clients may benefit from examples of stories to get a feel for the experiences to explore (the autonomic hierarchy from dorsal vagal to sympathetic to ventral vagal) and the level of detail for their descriptions. You can provide your own examples or use the following ones.

Dorsal Vagal Bowl-Shattering Moment: In my commitment to eating in a healthier way, I took time to make a salad for lunch. I used the special bowl that I brought back from France and enjoyed cutting up and layering vegetables making a lunch that was nutritious and looked inviting. As I walked out of the kitchen, my arm caught on the counter and I dropped the bowl. It shattered, spreading vegetables and pieces of pottery across the floor. I stood there unable to move, just staring at the mess, and then walked to the living room and sat down on the couch. It felt like an overwhelming disaster, not a dropped bowl of salad, and I went into a full collapse. I sat and stared and felt numb. The only thing I could say was "I'm done"—without even knowing what that meant. It took 15 minutes to begin to feel the stirring of enough energy to clean the kitchen floor. Lunch was a thing of the past and my attention was now focused on simply putting one foot in front of the other. While the intensity of collapse I experienced in response to the accident made no sense in isolation, in a larger context it was the last straw for my nervous system that couldn't keep up with the overwhelming demands of daily living. This "bowl-shattering moment" is for me the epitome of a dorsal vagal experience.

Sympathetic Jack-in-the-Box: I learned growing up that it was safer to be seen and not heard—ever. I've worked hard to find my voice as a grown-up, and now, instead of the shutdown experience of my childhood, when I feel someone is minimizing my experience, I'm immediately mobilized to fight. I'm like a Jack-in-the-Box—coiled tight and ready to spring. I feel the lever turning and then I pop. The moment that sticks in my mind is a phone call with my brother during the holidays. I had been estranged from my sister for some time and my brother made an innocent comment about holidays and families being together and POP! I stopped hearing what he said, hung up on him, and threw the phone. When I regained

enough regulation to look back on that moment, I knew it wasn't what my brother said, it was that my rupture with my sister was unacknowledged and my experience dismissed.

Ventral Vagal Wise Woman: I was on a 2-week meditation retreat struggling with doubt, fear, self-criticism, and boredom—all the kinds of feelings that find their way into awareness when you sit silently for hours a day. One day, when I was sitting with tremendous sadness, I saw the image of an old woman silently sitting in a warm, dark room, next to an enormous, glowing, pulsing shape that I knew was my own heart. In that moment I knew there was nothing in the world that would stop her from sitting next to that heart. Her presence was unconditional. Her warmth and regard unchangeable. She was sitting with my heart. The tremendous sadness I was feeling didn't go away, but it was somehow eased and seen in such a way that I wasn't burdened by it anymore. For me, in that moment, *being with* became the essence of the ventral vagal state.

Encourage your clients to explore the details of their experiences. If they have trouble getting in touch with a state, talk with them about some of their memories. Have them write a few words, short phrases, or sentences to begin their landmark story. They can then take their beginning story home and continue the work on their own. You can return to this exercise the following week(s) and revisit it later in the therapy process to expand your clients' stories and understanding.

EXERCISE

Ventral Vagal Anchors—Anchoring in Safety

This exercise helps your clients identify the experiences that anchor them in a ventral vagal state, using the categories of who, what, where, and when. Invite your clients to work on this at home and share their anchors with you during a session. This is an exercise to return to as your clients add ventral vagal anchors and update their lists.

BACKGROUND

The Merriam-Webster dictionary defines an anchor as “something that serves to hold an object firmly; a reliable support.” A ventral vagal anchor holds the connection to the energy of your ventral vagal system when experiences threaten to pull you into a sympathetic or dorsal vagal state. Your ventral vagal anchors help you find the way back to regulation and stay there. These are autonomic cues of safety that can be found in the categories of who, what, where, and when. You can use your anchors by reconnecting to the anchor or by activating the memory of the anchor. With regular practice, ventral vagal anchors strengthen your capacity to return to regulation.

STEPS

1. **Who.** Reflect on the people in your life and make a list of the ones who bring you a feeling of being safe and welcome. You might also have a pet who fills that role. First identify a person or pet who is present in your life. Then, if you wish, you can expand your search to also include people who are no longer living, people you haven’t met but who bring your ventral vagal state alive, and spiritual figures.
2. **What.** Think about what you do that brings your ventral vagal state alive. Look for small actions that feel nourishing and inviting of connection. Keep track of the things that bring moments, or micro-moments, of ventral vagal regulation.
3. **Where.** Take a tour of your world and find the physical places that bring you cues of safety. Look around your home, your neighborhood, your community, your workplace, a place you feel a spiritual connection. Bring to mind the everyday places you move through. Take note of the environments and name the ones that activate your ventral vagal state.
4. **When.** Identify the moments in time when you feel anchored in your ventral vagal energy. Take a moment to go back and revisit those experiences. Bring them into conscious awareness and write them down.
5. **Create a portfolio of your ventral vagal anchors.** Decide how you want to gather your anchors together in one place: write them in a notebook, illustrate them in a journal, make a list and hang it

in a prominent place, write on sticky notes and put them around your home and at work in places that are easy to see. Experiment and find the way that works for you, making sure you have easy access to your anchors.

TIPS

You might share your own anchors to prompt your clients, or they may readily identify anchors on their own. The following are some examples of anchors in each category that can be used to start the exploration.

Who: Sometimes one person is identified as an overarching anchor.

- My old friend from childhood is my anchor. I have been sharing stories with her for almost 60 years and know I can count on her to be there no matter what I need.
- At other times different people are identified as anchors for specific kinds of moments.
  - I have someone who is my “happy moments” anchor, someone who is my “angry moments” anchor, and someone who is my “lonely moments” anchor.
  - I have a person who is an anchor in my professional world and another person who is a personal anchor.

What:

- My walk to work, checking my horoscope, looking out the window, holding my lucky stone, watering my plants

Where:

- By the ocean, at my local coffee shop, under my favorite tree, in my car, at my friend’s house, in the kitchen, in the garden

When

- The very early hours of the morning, climbing into bed at the end of the day, Sunday afternoon, in the evening when the kids are asleep, leaving work and heading home

Just as the ancient Greek philosopher Epictetus wisely recommended that we not moor a ship with one anchor, having a variety of ventral vagal anchors to choose from makes it easier to find an anchor to hold onto when needed. During the course of therapy, you've probably heard your clients identify anchors (although not named in that way), and they can bring their awareness to those. Many clients begin by finding one anchor in each category and add more as time goes on. Because trauma often happens in relationships, the *who* category can be the most challenging for your clients. In the beginning, they may not have safe, regulated people in their lives and may identify you as the person who is their ventral vagal anchor.

THE ART OF BEFRIENDING—AN ILLUSTRATED HIERARCHY

The autonomic hierarchy can be visualized in many ways. The autonomic ladder presented in *The Polyvagal Theory in Therapy* (Dana, 2018) is one way that has proven to be easy to understand and use.

Art, writing, and movement are other options for your clients to get to know the autonomic hierarchy. Art is a means of self-expression and communication that supports experiencing emotions in a safe way (McPherson, Barrett, Lopez-Gonzalez, Jiradejvong, & Limb, 2016). Making visual art has been shown to have an impact on resilience (Bolwerk, Mack-Andrick, Lang, Dörfler, & Maihöfner, 2014) and is a way to explore, understand, and express experiences that may be difficult to put into words (Stuckey & Nobel, 2010). Writing brings together cognition, emotions, and biology and offers a new way of understanding experiences of self (Pennebaker, 2018) while movement has been shown to support self-awareness (Stuckey & Nobel, 2010). Once your clients have a feel for the states of the autonomic nervous system, the ways to illustrate the hierarchy are unlimited.

EXERCISE

Befriending the Hierarchy

This exercise uses a simple vertical line to represent the hierarchy. Clients explore a variety of design options and a range of ways to illustrate their personal experiences of moving between states. Invite your clients to work on these at home and bring their completed designs to sessions.

BACKGROUND

With the ability to name your states and recognize the shifts that happen between states, you can represent your experience of moving along the hierarchy. Portraying these movements in different ways expands that connection. As you engage in the process of designing hierarchies, you are engaging in an act of befriending.

STEPS

1. Draw a vertical line, divide it in thirds, and mark the three states (ventral, sympathetic, dorsal, or the words you choose to name your states).
2. Imagine moving along that line and feel the autonomic state shifts.
3. Illustrate the small increments of change that happen as you travel down and up the hierarchy using:
   - color to represent your states and transitions from state to state, blending shades to illustrate the full range of the autonomic hierarchy
   - words to label the continuum of your experience from dorsal through sympathetic to ventral
   - photos of faces to show the many ways your states are expressed
   - images of animals to represent states
   - pictures of places that bring the points along the continuum to life
   - nature scenes that portray the many stops you make along the hierarchy

- names of songs that carry the energy of states

4. Create a few illustrated hierarchies to get a sense of how different designs work for you. See if you resonate with one particular way of representing the hierarchy or if you connect with several different styles.
5. Choose one or more hierarchies and create an ongoing practice of using it (or them) to find your place and name your state.

TIPS

Encourage your clients to create their first hierarchy using the style they feel most comfortable with and then experiment with other designs. Have them share their completed hierarchies in session. Discuss how they connect with each and compare their autonomic experiences.

EXERCISE

Autonomic Trees

This exercise is a multifaceted way to help clients safely create connection to their autonomic states. Three modalities—art, writing, movement—are used to help clients come into connection with their regulated and reactive responses in new ways. Clients can create variations at home and share their different autonomic expressions in sessions.

BACKGROUND

A tree is a commonly used metaphor. The tree of life is often used to illustrate both evolutionionary processes and patterns of relationships. Using a tree metaphor, you can investigate your autonomic experiences: with trees representing regulated responses and ones representing reactive systems. There are many ways to dive into discovering the qualities of autonomic trees, and each brings its own pathways to befriending the embodied experience of your autonomic nervous system.

Art: Making art is a safe way to explore autonomic states. Creating

images of regulated and reactive trees invites you to bring your autonomic states to life and befriend them through color and design.

Writing: Sitting down to write the stories of regulated and reactive autonomic trees requires a stance of curiosity that lends itself to befriending.

Movement: Imagined or enacted movement is a way to feel the rhythms of your regulated and reactive trees. Autonomic trees can feel as if they are stomping and swaying, their trunks bending or twisting, their branches reaching up and out, and their spring buds emerging or autumn leaves falling.

STEPS FOR AUTONOMIC TREE ART:

1. Set up your creative space. Gather various-sized papers and other art materials.
2. There are thousands of species of trees, many living only in one specific place in the world. Your regulated and reactive trees live in your personal world and have their own unique characteristics. Visualize their roots, branches, and leaves. See their forms, shapes, and colors.
3. Create your trees. You might design one tree that illustrates all three states, one regulated and one reactive tree, or a family of regulated and reactive trees (Figure 4.1).

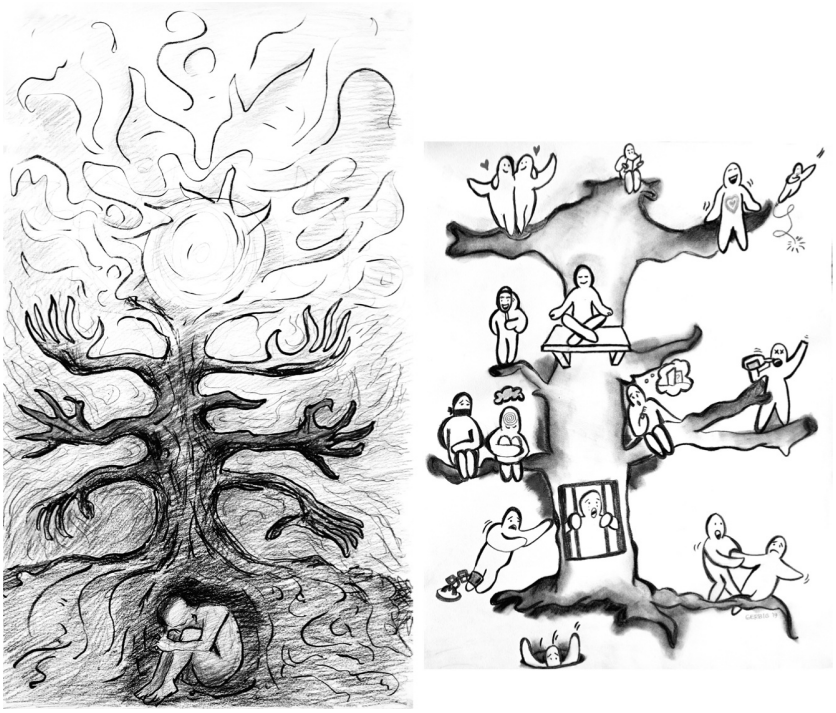

FIGURE 4.1. Autonomic Tree by David Keevil; Autonomic Tree by Rebecca Gerbig

4. Reflect on your designs. What autonomic experiences do they represent?
5. Periodically return to your trees and connect to your personal tree kingdom.

TIPS

Clients' art trees are useful tools to explore ventral, sympathetic, and dorsal states. Because the images can be brought to life quickly, they become easy reference points to use in sessions.

STEPS FOR WRITING TREE STORIES

1. If you have created your tree maps, you can use those as an entry point for listening. Otherwise, bring your regulated and reactive trees to life by focusing on an internal image.
2. Use the following prompts to begin to write a story for each of your trees:
   - The (roots, trunk, branches) of my tree bring . . .

- When I sit under my tree, I . . .
- When I put my arms around my tree, I . . .
- When I listen to my tree, I hear . . .

3. Read your story and add any other information you want to complete it.
4. Give your story a title.

TIPS

Similar to art trees, clients can create tree stories for more than one regulated and reactive state. Have your clients share their tree stories with you. Get to know the particular words that are meaningful for each client as they describe their experiences of being with each tree. The act of reading a story and having a story read to you evokes different experiences. Invite your clients to read their tree stories to you and also read their tree stories to them. Explore what happens when they speak and hear their stories.

STEPS FOR MOVING TREES

1. Visualize your tree and feel its movement inside your body.
2. Either see the movement in your mind's eye or let the movement come into physical expression. Choose the way that brings a neuroception of safety.
3. Explore the ways your tree moves. Ventral vagal regulation is experienced in many different ways along the continuum of stillness to joy-filled passion. Reactivity includes both the intensity of sympathetic mobilization with fight and flight and the absence of energy in dorsal vagal disappearance, disconnection, and collapse.
4. Repeat the process with all of your trees.
5. Build an ongoing practice of moving with your trees.

TIPS

Regulated and reactive trees have a multitude of movements. Just as living trees are impacted by daily weather and changing seasons, the shifts in your client's *autonomic weather* affect their embodied trees and can be seen in the changing movements.

THE PRACTICE OF RECONNECTING

A common posttraumatic response is a sense of disconnection from the body. Since 80% of the information from the vagus is sent through afferent pathways from the body to the brain, learning to turn toward and listen in to what the autonomic nervous system is communicating is an important part of befriending.

EXERCISE

Body Language

Safe embodiment is a challenge for many clients, so introduce this exercise and experiment with it during a session where you are there to be a co-regulating presence. Once safety with this way of listening has been established, your clients can continue the practice at home.

BACKGROUND

With an ability to safely connect to your autonomic states and bring that embodied experience into explicit awareness, you have access to the important autonomic information that is guiding your daily experience.

STEPS

1. Find the place in your body where you feel most connected to your ventral vagal state. Bring the qualities of that experience into explicit awareness and add language to describe it.
2. Find the place in your body where you feel most connected to your sympathetic state. Bring the qualities of that experience into explicit awareness and add language to describe it.
3. Find the place in your body where you feel most connected to your dorsal vagal state. Bring the qualities of that experience into explicit awareness and add language to describe it.
4. Connect to the three places in your body where you identified feeling each state most fully. Move from one place to another. Feel the ways your experience changes as you shift your focus.
5. Connect to your ventral vagal state of safety and connection. Tune

5. Connect to your ventral vagal state of safety and connection. Tune in to how this is expressed in your body. Identify the qualities of your breath, muscle tone, and posture. Track the flow of energy throughout your body and notice any movements connected with this state.
6. Move to your sympathetic nervous system and consider the activation of the mobilizing energy of fight and flight. Tune in to how this is expressed in your body. Identify the qualities of your breath, muscle tone, and posture. Track the flow of energy throughout your body and notice any movements associated with this state.
7. Move to your dorsal vagal state and consider the ways collapse and shutdown are experienced. Tune in to how this state is expressed in your body. Identify the qualities of your breath, muscle tone, and posture. Track the flow of energy throughout your body and notice any movements associated with this state.
8. Move from state to state and notice the changes that happen. Become familiar with the ways your body moves through states.

TIPS

Bringing safe awareness to the embodied experiences of states is more challenging than working with cognitive awareness. This is an exercise where *small and often* is an important guideline. Support your clients in listening for small moments to make connecting to this autonomic information a natural, uncomplicated, and ordinary practice.

EXERCISE

The Continuum Between Survival and Social Engagement

This exercise brings explicit awareness to the experience of being safe and engaged or disconnected and in danger. Since this is often experienced as an either/or event, the use of a continuum helps identify the subtle autonomic shifts that happen between the two opposite ends of experience.

BACKGROUND

Between the two ends of autonomic responses, there are many points along the way. Some bring a nuanced experience of an autonomic shift while other points are where you make a bigger step from one state to another. Using a continuum is a way for you to map the progression of small steps that connect two opposite end points. To create this continuum, bring focused attention to the particular ways you move between protection and connection.

STEPS

1. Draw a horizontal line and name the two ends of your continuum. What is your label for engagement? What is your label for disconnection?
2. Start at either end. Identify the first small step out of that state toward the other end. Repeat this, marking small steps along the way until you reach the other end.
3. Mark the midpoint where you feel the larger shift from connection to protection. The midpoint is a good way to identify this moment of change.
4. Remember you are always moving along this continuum, sometimes firmly planted in one place and other times pulled from one end to the other. Stop and see where you are. Use the midpoint to first see if you are on the side of protection or closer to the state of connection. Then identify more precisely where you are on your range of responses.
5. Return to your continuum and practice placing yourself on it until it becomes second nature for you to know where you are and in which direction your autonomic nervous system is taking you.

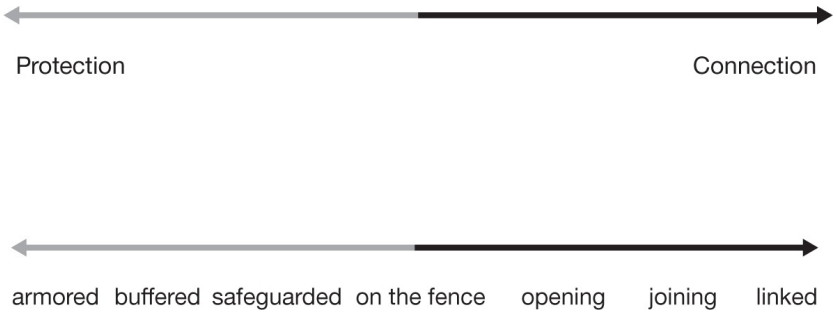

FIGURE 4.2. Between Protection and Connection Continuum and Example

TIPS

By using the continuum illustrated in Figure 4.2, your clients learn to see the flow of experience and move away from thinking in all-or-nothing terms. They create skill in feeling the nuanced shifts that lead to large scale changes. Once your clients have worked with this continuum, this becomes a useful template to create other continuums. Just identify a particular experience, name the two ends, find the midpoint, and then fill in the steps that lead from one end to the other.

EXERCISE

The Social Engagement Scale

This exercise is a way for clients to identify their personal experiences of the ebb and flow of social engagement that happens within the ventral vagal state. With the social engagement scale, clients are able to track the level of participation that is resourcing in the moment.

BACKGROUND

Rather than a straightforward on or off mode, the social engagement system can be online and bring a range of responses. Sometimes you may feel a pull to enter into conversations and at other times feel a deep contentment in sitting back and listening. One moment you may be moving in synchrony with another person, while the next brings the joy of being an observer. Between the two ends of engagement there are a variety of experiences. In addition to the expected everyday fluctuations, the capacity for social engagement is impacted by illness and wellness. In a state of illness, the social engagement system retracts, responding to the physiological demand to attend to internal conditions. In a state of wellness, the social engagement system is at work in the external environment, seeking and signaling readiness for connection.

STEPS

1. Use the scale to fill in your personal experience of the points between “open and engaged” and “internal and engaged.” Start by naming each end and then label the points between

naming each end and then label the points between.
2. Consider where you are right now. Stop and find your place on your scale.
3. Reflect on recent experiences and see where you were on your scale.
4. Look at when your place on the scale fits with the environmental and relational demands of the moment and when there is a mismatch.
5. Recognize any patterns to your placement on the scale. Look for people, places, and experiences that predictably take you to a certain point along the scale. Become curious about the characteristics of those interactions that activate that response. Get to know your personal social engagement profile.

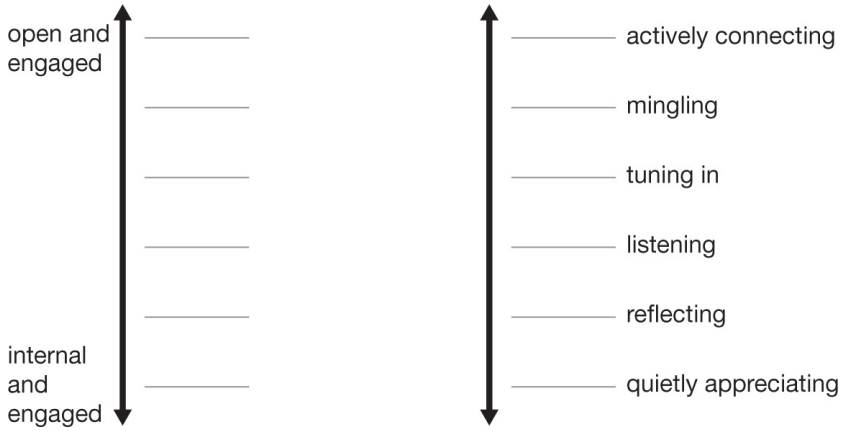

FIGURE 4.3. Social Engagement Scale and Example

TIPS

Clients often assume they are in a protective response and move into self-criticism when they are in fact nearer the “internal and engaged” end of the Social Engagement Scale. Help your clients understand the range of responses that are still within the state of ventral vagal safety. Using the scale shown in Figure 4.3, your clients can begin to bring curiosity and self-compassion to their personal patterns of engagement.

EXERCISE

A Neuroception Notebook

This exercise brings the implicit experience of neuroception into explicit awareness where it can be used to understand activation of autonomic states. Neuroception is working in the background below the level of awareness. Bringing perception to this flow of information is a foundational skill. This is a good exercise to introduce to clients early in the therapy process.

BACKGROUND

Neuroception, the messages the autonomic nervous system receives and records from inside your body, in the environment around you, and between you and other people, provides a valuable stream of information when brought to conscious awareness. When you bring perception to neuroception, you can find reminders of ventral vagal possibilities and identify moments of messiness and distress. Keeping a neuroception notebook is one way to bring explicit awareness to the ways the autonomic nervous system is working in the background shaping your life.

STEPS

1. Divide a notebook in sections for the three categories of neuroception: ventral vagal safety, sympathetic danger, and dorsal vagal life-threat. Use your own words to name the sections.
2. Carry the notebook with you and write in it as you feel your state shifting. Or create time at the end of the day to look back and reflect on your experiences.
3. Look for the specific cues that activated your state changes. Write down the cues of safety, danger, or life-threat you have identified.
4. Find any predictable patterns in the cues that move you toward connection or into protection.

TIPS

Tracking neuroception is an important skill. Introduce the neuroception notebook exercise in a session and then use it during the session. Stop several times to ask your clients to identify their neuroceptive experiences. With this practice, clients begin to bring explicit awareness to their implicit experiences. Have your clients continue to use their

notebooks to track experiences and routinely bring their notebooks to therapy to share with you what they are learning. Things that bring a neuroception of safety become resources while things that bring a neuroception of unsafety (sympathetic or dorsal vagal) often become a focus of therapy.

CHAPTER 4 **SUMMARY**

Know thyself.

—INSCRIPTION AT THE TEMPLE OF APOLLO AT DELPHI

The practice of recognizing autonomic states is a neural exercise and a step in the process of creating a more resilient system (Sullivan et al., 2018). As a physiological system, the autonomic nervous system doesn't attach moral meaning to states and state changes; it simply acts in service of survival. Through the skills of befriending, your clients learn to nonjudgmentally recognize the connecting and protecting actions of their autonomic nervous systems and bring curiosity to the patterns that have been created. The exercises presented in this chapter offer a guide to recognizing the full range of autonomic states. With ongoing practice, your clients build a habit of connecting with compassion. When you help your clients create a pattern of tuning in and turning toward without self-criticism, they build the important habit of befriending.

CHAPTER 5

ATTENDING TO AUTONOMIC STATES

Pursue some path, however narrow and crooked, in which you can walk with love and reverence.

—HENRY DAVID THOREAU

Attending is the ability to track autonomic states, see the movement between states, and create a moment-to-moment habit of noticing both large shifts and nuanced changes. For your clients, having an autonomic sense of where they are and where they are heading is the first step to finding their way home to autonomic regulation. Autonomic awareness can be thought of as a "protective factor for psychological well-being" (Fustos, Gramann, Herbert, & Pollatos, 2012, p. 915). The more skilled your clients are at autonomic attending, the more flexible they can be in their autonomic responding. The more attuned they are to their own physiology, the greater their ability to attune and be compassionate to others (Halifax, 2012).

Over a century ago William James described a "continuous

cooperation between the body and emotions" (1890, p. 192). More recently research has underscored the importance of the body-mind connection, noting that the "orientation of our emotional compass" is directly connected to our physiology (Furman, Waugh, Bhattacharjee, Thompson, & Gotlib, 2013, p. 780). The ongoing flow of information from the body to the brain influences the experience and intensity of emotion (Critchley & Harrison, 2013). Studies show that a reduced awareness of autonomic state results in decreased experiences of positive moments and more difficulty with decision making (Furman, Waugh, Bhattacharjee, Thompson, & Gotlib, 2013). Posttraumatic response limits awareness of autonomic responses and fosters a biological bias toward looking for cues of danger (Rabellino et al., 2017). Research on resilience shows that low resilience corresponds with less awareness of physiological signals, and an inability to monitor and use moment-to-moment autonomic information to guide decision making (Haase et al., 2015).

The experience and awareness of who you are is shaped by your physiology (Critchley & Harrison, 2013). You know yourself through your autonomic state, or as Internal Family Systems (Schwartz, 2001) might say, you know your "selves" through your autonomic state shifts. Chapter 5 is divided into five sections, offering your clients a variety of different ways to follow their nervous systems: Attending to the Nervous System, Attending to Autonomic Pathways, Playfulness, Rethinking Solitude, and Moments to Savor. Narrative writing has been shown to be an emotional regulator (Herbert, Sfärlea, & Blumenthal, 2013), and the exercises in Attending to the Nervous System use writing as a way to bring clarity to the many flavors of autonomic states and track moment-to-moment changes. Attending to Autonomic Pathways offers three exercises designed to move into awareness of how multiple pathways join to create a larger perspective. With an understanding that play and stillness are challenging for many clients, the Playfulness and Rethinking Solitude sections present exercises that help your clients explore how to create

conditions that support safe engagement with these experiences. Finally, Moments to Savor provides three exercises that bring into practice ways to connect with and deepen moments of ventral vagal regulation. Each of the exercises in these sections will help your clients begin to know *where* they are and *how* they are and help them get to know *who* they are.

ATTENDING TO THE NERVOUS SYSTEM

Autonomic state shifts sometimes activate a move down or up the hierarchy and other times bring subtle changes in the way a state is experienced and expressed. Your clients feel the shifts between states as their body systems respond, their behaviors change, and their stories reshape. The nuanced changes that happen within a state are more difficult to track and may go unnoticed. Helping your clients learn to first notice and then follow the changes that happen as they move within a state and between states brings attention to the ways the autonomic nervous system responds to meet their individual needs.

EXERCISE

Autonomic Alphabets

In this exercise, clients are asked to use the letters of the alphabet to move beyond the broad category descriptions of states and attend to the variety of experiences each state offers.

BACKGROUND

Looking beyond the primary description of a state creates an expanded understanding of the ways each of your states can be experienced. Finding the variety of flavors of each state encourages you to become aware of the subtle ways your states shift.

STEPS TO CREATING YOUR ALPHABET:

1. Find a word that begins with each letter of the alphabet to describe the qualities of your three autonomic states. (You may have to get creative with the letter X.)
2. Begin by creating your dorsal vagal alphabet.
3. Move up the hierarchy and create your sympathetic alphabet.
4. Continue to the top of the hierarchy and create your ventral vagal alphabet.
5. Use your alphabets. When you notice a familiar feeling, a quality you identified in one of your alphabets, stop and name the state. When you notice you are in a state, go to your alphabet and find the quality.

TIPS

Creating an alphabet is a way to look at the qualities of the three states from a safe distance. Once your clients have created their alphabets, you can then use them in sessions to attend to the nuance of states and shifts.

You may want to create your own alphabets to use with your clients, but samples are included here as examples to share.

Dorsal: Absent, Blank, Collapsed, Despairing, Exhausted, Foggy, Grim, Hopeless, Impenetrable, Judged, Knocked out, Lost, Missing, Numb, Overwhelmed, Pathetic, Queasy, Retracted, Shutdown, Terrified, Unloved, Void, Without, eXpressionless, Young, Zoned out.

Sympathetic: Alarmed, Buzzing, Claustrophobic, Deranged, Envious, Frightened, Grasping, Harried, Irrational, Judgmental, Knotted, Looping, Manic, Nasty, Overdoing, Pressured, Quick, Raging, Stuck, Troubled, Unwanted, Vibrating, Worried, eXtreme, Yearning, Zigzagging.

Ventral: Awesome, Benevolent, Courageous, Devoted, Eloquent, Free, Grateful, Happy, Joyful, Kind, Loving, Mellow, Nice, Open, Playful, Quiet, Relaxed, Skilled, Trusting, Uplifted, Vibrant, Whole, eXtraordinary, YES, in the Zone.

EXERCISE

Autonomic Names

In this exercise, clients are asked to use the letters of their name to move beyond the broad category descriptions of states and attend to the variety of experiences each state offers.

BACKGROUND

In Shakespeare's *Romeo and Juliet*, Juliet asks "What's in a name?" In fact, your name is often the first label you are given, and is an important way you identify who you are. Looking at your name through the qualities of autonomic states invites you to experience who you are in different ways.

STEPS TO WRITING YOUR NAME:

1. Use the letters of your name to describe who you are in a dorsal, sympathetic, and ventral state.
2. Create several autonomic name descriptions for each state and compare the effects.

TIPS

When your clients write their names using autonomic state descriptors, the exercise feels very personal and often brings connection to a larger story. Different words evoke particular flavors of a state. Invite your clients to write several variations of their names for each state and see what stories emerge. You can use your own name if you choose or here is my name as an example to share.

Name: *DEB*.

*Dorsal = **D**isconnected, **E**mpty, **B**roken*
*Sympathetic = **D**istracted, **E**rratic, **B**attling*
*Ventral = **D**elighted, **E**xcited, **B**enevolent*

EXERCISE

Autonomic Short Stories

This exercise is a way for clients to intentionally add narrative to an autonomic experience. The five prompts offer a structure for clients to connect body and brain, create an integrated story, and reflect on the ways autonomic activation begins the story-creation process.

BACKGROUND

Adding language to autonomic events is a way to become acquainted with states and state changes. The plots of your short stories illustrate a slice of an autonomic experience. This is a quick writing exercise designed to bring attention to a specific autonomic point in time and spend a moment getting to know it.

STEPS

1. Use these five prompts to write your autonomic short story. Spend no more than a minute or so on each.
   - My autonomic state is . . .
   - My system is responding to . . .
   - My body wants to . . .
   - My brain makes up the story that . . .
   - When I review my short story, I notice . . .
2. When you feel a state change, take a couple of minutes to listen in and follow the five prompts.
3. When you want to appreciate where your autonomic nervous system has taken you, follow the prompts and write a short story.
4. Track how your stories change as your autonomic responses begin to reshape.

TIPS

This is a good exercise to have your clients use regularly. The short stories offer your clients a way to notice both the impact of state to story and the ways their stories change as therapy progresses and their autonomic patterns begin to reshape. It is often a good idea to have your clients write their first stories with you during a session. After that, invite your clients write stories at home and share them with you in their

your clients write stories at home and share them with you in their sessions. Remind your clients this is a quick dip into listening to their autonomic experience; they should spend no more than a minute or so with each prompt.

An example of an autonomic short story is included here:

My autonomic state is moving into sympathetic.

My system is responding to the people around me who are arguing about how to meet the deadline for our project.

My body wants to get up and run away.

My brain makes up the story that it's all my fault. I'm a total failure and I'm going to be fired.

When I review my short story, I notice how quickly I lose control and think about the worst-case scenario. As I look back now, I recognize the familiar, childhood pattern of my sympathetic state being triggered by raised voices. I can reflect on the ways that in my adult life raised voices are not the same sign of danger.

EXERCISE

Attending over Time

The first exercise creates skill in following autonomic movement and feeling the ways autonomic states shift in nuanced and large-scale ways in short periods of time. The second exercise uses a longer period of time to notice how patterns evolve and consider whether to continue or interrupt a response.

BACKGROUND

While atomic clocks measure time with precision and accuracy, it seems your personal experience of time is changed by your state of

engagement with it. Time sometimes seems to stand still and other times fly by. You can feel stuck in a state of dysregulation or unable to hold onto a state of regulation. Using increments of time to attend to state changes adds chronology to your understanding of how you move through daily experiences. Attending over time, both in short and long intervals, invites you to see the ongoing ebb and flow of your autonomic nervous system and the ways it responds both in moment-to-moment shifts and in patterns over time.

SHORT-DURATION ATTENDING STEPS

1. Decide on a 5- or 10-minute increment as your measure of time. Use the following series of prompts to check in three times over that span of time.
   - In this moment my autonomic state is . . .
   - And I am feeling . . .
   - Now my autonomic state is . . .
   - And I am feeling . . .
   - And now my autonomic state is . . .
   - And I am feeling . . .
2. Repeat this exercise a few times a day for several weeks.
3. Look for any patterns that emerge. When are the times you respond flexibly and when are the times you get stuck? Are any changes happening over the course of tracking?

LONG-DURATION ATTENDING STEPS

1. Longer time periods offer an expanded, bird's eye view of your experience. Decide on a timeframe to use. You can experiment with doing the exercise in the morning, at the end of the day, or even once a week.
2. Answer the following four questions.
   - *Where am I?* The starting point is where you are right now. Begin with noticing your current state.
   - *Where have I been?* From your present reference point, reflect back and notice any state changes.
   - *What does this mean for where I might be heading?* With an understanding of your movement from past to present, bring

curiosity to the trajectory you have found. Is there a pattern? Does it make sense to you when you see it clearly?

- *What do I want to do now?* Is this a path you want to follow or a pattern you want to interrupt?

3. Repeat this exercise over successive days or weeks and track emerging patterns.

TIPS

Your clients often see their autonomic state changes as individual moments in time not connected to a larger experience. Autonomic shifts are interconnected experiences that lead your clients deeper into or out of a state. By adding the dimension of time to track autonomic change, your clients can begin to notice the flow of their experience. The two Attending Over Time exercises help your clients bring attention to moment-to-moment change and build their awareness of how moments combine to create patterns.

Included here is an example of the first exercise.

At the first minute:

In this moment my autonomic state is . . .

In this moment my autonomic state is slightly dorsal vagal

and I am feeling . . .

and I am feeling a little collapsed

Now my autonomic state is . . .

Now my autonomic state is a bit more dorsal

and I am feeling . . .

and I am feeling some disconnection

And now my autonomic state is . . .

And now my autonomic state is moving just a fraction toward sympathetic

and I am feeling . . .

and I am feeling as if I might be able to move

At 3 minutes:

In this moment my autonomic state is . . .

In this moment my autonomic state is becoming more sympathetic

and I am feeling

and I am feeling . . .

and I am feeling the need to get going

Now my autonomic state is . . .

Now my autonomic state is heading to ventral

and I am feeling . . .

and I am feeling that I can look at my list for the day

And now my autonomic state is . . .

And now my autonomic state is much more ventral

and I am feeling . . .

and I am feeling that the day might be ok

At 5 minutes:

In this moment my autonomic state is . . .

In this moment my autonomic state is a bit sympathetic

and I am feeling . . .

and I am feeling some anxiety about getting ready to go to work

Now my autonomic state is . . .

Now my autonomic state is moving into ventral

and I am feeling . . .

and I am feeling organized

And now my autonomic state is . . .

And now my autonomic state is fully ventral

and I am feeling . . .

and I am feeling ready to meet the day

ATTENDING TO AUTONOMIC PATHWAYS

Reflection invites awareness of where clients are and where they have been and often leads to thinking about where they might be heading. Making time to slow down and become curious leads to an awareness of the many states and state changes that clients naturally experience while navigating the demands of the day and an appreciation of the autonomic pathways that they have traveled.

EXERCISE

Daily Pie Charts

This exercise uses the visual design of a pie chart to tune into the ways a day is comprised of a blend of dorsal vagal, sympathetic, and ventral vagal states and the relationship between states during the day. As soon as clients can predictably name their three states, this exercise becomes a useful tool.

BACKGROUND

We tend to give our days a label—this was a good day or a difficult day, a quiet day or a busy day—based on one particularly intense moment or on a string of related experiences. When you name your days in this way, you often miss the moments that didn't fit the pattern. When considering the day through an autonomic lens, looking at the relationship between states and the relative amount of time spent in each gives a more complete picture of your daily experience. With a pie chart, ventral vagal, sympathetic, and dorsal vagal experiences are seen as part of an integrated autonomic system. The global flavor of your day is a result of the contributions of each. The design of a pie chart (Figure 5.1) offers an uncomplicated image of the overall sense of a day and brings the feeling of the day alive in shape and color. What name would you use to describe each of the days illustrated here?

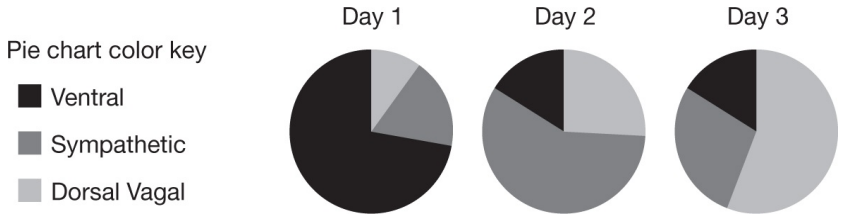

FIGURE 5.1. Daily Pie Charts

STEPS

1. What does your autonomic pie chart look like? Use a blank circle each evening to review your day.
2. Choose the colors you want to represent each state and divide your pie into ventral vagal, sympathetic, and dorsal vagal pieces.
3. Name your day.

4. Make a collection of your daily charts. Use your collection of daily charts to get a sense of your autonomic experience over a period of time. With a series of charts, you can look at the ebb and flow of states and the impact on your autonomic experience.
   - Is there a day of the week that repeatedly brings the same autonomic responses?
   - What is the overall tone of a week?
   - Is there a pattern to your weekends?
   - If you are in a time of transition, use your pie charts to see how your autonomic nervous system is responding.

TIPS

Many clients identify with a specific state and miss the everyday mixture of states that make up their day. A pie chart is an easy way for your clients to bring attention to their combinations of states and notice how much time they actually spend in each state during a day. Invite your clients to periodically bring their pie charts to a session. Look for patterns and track change over time.

EXERCISE

Daily Tracker—Three Different Things

This exercise brings explicit awareness to the ways a client's autonomic patterns are shifting. In the midst the therapy process, it's easy to miss the small moments that mark the beginning of change. This exercise is an easy way to create a habit of recognizing and naming the hopeful signs of a system that is reorganizing.

BACKGROUND

An end-of-the-day reflection during which you listen to the subtleties of autonomic change is a good way to look back at the autonomic path you've traveled. With a habit of autonomic reflection, implicit knowing and explicit awareness combine to bring you into a deeper understanding of the ways the autonomic nervous system shapes your days.

Remembering that the autonomic response is always considered an adaptive one, don't look for what is better, but instead look for what is different. A regular tracking practice brings attention to the small shifts in patterns that highlight the ways your system is reorganizing.

STEPS

1. Review the day and identify three different ways your autonomic nervous system responded.
2. Bring attention to what happened. You might notice a slightly less intense response to an event or an easier recovery into regulation. Or maybe you recognize a different kind of response—sympathetic mobilization in place of a dorsal vagal collapse or a moment of ventral vagal connection instead of fight or flight.
3. It's equally important to attend to what didn't happen. The absence of a reaction is also a good measure that a response pattern is changing and that your system is moving toward regulation.
4. Keep a journal of your daily "three different things" experiences. As small changes begin to add up, new autonomic patterns take root.
5. Review your daily journal periodically to see how your responses are changing. Look back over the range of autonomic responses and consider the larger picture of change that is happening. Is there a shift? If so, in what direction? Consider the intensity, frequency, and duration of your states and state changes in your reflection.

TIPS

Because clients are used to naming responses as good and bad, it is important to remind them that this exercise is about noticing difference. Some clients resonate with asking what happened while others find asking what didn't happen to be a more useful question. Encourage your clients to use both. Seeing the small changes that are tracked with this exercise keeps the focus on the fact that autonomic patterns are shifting.

EXERCISE

The Autonomic Request for Connection

This exercise brings explicit attention to the implicit signals being sent between autonomic nervous systems. By focusing on the pathways of the social engagement system, clients learn to discern signs of welcome and warning and use that knowledge in making decisions about connection.

BACKGROUND

The autonomic nervous system is a relational system. Through your biology you are wired for connection. Eyes, voices, faces, and gestures telegraph cues that it is safe to explore a relationship. The elements of the social engagement system are essential to assessing safety and danger. Yet, through the ways the nervous system has been shaped by your personal experiences, you might miss or misread those invitations.

An ongoing stream of signals of welcome and warning are received and sent through the pathways of the social engagement system. The muscle around the eyes (the orbiculares oculi) opens and closes the eyelid and contributes to the wrinkles around the eyes that express emotions. This is where the nervous system looks for signs of warmth and an invitation to connect. Prosody (patterns of rhythm, tone, frequency in the voice) is an important nonverbal signal and sends messages of welcome or warning to another nervous system. Facial expressions convey social information. An unmoving face is seen as sign of danger, while a mobile face is experienced as alive and sending social information. Finally, turning and tilting the head signals availability and interest.

You can begin to understand the conversation that is taking place between two nervous systems when you are aware of the cues you are sending and can accurately interpret the cues you are receiving. As you become familiar with this way of listening, you'll find you are able to navigate relationships more skillfully.

STEPS

1. Make a practice of looking at eyes, listening to voices, seeing facial expressions, and watching for social gestures. Bring explicit awareness to your present-moment experiences with another social engagement system. Use the following prompts to build skill in noticing:

- Their eyes are signaling . . .
- Their tone of voice sounds . . .
- Their face is expressing . . .
- Their gestures convey . . .

2. Identify the specific characteristics that invite connection or prompt a move into disconnection. Exactly what is it about the other person's eyes, voice, face, and movements that sends cues of safety or danger to your nervous system?
3. Ask yourself if your response is a match for the present-moment situation or linked to a prior experience.
4. As you get to know your responses to another social engagement system, bring attention to your own end of the interaction using the same questions.
   - My eyes are signaling . . .
   - My tone of voice sounds . . .
   - My face is expressing . . .
   - My gestures convey . . .

TIPS

This is a good exercise to practice during sessions before asking your clients to try it in their daily environments. Clients are often unaware of both their responses and of the cues they are sending. Experiment with sending different signals via your eyes, tone of voice, facial expressions, and gestures to help your clients find the matches and mismatches in their neuroceptive response to your signals. Reverse the process and give your clients feedback about the signals they are sending.

PLAYFULNESS

"Playfulness occurs in a protected context and is easily disrupted by stress" (Bateson, 2014, p. R13). Playfulness is a state of mind supported by the autonomic state of ventral vagal regulation and a great way to exercise the vagal brake (Porges, 2015b). Studies suggest playfulness is a quality that is not set but can be enhanced and invited into daily living (Neyfakh, 2014).

While we are serious beings, problem solvers wanting to make

sense of the world, we are also playful beings wanting to let go of our problems for a moment in time.

EXERCISE

Pathways to Playfulness

To play is a challenging experience and is especially difficult for many clients. In order to play, clients have to stay in the safety of a ventral vagal state while feeling the mobilizing energy of the sympathetic nervous system. This exercise explores building a capacity for playfulness.

BACKGROUND

You can be playful both by yourself and with others. Playfulness and a sense of well-being go together. A playful attitude supports seeing new perspectives and being able to cope with adversity. As Dr. Seuss (1960) said, fun is good.

STEPS

1. Get to know yourself as a playful person. Look at the conditions that support your sense of playfulness:
   - Identify where, when, and with whom you feel your sense of playfulness emerge.
2. Identify where, when, and with whom you feel your sense of playfulness disappear.
3. Track your experiences of the different kinds of playfulness. Identify where you find yourself on your autonomic hierarchy when you engage in, or think about engaging in, these kinds of playfulness:
   - playing with others
   - playing with thoughts and ideas
   - spontaneous play
   - daydreaming

TIPS

Your clients may be occupied by the serious issues that bring them to treatment and think they've lost the ability for playfulness. They may think there's no place in their lives for being playful, that it's a luxury rather than an everyday experience, something to look at once therapy has ended. Playfulness is an important part of well-being and emerges when there is a neuroception of safety and an active ventral vagal state. Help your clients discover who they are as playful people.

EXERCISE

Playful Moments

As clients begin to understand how they play, the next step is to create time to play. This exercise helps clients find moments to play and expand their repertoire of playful experiences.

BACKGROUND

Playfulness is an important quality that contributes to well-being. As you find ways to create opportunities for moments of playfulness, you can become a more playful person and experience the joy and creativity that accompanies that.

STEPS

1. Notice how often, easily, and intensely you engage in a playful experience.
2. Increase your playful experiences. Find the ones that bring a smile and the ones that bring energy and play in those ways a little bit more.
3. Expand your playfulness. Experiment with experiences in the kinds of play that aren't in your play repertoire.

TIPS

Play is often a missing experience in your clients' lives. When an environment is filled with cues of danger, the autonomic nervous system remains on guard, focused on protection, making play a nonessential and

remains on guard, focused on protection, making play a nonessential and even unsafe choice. Many of your clients have had limited opportunities to engage in play. With the clinical focus on the challenges that bring your clients to therapy, play is often overlooked in the therapy process. Yet, play is an essential element of healing. Find ways to routinely bring moments of play into your sessions. Play can be as simple as sharing a moment of laughter and friendly banter. Introduce play early in therapy as a reminder that even in the midst of complicated trauma work, the autonomic nervous system has the capacity to engage in moments of play.

RETHINKING SOLITUDE

Humans are inherently social beings, yet also have a desire for moments of solitude to "cultivate the inner word of the self and experience self-discovery, self-realization, meaning, wholeness, and an enhanced awareness of one's deepest feelings and impulses" (Hollenshorst & Jones as cited in More, Long, & Averill, 2004 p. 224). Solitude has been shown to have a deactivating effect on the intensity of high-arousal responses, such as excitement and anger, and to be activating of low arousal responses, such as calm and ease (Nguyen, Ryan, & Deci, 2018). In experiences of solitude, many people report feelings of intimacy and a stronger feeling of closeness to another person while others feel a religious or secular spiritual connection (Long & Averill, 2003). Creativity often blossoms in solitude, as does self-reflection that can lead to self-transformation (Long & Averill, 2003).

"Unique among the species, we have the ability to sit and mentally detach ourselves from our surroundings and travel inward . . ." (Wilson et al., 2014, p. 75). "Stillness is the moment when the buried, the discarded, and the forgotten escape to the social surface of awareness . . ." (Seremetakis as cited in Lepecki, 2001). Stillness is a joining of the ventral and dorsal vagal circuits that allows you to sit alone in silence and feel restored or share a moment of quiet with a

friend. As these two pathways come into connection, with the sympathetic nervous system quiet in the background, you feel immobilization from the dorsal vagus joined with the experience of safety from the ventral vagus and can enter into the state of being safely still (Porges 2017c).

EXERCISE

Personal Preferences Around Solitude

This exercise brings attention to the autonomic experience of solitude and helps clients identify where and when they look for solitude and how much solitude they need. When clients understand the concrete elements that support their ability to safely find moments of solitude, they are more likely to attend to their needs for time alone.

BACKGROUND

Distinct from loneliness, which has been shown to have a multitude of negative physical and psychological outcomes, entering into moments of solitude has positive benefits for well-being. Practicing a moment of solitude is an autonomic exercise that creates an experience of feeling centered and peaceful.

STEPS

1. Locate the experiences of solitude and loneliness on your autonomic hierarchy. Feel the difference between them.
2. Explore where in your daily environment you find solitude. Nature is often where people go to find a private place to escape to when they are surrounded by the demands of the day and the autonomic nervous system is needing room to breathe.
   - Reflect on your daily experiences to discover where you choose to find solitude.
   - Identify what kind of natural habitat are you drawn to.
   - Notice where in your everyday natural environment are the places you can predictably visit and feel the benefits of solitude.

Solitude is a state of being and doesn't have to take place in isolation. Solitude is also found in spaces where there are other people.

- Identify the places and spaces you visit every day that include other people and also offer you an opportunity for a moment of solitude.

3. Notice when you reach for solitude.
   Consider what is happening in your life that prompts you to seek quiet.
   - Look at your physical environment.
   - Consider the actions of people around you.
   - Reflect on the number, frequency, and kinds of requests for your time and attention.
4. Identify how much solitude you need.
   Focus on your moments of solitude and the length of time that brings a sense of nourishment.
   - Consider when a few moments of solitude meet your need.
   - Compare that to when you need a longer experience of solitude to feel nurtured.
   - Notice how you know when your system has taken in enough solitude and you're ready to rejoin the world outside yourself.

TIPS

Solitude is often confused with loneliness. Solitude is an experience of feeling safe while loneliness activates a survival response. Use the autonomic hierarchy to help your clients understand the difference between these two states.

EXERCISE

Attending to Stillness

This exercise continues the exploration of autonomic experiences of quiet with attention to exploring the conditions that support a client's ability to rest.

BACKGROUND

BACKGROUND

Over the course of evolution, humans developed the ability to become still as a way to rest and renew. Sometimes, instead of feeling nurtured by stillness, the beginning of calm can bring cues of danger and a sense of vulnerability. As your autonomic nervous system begins to move from action to quiet, you might feel your sympathetic nervous system reacting with mobilizing energy or you might feel pulled into dorsal vagal collapse. Bring curiosity to identifying the elements that add safety to your experiences of rest so you can find your way to the places where you can receive the benefits of moments of quiet.

STEPS

1. Identify restful and restless environments.
   Many people label environments with lots of people, activity, sound, and movement as restless. Workplaces and the daily commute are two environments that are often cited as mobilizing and not restorative. In comparison, the natural environment and at home are often identified as places to rest and renew.
   - Identify environments at the two ends of your experience—places that bring you a feeling of restlessness and places that offer you the opportunity to rest.
2. Attend to the qualities of the spaces that bring you a rhythm of rest.
   - location
   - size and shape of the space
   - colors, sounds, and textures
3. Consider when you want to be by yourself and when you want to be with others (people or pets).
4. Make a list of the combination of qualities you've identified. Go out and find places that offer those.
5. Create a plan to regularly visit the places you identified as offering the opportunity for rest.
6. Create your own space, incorporating qualities you identified that support you in resting in a moment of stillness.

TIPS

Stillness is a complicated autonomic experience and many clients find sympathetic mobilization interrupts their ability to rest, or they get pulled into dorsal vagal collapse when they begin to become quiet. By helping your clients attend to the qualities of places that support safety in quiet, this exercise helps them first identify where they can safely experience stillness and then experiment with entering those places.

MOMENTS TO SAVOR

Savoring is a process of attending to and appreciating positive life events (Bryant as cited in Geiger, Morey, & Segerstrom, 2016). Trauma can disrupt the ability to savor. Feeling negative emotions in a normally positive moment and an inability to experience positive affect can create secondary guilt and shame at the inability to experience joy (DePierro, D'Andrea, & Frewen, 2014). These experiences then set up a pattern of ongoing dysregulation. The practice of savoring is an active strategy to build ventral vagal resources. Savoring is linked to psychological resilience, positive health outcomes, and a sense of well-being (Geiger, Morey, & Segerstrom, 2016; Phillipe et al., 2009; Speer, Bhanji, & Delgado, 2014). Momentary savoring enhances positive mood, while an ongoing practice of savoring maintain levels of happiness (Jose, Lim, & Bryant, 2012).

EXERCISE

Savoring Snapshots

This exercise helps clients recognize moments or micro-moments of ventral vagal experience. It is a way to remember that the autonomic nervous system regularly moves into moments of regulation and a way to capture those moments and bring them into explicit awareness. This exercise is applicable both in times of relative ease and in a time of ongoing challenge.

BACKGROUND

To savor is to take a moment of ventral vagal regulation and the feeling of a sense of safety and experience a story of connection to self, to another, or to nature. Because savoring is a quick practice whereby you capture a ventral vagal moment and hold it in your conscious attention for just a short time. Moments to savor routinely happen in the course of everyday living. Because a 20- to 30-second snapshot is all that is needed to benefit from the practice, it is easy to savor during the natural flow of your day.

STEPS

1. Look for a ventral vagal moment to savor, bring it into conscious awareness, and place your attention on it for 20–30 seconds. In the beginning, if the experience of savoring is challenging, start with micro-moments of savoring (5–10 seconds). Each micro-moment shapes your system. Over time, your ability to savor will build to the 20–30 second maximum that defines a savoring experience.
2. Practice savoring each day. Begin with finding one moment to savor each day. As savoring becomes easier, increase the number.
3. Track your savoring moments.
   - Keep a savoring notebook or a joy journal.
   - Reflect at the end of the day to find and savor moments you may have missed.
   - Create an agreement to share savoring moments with a friend using technology or in person.
   - Organize a savoring circle—online, in person, or a combination of the two.
   - Create a savoring album using simple illustrations of your savoring moments and adding captions.
4. Establish a habit of savoring.
   - Remind yourself that moments to savor are common occurrences in everyday life.
   - Be on the lookout for the small moments that bring you into a ventral vagal state.

- Set a goal to see and savor a certain number of moments each day.
- Invite a friend to savor with you.

TIPS

In addition to the routine appearance of moments to savor in daily life, opportunities to savor also happen regularly during therapy sessions. The essence of savoring is the 20–30 second timeframe, making it easy to incorporate into the therapy session. Introduce this skill to your clients and then stop and notice moments during your session. Help your clients build confidence in their ability to savor so they can create a successful everyday practice.

EXPANDING OUTWARD—CONNECTING TO ART AND NATURE

Connecting inward to attend to the challenges of sympathetic and dorsal vagal survival responses along with the resources of the ventral vagal system is a foundational skill. Expanding outward to identify ways you are resourced through connecting to art and nature is also important. Each offers connection to the ventral vagal state of regulation through easy to access experiences.

Art can move you to tears with its beauty, prompt a moment of transformation, and change your self-image or world view (Pelowski, Markey, Lauring, & Leder, 2016). Viewing art is a complex experience that engages the body and mind in a process that unfolds over time (Brieber, Nadal, Leder, & Rosenberg, 2014). “Art viewing engenders myriad emotions, evokes evaluations, physiological reactions, and in some cases can mark or alter lives” (Pelowski et al., 2016, p. 1).

Your ability to return to autonomic regulation following a stressful event is supported through connection with nature (Brown, Barton, & Gladwell, 2013). Nature scenes are autonomically regulating and restorative. Technology that simulates the natural world brings an autonomically regulating effect (Kahn, Severson, & Ruckert, 2009),

while listening to the sounds of nature brings an increase in autonomic regulation (Gould van Praag et al., 2017). Another way to connect with nature is through fractals—the simple patterns in nature that repeat over and over with increasing complexity (e.g., the nautilus shell, a leaf, a pinecone, broccoli buds, dandelions, ice crystals, clouds). Viewing fractals reduces physiological stress levels (Taylor & Spehar, 2016). The regulating autonomic response to fractals appears to be universal and is elicited in periods of time as short as 10 seconds (Taylor, 2006).

Intentionally bringing experiences of art and a connection with nature into daily life is an uncomplicated, easily accessible way to enter into moments of ventral vagal regulation.

EXERCISE

Attending Through Art

Viewing art opens up possibilities for seeing the world in new ways. Both the body and the mind are involved in the experience. Engaging with forms of art that bring a ventral vagal response can change the way clients think and feel. This exercise invites clients to investigate their autonomic response to different kinds of art and make art a part of their everyday lives.

BACKGROUND

Art comes in many forms and no special training is necessary to benefit from seeing it. Art speaks to the body through your autonomic pathways and brings responses that can lead to new ways of thinking about yourself and the world. Finding ways to invite art into your life is an act of listening to your autonomic nervous system and discovering the particular ways you connect.

STEPS

1. Explore the ways that are easily available to you to see and be with art. Museums, artists' workshops, public art spaces, arts

with art museums, artists' workshops, public art spaces, arts festivals, and an illustrated art book are just some of the options.
2. Identify the kinds of art you are drawn to. View different kinds of artwork (photography, sculpture, drawing, painting, ceramic, mosaic, textiles, and other forms of art) and notice how you respond.
3. Decide how and how often you need to connect to art in order to feel as if you have enough art in your life.

TIPS

Clients may feel that art is a luxury they don't have time for or that it doesn't fit in their lives. Help them understand that art is all around, comes in many forms, and has an impact that can easily evoke the positive qualities of the ventral vagal regulating activity.

EXERCISE

Attending in Nature

This exercise brings attention to the naturally occurring autonomic benefits found in nature. With the recognition that nature is nourishing both in live experiences and through images, attending to a connection with nature becomes an easily accessible regulating activity.

BACKGROUND

Nature, both in real life and through viewing images, offers relaxing and restorative opportunities. Abundant in the natural world are fractals, simple patterns that repeat over and over creating increasing complexity (the nautilus shell, a leaf, a pinecone, broccoli buds, dandelions, ice crystals, clouds). Viewing fractals for just a few moments brings a regulating autonomic response. Find the particular places and ways to connect with nature that bring your ventral vagal system alive.

STEPS

1. Attend to the natural environment around you and track your responses. Identify the places that bring you into ventral vagal

regulation, sympathetic mobilization, and dorsal vagal disconnection.

2. Visit the places that are regulating for you either in person, through images, or in a combination of both.
3. Look for fractals as you move through your day. Stop for a just a few seconds to take them in.
4. Find images of fractals or objects that have the characteristics of fractals and notice the ones that bring an intense ventral vagal response. An internet search will bring up a wealth of images, and the plants and trees around you offer living examples.
5. Display fractal images or objects in a way that you can easily return to them. (A screen saver, photos on your phone, or a flowering plant or cactus in your home or office are some suggestions.)

TIPS

Clients are exposed to the regulating influences of the natural world as they move through their daily lives. By bringing attention to these experiences nature becomes an active resource. Helping your clients learn to intentionally connect with nature is a way to build, their ventral vagal capacities.

CHAPTER 5 **SUMMARY**

If there is a feeling change, there is an autonomic change.

—STEPHEN PORGES

Each autonomic state holds within it a multitude of flavors. The practice of attending creates skill in discerning these micro-states. Ventral vagal is more than regulated and calm. It also brings joy, passion, excitement, celebration, interest, alertness, ease, and rest. Sympathetic is sometimes fight and other times flight, and dorsal vagal can feel collapsed, foggy, numb, or invisible. The three autonomic states are always moving in relationship with each other.

As ventral, sympathetic, and dorsal energies ebb and flow how your clients experience the world changes. By engaging in attending, your clients create moments of mindfulness. These small practices interrupt the automaticity of habitual patterns and make space to see autonomic responses in a new way. Making intentional choices about what to attend to offers opportunities to use everyday experiences to build ventral vagal capacity.

CHAPTER 6

SHAPING THE AUTONOMIC NERVOUS SYSTEM

The natural healing force within each one of us is the greatest force in getting well.

—HIPPOCRATES

The autonomic nervous system "plays a central role in regulating energy and information flow between the brain, body, and environment" (Rejeski & Gauvin, 2013, p. 660). Trauma interrupts the ability to regulate and flexibly move between autonomic states. Fight, flight, or shutdown prevail, while the state of calm and connection is fleeting (Williamson et al., 2015). When the ventral vagal state of safety is missing, life is an exhausting mix of intense mobilization and withdrawal. Navigating daily living is focused on limiting the possibility of being activated into a state of dysregulation. The path to regulation and social connection is hidden by habitual protective responses.

Shaped by experience, the autonomic nervous system acts in

service of survival, responding to cues of safety and danger in the present moment based on experiences in the past. “Visiting the past in therapy should be done while people are, biologically speaking, firmly rooted in the present and feeling as calm, safe, and grounded as possible” (van der Kolk, 2014, p. 70). Regularly engaging in practices to retune neuroception and reshape habitual response patterns helps your clients build this biological platform. The continuing opportunity to exercise the neural circuits of regulation and connection is essential for physical and psychological well-being (Flores & Porges, 2017). This chapter presents daily practices in the categories of energy, sound, movement, breath, environment, and reflection to help your clients shape their autonomic nervous systems toward safety and connection.

THE RIGHT DEGREE OF CHALLENGE

Finding actions that stretch but don’t stress the autonomic nervous system is at the heart of shaping. When the autonomic flavor is one of dorsal vagal protection through conservation of energy, taking small steps toward mobilization begins to create new patterns. When the system is in the mobilizing energy of sympathetic protection, an intentional release of that energy begins to build new pathways. When in a state of ventral vagal regulation, it is essential to celebrate and deepen the experience.

EXERCISE

Energy and Actions Map

This exercise offers clients a way to map the range of actions they can use to find their way back to ventral vagal regulation and stay there when they arrive. Each state is individually mapped, identifying actions on a scale of passive to active in the two categories of self- and co-regulation. It is helpful to regularly review this scale and revise it as new resources

are recognized.

BACKGROUND

Activities that shape the autonomic nervous system fall along a scale of passive to active. There are times when thinking about moving, remembering a connection with a friend, or simply looking up toward the sky is the right choice and other times when you need to take action, put your body in motion, or head out into the world and seek social connection. Choose an experience that brings a return of energy when the dorsal vagal immobilizing collapse is present, a way to safely discharge energy when feeling the frenetic activity of the sympathetic state, and an action that deepens the feeling of regulation when anchored in the safety of ventral vagal.

STEPS

1. Label your state in the box at the top of the Energy and Actions map. Identify your state through its biological name (dorsal, sympathetic, ventral) or name it in a way that has meaning for you.
2. For sympathetic and dorsal vagal states, move along the line between passive and active and identify actions that take you in the direction of a return to the ventral vagal state of regulation. Use the left side to identify self-regulating actions and the right side to identify co-regulating actions.
3. For your ventral vagal state, move along the line between passive and active and identify actions that deepen your experience of safety and connection. Use the left side to identify self-regulating actions and the right side to identify co-regulating actions.
4. Complete a map for each state.
5. Use your maps to find a resource that is in the range of energy that fits your needs in the moment.
6. Update your maps as you create additional resources.

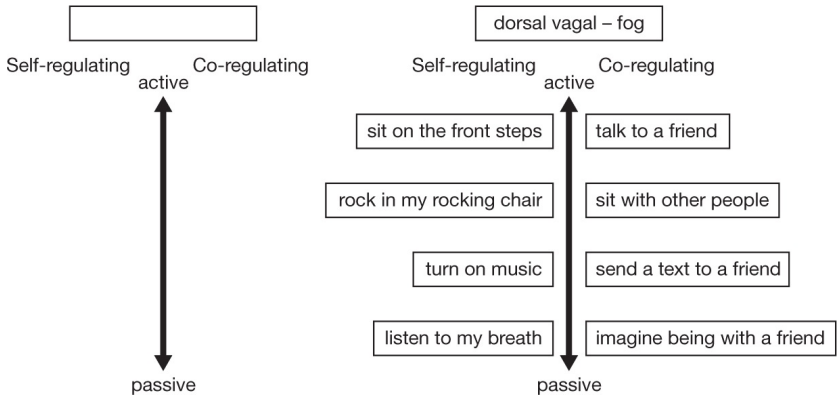

FIGURE 6.1. Energy and Actions Map and Example

TIPS

A resource is an action that moves your clients up the hierarchy toward ventral and, once there, helps them stay there. Goldilocks and her experiences with *too much, not enough, and just right* can be useful in helping your clients understand how the autonomic nervous system connects with resources. When your clients can match the energy they have available with the energy that is required for a particular resource, they can choose the action that fits the autonomic need of the moment (Figure 6.1).

GLIMMERS AND GLOWS

Sometimes simply navigating a day filled with responsibilities feels like an autonomic challenge. These are *glimmer days*, when noticing micro-moments of ventral vagal energy can help you stay regulated and ready for connection. Other days feel more open with time to pause and deepen into the longer experience of a glow. Both experiences shape your system and strengthen your connection to ventral vagal regulation.

EXERCISE

Finding Glimmers

This exercise engages clients in an active search for micro-moments of regulation. Looking for these moments brings a new level of autonomic awareness. Finding them begins to change clients' expectations around their daily experience.

BACKGROUND

Glimmers are the micro-moments of ventral vagal experience that routinely appear in everyday life yet frequently go unnoticed. To ensure survival, human beings are built with a negativity bias. This means you are biologically wired to pay more attention to negative events than positive ones and can often miss the ventral vagal moments that coexist with moments of dysregulation. Things like seeing a friendly face, hearing a soothing sound, or noticing something enjoyable in the environment go unnoticed. A fundamental step in shaping your system is seeing a glimmer, pausing to take it in, and then beginning to look for more.

STEPS

1. Set an intention to look for a certain number of glimmers each day. Choose a number that feels doable to begin. If glimmers are an unfamiliar experience, watch for a single glimmer. As finding glimmers becomes easier, set a new goal.
2. Notice when you feel a spark of ventral vagal energy. Look for glimmers in your daily activities. Glimmers happen regularly, but because they are micro-moments you need to be on the lookout for them.
3. See, stop, and appreciate your glimmers. Create an easy way to acknowledge a glimmer when it happens. You might bring attention to the moment by simply saying "glimmer" or with a small movement (perhaps your hand on your heart).
4. Track your glimmers. Create a daily glimmers notebook or keep a running list.
5. Look for glimmers in specific places, with particular people, at certain times. Find the ways your glimmers routinely appear.
6. Share your glimmers. You might text your glimmers to a friend, make talking about daily glimmers a family nighttime ritual, or share your list of weekly glimmers to share with your therapist. Find the way that works for you.

Find the way that works for you.

TIPS

As glimmer experiences accumulate, your clients naturally turn toward finding more. Creating a practice of recognizing glimmers is a reminder to your clients that among many experiences of dysregulation, there are also regularly occurring micro-moments of regulation. Just a simple acknowledgement of those moments can temper the intensity of your clients' responses to the challenges in their daily lives. Glimmers also predictably happen in your therapy sessions. Look for them and stop to name them.

EXERCISE

From Glimmer to Glow

This exercise builds on the skill of recognizing glimmers to create a more expansive ventral vagal experience. When clients hold a glimmer in their awareness for a longer period of time, the experience deepens and the story that accompanies it comes to life.

BACKGROUND

When you recognize the micro-moment of a glimmer, you feel the spark of your ventral vagal system. Just as sparks can be used to ignite a fire, glimmers can be turned into the deeper experience of a glow. With a glimmer, you pause just long enough to acknowledge that a ventral vagal moment is happening in the flow of your day. With a glow, stop and celebrate the glimmer. Take time to soak it in and give it deeper meaning.

STEPS

1. Notice a glimmer and stop and let the experience fill you. Move beyond a few seconds and stay with the experience for a half a minute or more. Give the glimmer time to become a glow.
2. Feel what happens as you move from connecting for a micro-moment to a longer experience of taking in.
3. Listen to the story that accompanies the glow.

4. Describe your experience of the glimmer and the glow. Notice how the experience changes. For example, a particular glimmer moment might be described as quick hit of happiness that brings a smile, and when you turn it into a glow, the experience feels like basking in the warmth of the sun while breathing a sigh of contentment.

TIPS

Once your clients are skilled at noticing glimmers, introduce this exercise. Practice in your sessions so your clients get the feel of holding a glimmer in awareness for a longer length of time. Glow moments are still relatively short (up to a minute), which makes them accessible for most clients but can, for some clients, activate a sympathetic or dorsal vagal survival response. Work with your clients to increase the time they hold a moment in awareness and stay in the experience of ventral vagal deepening.

SHAPING YOUR STORY THROUGH SOUND

The world is never quiet.

—ALBERT CAMUS

Sound is one of the ways the autonomic nervous system experiences the world. When you speak, you are not only creating a story through language, but with prosody (the music of the voice that is felt in rhythm, loudness, and pitch). You are also telling a story about your autonomic state. In interesting research, people reported that when their voice was computer altered, their level of anxiety changed. This self-reported experience was measurable in physiological changes (Costa et al., 2018). In one project, participants recorded a short story that was then computer altered so their voices reflected happiness, sadness, and fear. As participants listened to the modified recordings, their physiological responses changed and they reported feeling the

emotions portrayed in each recording (Aucouturier et al., 2016).

When listening to music you often experience a state of absorption or flow (Hall, Schubert, & Wilson, 2016). Music is a portal to safely connecting to, and even enjoying, distressing emotions (Herbert, 2011). The tempo of a piece moves you: heartbeat, breath, movements, and likely cognition all synchronizing with the music (Chanda & Levitin, 2013), while the frequency of music in the range of the human voice is a kind of musical prosody that encourages physiological regulation (Porges, 2010). Since music is an autonomic regulator, you can choose musical selections that safely move you in and out of states of activation. (See *The Polyvagal Theory in Therapy*, pp. 88–90 for a description of using musical maps.) Face and head muscles are used when you both listen to and produce music, and the middle ear muscles support listening (Porges, 2010), so whether you are listening to music or making music, you are engaged in an autonomic exercise.

EXERCISE

The Sound of Your Voice

This exercise is a way for clients to get to know how different tones of voice change the way they feel. By manipulating their tone of voice and tracking responses, clients begin to become aware of how the way they speak impacts their own experience and can begin to look at how the sound of their voice impacts the way they are experienced by others.

BACKGROUND

The autonomic nervous system uses tone of voice as a way to discern safety. You respond to intonation before you take in information. The way you speak changes the way you feel, the story you tell, and changes the way people around you hear what you are saying.

STEPS

1. Experiment with the ways your voice impacts the way you feel. Tell, or record, a short story in different tones of voice. Notice where the different tones of your voice take you on your autonomic map.
2. Track the way the same word spoken in different tones of voice elicits a different state and feeling. Choose a word, speak it in different ways, and follow the ways your states and feelings shift. Try out a variety of words and notice the specific ways of speaking that elicit certain states and feelings.
3. Talk about a difficult experience using different tones of voice. Track what happens to your autonomic state. Find the way of speaking that brings you into a ventral vagal state. Notice the way of speaking that helps you see options and take regulated actions.
4. Find a friend and experiment with sound. Talk in different tones of voice and get feedback on their response. Ask your friend to do the same and track your own responses.

TIPS

Tone of voice is a fundamental way neuroception assesses safety or unsafety. A small change in the way a word is spoken can create a large-scale shift in autonomic state. Pay attention in sessions to the messages that are being sent through your and your client's tone of voice. Bringing these messages into explicit awareness often leads to a new insight. Help your clients create a habit of listening to the way they are speaking.

EXERCISE

The Music in Your Life

BACKGROUND

Music is all around you, affecting your physiology and your feelings. Along with activating a ventral vagal response, music has a paradoxical effect that allows you to safely connect to, and even enjoy, your sympathetic and dorsal vagal states.

STEPS

1. Take an inventory of the way music is a part of your life.
   - Music listening: Do you regularly listen to music? Have a favorite radio station? Favorite songs or artists? Do you go to hear live music?
   - Music making: Do you make music? Do you play an instrument or sing by yourself or with others?
2. Assess how much music is in your everyday life.
   - Is there enough music in your daily experience?
   - Do you miss music and want to hear more?
3. If your everyday experience is already filled with music, acknowledge the role of music in your life and identify the ways music is a regulating resource.
4. If your inventory brings a recognition that you have a desire for more musical moments, begin to look for ways to add music to your daily experience.
5. Identify the particular pieces of music that take you to different places on the autonomic hierarchy. Sing along, play along, or move along with the music. Use different selections to safely join with your sympathetic and dorsal vagal states and dive into all the flavors of ventral vagal.

TIPS

Music is a readily available resource, which makes it something your clients can easily explore on their own and you can bring into your sessions. Create connection by listening with your clients to their selections. Add the experience of reciprocity by sharing your own music preferences.

SHAPING THROUGH MOVEMENT

All that is important is this one moment in movement.

—MARTHA GRAHAM

Movement is an essential life process. When you catch something

moving out of the corner of your eye, you turn your attention to look for something that is alive. A leaf blowing, a candle unexpectedly flickering, and shadows in the sunlight each bring a sudden sense that something alive is nearby. Humans, like all living things, respond to stimuli with movement and how that happens is in part regulated by the autonomic nervous system.

The ability to turn toward and fully experience body sensations as you move is therapeutic (Lucas, Klepin, Porges, & Rejeski, 2018; Rejeski & Gauvin, 2013). Movement practices are a form of autonomic exercise that shapes the system. Both the actual physical act of moving and bringing movement to life in your imagination activate the autonomic nervous system (Collet, Di Rienzo, El Hoyek, & Guillot, 2013; Demougeot, Normand, Denise, & Papaxanthis, 2009).

EXERCISE

Moments of Movement

This exercise helps clients identify a continuum of movements for each autonomic state. The continuum can then be used as a guide to safely navigate dorsal vagal and sympathetic moments and maintain a ventral vagal experience.

BACKGROUND

Movement occurs along a continuum of expression: simple through complex, micro-movements to full body motions. Each autonomic state has different levels of energy that you can connect with and use to shape your experience. Intentional use of movement is a way to engage your dorsal vagal and sympathetic states, making them less intense and persistent, and it’s also a way to deepen your ventral vagal capacities.

STEPS

1. Choose an autonomic state. Using a line to represent ways you move, identify movements at either end. Look for movements that

move, identify movements at either end. Look for movements that engage the least and most energy available to you in the state.

2. Identify movements that happen between the ends. In dorsal vagal, look for movements that begin to gently energize you. In sympathetic, look for movements that use the activated energy in organized and safe ways. In ventral vagal, look for movements that prolong the experience.
3. Design a series of movement lines to bring awareness to the range of movements that are possible in each autonomic state.

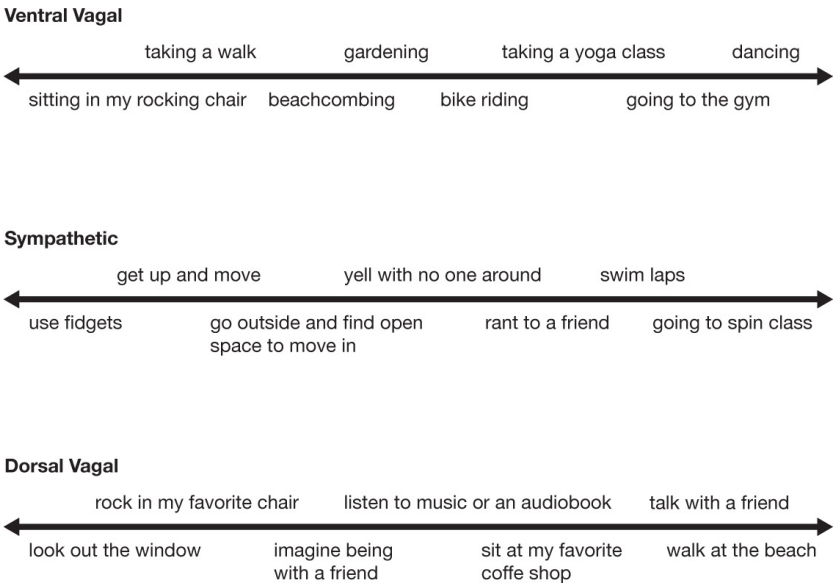

FIGURE 6.2. Movement Continuums

TIPS

Clients are often surprised to realize they can use organized movements (Figure 6.2) to shape their experiences of dysregulation. From a state of dorsal vagal conservation, movement needs to be gentle and often involves imagining a movement before enacting a movement. Simply being in a place where other people are present without a requirement to connect can bring the right degree of autonomic challenge to support beginning mobilization. In the intensity of sympathetic mobilization your clients are looking for an organized way to use and safely discharge their energy. Because the ability for clear thinking is impaired in a dorsal vagal or sympathetic state, having a movement continuum as a guide supports your clients when their autonomic state makes it difficult for them to make

a choice and is a reminder to recognize and savor their ventral vagal experiences.

EXERCISE

Imagined Action

Movement is not always an option. Personal and environmental circumstances sometimes make it difficult to take an action. When that happens, imagined movement is the next best choice. This exercise helps clients connect to the benefits of movement through imagery.

BACKGROUND

Motor imagery is a way for you to be in motion when the environment you're in doesn't support moving, when physical challenges make moving difficult, or when making a movement doesn't feel safe and instead activates a protective survival response. Imagined movement practices, either as a replacement for or as a complement to movement, are another way to get the benefits of moving and experience safely moving through space.

STEPS

1. Identify a movement you are drawn to but haven't brought into action yet. Play with it. Imagine yourself safely bringing the action to life. See yourself doing it. Sense your body moving on the inside. Feel the emotions that accompany your moving. Hear the story of who you are as you move.
2. Once you get the feel for imagined movement, create a series of movements. Use your imagination to move in ways you have always wanted.
3. Make time each day to bring one of your moments of movement to life on the inside.
4. Notice if, over time, using motor imagery invites bringing the movement out of your imagination into the world or if it is autonomically nourishing when it remains an imagined experience.

TIPS

Movement is a good example of needing to find the right degree of challenge to have an action be resourcing rather than dysregulating. Some of your clients will find that imagining certain actions supports their ability to feel safe enough to then enact the action in real life. Other clients are nourished through imagining a movement, but a sympathetic flight or dorsal vagal immobilization response takes over when they think about their private, internal experience becoming visible. However your clients sense and see themselves safely bringing a movement to life, the experience of being a mover brings new information that can be integrated into the story of who they are.

EXERCISE

Labyrinth Walking

Walking a labyrinth activates a subtle pattern of mobilization and calm and opens the mind to new experiences. This exercise offers clients multiple ways to engage with labyrinths, create repeated experiences of autonomic shifts, and explore new ways of thinking.

BACKGROUND

People have been walking labyrinths for centuries. Unlike a maze, a labyrinth has one path and no dead ends. Often thought of as a path to transformation, when you enter a labyrinth, there is a release of connection to the everyday world, a sense of receiving wisdom when you reach the center, and a subtle shift in your sense of yourself and the world when the circuit is completed. When walking a labyrinth there is first a slight increase in mobilization followed by a return to calm making this a gentle autonomic exercise.

STEPS

1. Investigate labyrinth-walking options. The location of thousands of labyrinths around the world as well as access to virtual and printed ones are available at https://labyrinthsociety.org

- Walk a full-size labyrinth.
- Navigate a virtual labyrinth on your computer.
- Trace a printed labyrinth.
- Walk a labyrinth with your fingers using a finger-walking guide.

2. Identify your physiological response to each of the different labyrinth-walking options. Which ones feel the most regulating?
3. Notice any ways your thinking shifts over the course of your labyrinth walk.
4. Keep track of the stories about yourself and the world that you connect with on your labyrinth walks.
5. Find an easily accessible form of labyrinth-walking you can use to return to regulation when you notice a rise in stress.
6. Combine different forms of labyrinth-walking to create a regular practice.

TIPS

With the variety of ways to connect with a labyrinth, this becomes an accessible way for your clients to reduce psychological and physiological stress and gently shape their systems. While using labyrinth walking as an autonomic shaping exercise, your clients may experience an accompanying shift in the ways they think about themselves and see the world.

SHAPING THROUGH BREATHING

We live in an ocean of air like fish in a body of water.

—ALEXANDER LOWEN

Breathing, thinking, and feeling are tied together through the autonomic nervous system (Ma et al., 2017). Autonomic regulation and a story of safety happen when the heart and the breath are in harmony. This cardiorespiratory synchronization is a function of the vagal pathways. While breath is an autonomic process that works without need for conscious attention, breath can also be consciously

without need for conscious attention, breath can also be consciously shaped. Intentionally regulated breath practices can initiate a state of calm, activate a needed moment of mobilizing energy, increase the capacity for attention and alertness, and enliven the social engagement system (Gerbarg & Brown, 2016).

Engaging in simple breath practices has a positive effect on physical, emotional, and relational well-being. Breath counting increases heart rate variability while decreasing sympathetic activation (Kim, Bae, & Park, 2016). The general rules around breath practices are slow extended exhalations and resistance breathing bring more ventral vagal tone; fast, forceful, and sharp inhalations or irregular breathing mobilize a sympathetic nervous system response; matched inhalations and exhalations maintain the system in a ventral-sympathetic balance (Gerbarg & Brown, 2016). Because breath practices dynamically alter the autonomic nervous system, they are both therapeutic and preventative interventions (Jerath, Edry, Barnes, & Jerath, 2006).

EXERCISE

Find Your Breath

This exercise uses a breath map to help clients bring attention to the particular ways of breathing that accompany their dorsal vagal, sympathetic, and ventral vagal states (Figure 6.3).

BACKGROUND

There are many ways of breathing. Sometimes breath comes in a quiet and rhythmic cycle and other times it arrives in an erratic and stressed way. Different rhythms of breathing change your physiology, making breath a direct route to shaping your autonomic responses. Use the autonomic hierarchy to map the many kinds of breaths you breathe each day.

STEPS

1. Begin by bringing awareness to what kind of breathing happens in your ventral vagal, sympathetic, and dorsal vagal states.
2. Experiment with different kinds of breath. Notice how each impacts your autonomic state. Identify breaths that are mobilizing, calming, disconnecting, and connecting.
3. Create a breath map.
   - Using a line to depict the autonomic hierarchy, come into connection with each state and feel the ways of breathing that happen there.
   - Breathe in different ways and see where the breath takes you. Place those breaths on your breath map.
4. Use your breath map to find your place on the hierarchy.

TIPS

Since this is an exercise that identifies rather than modifies breath, creating a breath map is a good way for your clients to get to know how their autonomic state and breathing are connected and sets the stage for the next exercises.

ventral vagal	full, deep, easy, steady, slow, long, calming, filling, even, regular, flow between heart and belly, healthy, sustaining
sympthetic	sharp, short, fast, loud, forced, irregular, tight, restricting, fiery, gasping
dorsalvagal	shallow, silent, unfulfilling, flat, empty, weak, depleting

FIGURE 6.3. Sample Breath Map

EXERCISE

Understand Your Breath

This exercise offers clients a way to experience how breath is affected by the actions of the diaphragm and begin to play with shaping their breath in different ways.

BACKGROUND

BACKGROUND

The diaphragm is the most important muscle in the process of breathing. The diaphragm divides your torso into two parts: the chest cavity inside the ribcage where the lungs and heart reside and the abdominal cavity where the stomach, liver, intestines, and adrenal glands are found. With each breath cycle, the diaphragm changes shape. On an inhalation the muscles of the diaphragm contract and the diaphragm flattens, stretching the lungs to make room for more air. On the exhalation the muscles of the diaphragm relax, restoring the natural curve of the diaphragm to help push air out. When you need extra strength to lift things, during exercise, or in a sympathetically charged state of fight or flight, your breath moves up from your belly to your chest. While this is necessary in the moment, if used for prolonged periods, chest breathing brings anxiety and fatigue. Belly breathing on the other hand emphasizes moving the abdomen, letting it fill and expand on the inhale, empty and contract with each exhale. Belly breathing engages the diaphragm, deepens the breath, and activates the ventral vagal system, inviting a return to regulation.

STEPS

1. Get a feel for the way your diaphragm works.
    - Hold your hands in front of you, fingers interlaced, elbows at your side. In this position, your hands take on the shape of the curve of the diaphragm.
    - Inhale, raising your elbows pointing them outward and let your fingers flatten.
    - Exhale, relaxing your arms letting your elbows fall to your side as your fingers return to the shape of the curve.
    - Follow this cycle, letting your motion reflect the rhythm of your breath as you imagine the action of your diaphragm.
2. Play with changing the rhythm of the motion and synchronizing your breath. Speed the motion up and slow it down. Track the ways your autonomic state shifts with different breath rhythms.
3. Listen to the stories that accompany state shifts.
    - Practice connecting the action of your diaphragm with your breath and listening to the story.
    - Breathe into your chest and track the way your autonomic state changes. Bring awareness to the stories that accompany the

change.
- Breathe into your belly and track the way your autonomic state changes. Bring awareness to the stories that accompany the change.

TIPS

Beginning to attend to the mechanics of breath is a safe starting point for most clients. Do these exercises with your clients to support their ability to bring attention to the interactions of the diaphragm and breath and stay in a ventral vagal regulated state. Once your clients have confidence in that ability, they can continue to explore breath on their own.

EXERCISE

Follow Your Breath

This exercise offers clients simple and safe ways to actively engage breath as a way to resource regulation.

BACKGROUND

Some of the ways to follow your breath are to attend to each cycle, track the ways your breath moves in your body, add movement to your breath cycle, and create a mantra to tie intention to inhalation and exhalation.

STEPS

1. Count your breaths. Breath counting (counting each exhalation) has been a part of mindfulness training for over 1500 years.
   - Begin with short sets—between 3 and 10 exhalations. Experiment until you find the number that brings you into the ventral vagal place on your breath map.
   - Count to that number of exhalations and begin again. Experiment with repeating the cycle two or three times to find the number of repetitions that brings a balance between challenge and nourishment.
2. Find the places you feel breath moving in your body.

- Some of the common places to find your breath are the abdomen, chest, heart, throat, just under the breastbone, in the side ribs, and in your lower back.
- Choose two places and put one hand on each. As you inhale and exhale, feel your breath moving between your hands. Find places that offer an easy pathway to feel the breath flowing between your two hands.

3. Create a mantra. The use of mantras is common in mindfulness practice and is a way to bring focused intention to your breath.
   - Find a word or a phrase for each inhalation and exhalation that brings awareness to:
     - the feeling of energy rising and falling (mobilize, calm)
     - sensing inward and outward connection (tune in, reach out)
     - moving between action and rest (attentive, peaceful)

   Honor the ways your autonomic nervous system and breath are interconnected. Let your breath and body guide you in finding your own words and phrases.
4. Take breath outside your body and add movement.
   - There is a strong connection between breath and posture. Experiment with changing postures (lying down, sitting, or standing; posture slumped, straight, or slightly curved) and listen to the story that accompanies each shift.
   - Integrating breath and arm movements strengthens the muscles used in breathing and increases lung capacity. Experiment with adding arm movements to your breath cycle. Try it both seated and standing. Let your body lead the way. Invite your arms to illustrate your inhalation and exhalation. Notice how your movements change when the quality of your breath changes. Find a pattern that feels restorative and create a daily practice of moving with your breath.
5. Add a sigh. Sighing resets the respiratory system, affects your physiological state, and impacts the story that emerges. Humans sigh many times an hour and those spontaneous sighs are a sign your autonomic nervous system is looking for regulation. You can intentionally sigh to engage your system in that process.
   - Become aware of the times you spontaneously sigh as your system looks for regulation. Make a practice of noticing. Spend

a moment actively appreciating the wisdom of your biology.

- Intentionally sigh. Experiment with a sigh to interrupt a sympathetically activated moment or to bring some energy into a dorsal vagal moment of collapse. Create a habit of bringing a sigh to a difficult situation. Breathe a sigh of relief or sink into a sigh of contentment to deepen a state of regulation and nourish a story of well-being.

TIPS

Breath is an autonomic action that can be intentionally manipulated and is a direct route to influencing autonomic state. When your clients use these exercises between sessions, they are practicing regulation. When you join your clients in following their breath it becomes a co-regulating activity. Watch for your clients' sighs during a session and name them as a way their autonomic nervous system is helping them regulate.

SHAPING THROUGH THE ENVIRONMENT

Outdoor Environments

And into the forest I go, to lose my mind and find my soul.

—JOHN MUIR

The American naturalist and conservationist John Muir found spirituality in nature. He intuitively knew the importance of connecting to nature for well-being. Decades after his death, science confirms what Muir knew: nature nourishes the autonomic nervous system. We now know that nature contributes to resilience (Wells & Evans, 2003) and is associated with feelings of safety (Maas et al., 2009). Walking in a forest environment is an autonomically regulating, restorative experience (Kobayashi et al., 2018; Song, Ikei, & Miyazaki, 2017, 2018), and following a period of distress is a way to calm intense emotions, evoke a state of relaxation, and bring a

return of ventral vagal energy (van den Berg, et al., 2015). Looking out at a forest landscape or just viewing an image of a forest scene can restore autonomic balance (Joung et al., 2015; Kobayashi et al., 2018; Song et al., 2018). Both mental health and general health are also positively impacted around environments that include water (de Vries et al., 2016). We have a deeply embodied, emotional, and communal connection to coastlines (Bell, Phoenix, Lovell, & Wheeler, 2015). In the same way viewing forest scenes is restorative, images with water bring an autonomically regulating effect (White et al., 2010).

Because we can't always get out into nature, we bring nature inside. Caring for indoor plants reduces sympathetic activity (M. S. Lee, J. Lee, Park, & Miyazaki, 2015). Flowers in offices bring physiological and psychological relaxing effects (Ikei, Komatsu, Song, Himoro, & Miyazaki, 2014). Simply having flowers in a room can reduce feelings of loneliness (Mojet et al., 2016), and the presence of a single flower invites people to move closer (Haviland-Jones, 2005).

Connecting with nature is a restorative experience, bringing the autonomic nervous system into a state of ventral vagal regulation. Creating an ongoing connection with nature is a preventative experience and an autonomic exercise that shapes the system toward well-being.

EXERCISE

Green, Blue, and Flowering

This exercise offers ways for clients to use the natural environment, either in reality or through images, to come into a ventral vagal state and deepen the experience.

BACKGROUND

It is a generally accepted that the *green effect* (the impact of being in

green spaces) is a powerful contributor to physical and psychological well-being and that being in a *blue environment* (around or in the water) reduces stress and enhances well-being. Even the simple act of directly connecting to the earth's surface, known as grounding, is an autonomically regulating experience. Drawing on the power of the environment and feeling nurtured by nature is a natural way to shape your system toward well-being.

STEPS

1. Head outside into the natural world.
    - Walk in the woods. Forest bathing, a term coined in Japan in the 1980s denoting the benefits of being in a forest environment, is regulating and restorative.
    - Find the green spaces around your home and work. Regularly return to the places that bring you into a ventral vagal state.
2. Find your way to water.
    - Being by the water is an autonomically regulating and restorative experience. Locate the places around you that offer you the opportunity to be in a *blue environment*. Look toward the ocean, rivers, lakes, ponds, streams, and fountains in city parks.
    - Being in the water brings its own benefits. Cool water experiences have been shown to bring a sympathetic nervous system response, and immersion in warm water lowers sympathetic activation and increases ventral vagal influence. Find a way to immerse yourself in the temperature of water that fits your autonomic need in the moment.
3. Make a physical connection to the earth's surfaces.
    - Walk barefoot in the grass, on the ground, or in the sand.
    - Dig your hands in the dirt or in the sand.
4. Bring the outside in.
    - Add flowers and plants to your home and work environments and benefit from their autonomically regulating effects.
    - The smell of clean air and wet earth is something all animals and especially humans are sensitive to. Track what happens in your body and where your autonomic nervous system takes you

when you encounter those smells.

- Experiment with scent. The smells found in nature are powerful activators of autonomic states. Juniper, lavender, rose oil, and bergamot are some of the scents that have been shown to bring relaxation and regulation. Rosemary, grapefruit, and fennel increase alertness.
- Discover the fragrances that your autonomic nervous system finds renewing. Experiment with different ways to use them. Living or dried objects from the natural world, candles, essential oils, and body creams are some possibilities. Incorporate your chosen fragrances into your everyday experience.

5. View nature.
    - Looking out a window at the natural world for as little as 5 minutes facilitates the return to regulation following a distressing experience.
    - Images can be used to complement your time in nature or as a stand-in for spending time in nature when opportunities in real time are limited. Find pictures of nature that are autonomically regulating for you.

TIPS

Whether or not your clients have physical access to water or green spaces, they can realize the autonomic benefits of connecting to nature. Help your clients find ways to get out into the natural world when possible and use images as another way to connect to nature. If you work in a place where you have access to outside spaces, consider moving outside for a session.

Indoor Environments

This happiness consisted of nothing else but the harmony of the few things around me.

—HERMAN HESSE

Along with the outdoor environments you move in, you inhabit indoor

environments. Through the pathways of neuroception, your homes and workplaces send cues of connection to meet your needs for co-regulation or signals of protection that bring feelings of isolation.

EXERCISE

A Ventral Vagal Space of Your Own

This exercise brings clients' attention to the indoor environments they inhabit. Using their autonomic responses to places and objects, clients assess what brings comfort or discomfort and create spaces to nourish their nervous systems.

BACKGROUND

Danish people have one all-encompassing word for a lifestyle that brings well-being. *Hygge* describes a way of living that is cozy, caring, content, friendly, and safe. This speaks to our longing to create and inhabit environments that are filled with cues of safety and inspire an enlivening of ventral vagal energy. Bringing these qualities into your home and workplace in small and simple ways is an act of autonomic shaping.

STEPS

1. Listen to your autonomic nervous system and become aware of what is present in your environment.
   - Look around your home and see where your sympathetic and dorsal vagal systems begin to activate. Identify what brings those states alive.
   - Consider the objects around you that bring a flavor of dissatisfaction or unease.
   - Look around your home and find the places that feel cozy, comforting, and connecting. Identify what makes them feel that way.
   - Notice the objects around you that inspire safety, contentment, and warmth.
   - Do the same with your workplace.

2. Make a list of the places and things in your home and work environments that bring a feeling of safety and connection. Identify the specific qualities that feel regulating and nourishing to your nervous system.
3. Bring curiosity to what might be possible. Look for spaces at home and at work (a room, a corner, or even a shelf) that could become a place of ventral vagal inspiration for you.
4. Find objects that bring your ventral vagal system alive and bring them into your space. Make small changes and track your autonomic response to each. Remember, small moments add up to a tipping point. Look for the moment when a space feels welcoming. Stop and take that in.
5. Ventral vagal spaces are filled with abundance, but abundance does not mean that your spaces are filled with lots of things. Abundance and scarcity are felt not in the presence of absence of objects but in your autonomic states. Find the balance of open and filled spaces that brings you an autonomic feeling of abundance.

TIPS

When your clients look at their homes and workplaces, they come into contact with a range of autonomic experiences, including disorganized and chaotic environments that mobilize the sympathetic system, ones that are dull and disconnecting and bring a dorsal vagal deactivation, and places that feel safe and welcoming and inspire a ventral vagal response. Because there may be a disproportionate number of elements of dysregulation, it is important to help your clients stay connected to the formula for change—small and often—and track the subtle shifts that happen. Creating ventral vagal–inspired places utilizes processes of closely tracking autonomic responses.

SHAPING THROUGH REFLECTION

Time and reflection change the sight little by little till we come to understand.

—CÉZANNE

For centuries, people have used writing as a way to make sense of their lives. Writing brings a special kind of awareness to thoughts and feelings. Expression in written form has short-term and long-term autonomic regulating effects (Beckwith McGuire, Greenberg, & Gevirtz, 2005). Writing about a past distress can reduce your autonomic response to a new stressor (DiMenichi, Lempert, Bejjani, & Tricomi, 2018), and writing about satisfying experiences can decrease stress, anxiety, and depression (Bhullar, Schutte, & Malouff, 2011).

Compassion practices increase heart rate variability, a marker of ventral vagal influence (Kirby et al., 2017), and self-compassion practices show an increased flexibility of response to stressful experiences (Friis, Consedine, & Johnson, 2015). Loving-kindness mediation has been shown to increase baseline vagal tone, which in turn impacts positive emotions and social connection (Kok et al., 2013).

Your brain and body are intimately connected, autonomic state and psychological story forming experiences and expectations that are sometimes nourishing and sometimes painful. Through the art of reflection, you have the power to shape your system in the direction of safety and connection.

EXERCISE

Writing Your Reflections

This exercise uses writing to add language to autonomic experiences. Creating a practice of listening and using the information to write stories of sympathetic and dorsal vagal challenges and ventral vagal victories helps clients bring explicit awareness to what are otherwise implicit experiences. Adding that awareness often leads to new insights.

BACKGROUND

Your autonomic states carry a wealth of information. Adding words brings

a different kind of awareness to your autonomic stories. Even if you don't think of yourself as a writer, your autonomic nervous system benefits as you listen to your state and begin to put words on paper.

STEPS

1. Think of a time when you experienced a dysregulated response. Take just a few minutes to write about it. Listen to your sympathetic or dorsal vagal survival state and write what you hear.
2. Think of a time when you felt the flow of ventral vagal energy. Turn toward that experience. Listen and write what your ventral vagal state wants you to know.
3. Choose a period of time and set an intention to write about an experience from each autonomic state. A suggested timeframe is once a week over the course of 6 weeks. After the initial writing period, if it feels like a positive experience, set the next intention.
4. Find someone to share your writing with or bring your writing to your therapy sessions. You hear your stories in a new way when you tell them to someone. In the telling, deeper awareness and different insights often emerge.

TIPS

For many clients, writing about autonomic challenges and successes becomes a part of their ongoing shaping practices. Invite your clients to share their stories with you and notice with them any ways their perceptions change as they put language to their experiences. Sometimes this is a subtle shift in understanding and sometimes there is a transformative insight.

In the midst of therapy, these autonomic experiences can be missed, and writing is one way to bring them into awareness.

EXERCISE

Reflecting with Compassion

This exercise is based on the practice of loving-kindness meditation. Using the focus of the four traditional phrases—happiness, health, safety,

Using the focus of the four traditional phrases—happiness, health, safety, ease—clients are asked to find the particular language that represents their autonomic experiences and write their own statements.

BACKGROUND

Compassion emerges from a ventral vagal state and then shapes your system toward experiencing more ventral vagal energy. Loving-kindness meditation is an ancient practice that focuses on self-generated feelings of love, compassion, and goodwill toward oneself and others. Loving-kindness meditation engages the power of the ventral vagal system first through self-compassion and then by offering compassion to others.

The traditional four phrases of loving-kindness meditation are, “May I be happy. May I be healthy. May I be safe. May I live with ease.” Some variation of these four phrases has been used for centuries. Jack Kornfield and Sharon Salzberg, two giants in the field of meditation, note that it’s okay to adjust the words to find the phrases that are most personally meaningful. What words bring these statements alive for you? Let your ventral vagal state guide you.

STEPS

1. Look at the four categories (happy, healthy, safe, and living with ease) through the language of the autonomic nervous system.
   - Find the words that you would use and write your own four phrases. Here is one example of the four phrases:
     - May I find glimmers every day.
     - May I be nourished by the flow of ventral vagal energy.
     - May I be filled with a neuroception of safety.
     - May I live in the rhythm of a regulated nervous system.
2. Say your phrases out loud. Listen to the words and feel how they land in your system. You’ll know you’ve found the right words when you feel a deep connection to your ventral vagal system.
3. Say the phrases to yourself (“May I”). Then send the phrases to others (“May you”) beginning with someone you feel safe and connected to, then a neutral person, then someone you may have an unrepaired rupture with, and finally to all living beings.
4. Share your four phrases with someone else. This might be a friend, a family member, or your therapist. Say the phrases to the

other person and also have them read your phrases back to you. Notice what happens when you offer and receive your unique phrases. Track your autonomic response to the experience of first offering compassion and then of receiving compassion.

TIPS

This exercise uses the ancient practice of Metta meditation as a structure for your clients to find language that reflects the ways their ventral vagal system can be engaged for well-being. Particular words bring different autonomic responses. Help your clients move out of a cognitive decision-making process and discover the wording for each phrase by attending to their autonomic experience.

CHAPTER 6 **SUMMARY**

Neural exercises create a resilience platform for everyday regulation (Flores & Porges, 2017). When your clients have ongoing experiences of returning from protection to the regulation of connection, their autonomic nervous systems are working out. As with other forms of exercise, autonomic exercising is good for physical and psychological well-being. Over a century ago, William James (1890) implored us to see the nervous system not as an enemy but as an ally. It's important for you clients to cultivate an attitude of understanding and respect for the rhythms the autonomic nervous system has created as they enter into practices to shape their systems. Shaping is not about one specific practice. It's through multiple autonomic pathways that a more flexible pattern of response is created, and the autonomic nervous system begins to move toward connection. Some exercises in this chapter involve active engagement while others quietly invite in a new pattern. Help your clients consider what fits their needs in the moment. Learning to listen to the wisdom of the autonomic nervous system and honoring the right degree of challenge is the foundation for change.

CHAPTER 7

INTEGRATING NEW AUTONOMIC RHYTHMS

The whole is greater than the sum of its parts.

—ARISTOTLE

Integration is a process of establishing new autonomic rhythms. Living creatures are amazingly flexible in adapting to the environment and, in fact, change some of their physiological characteristics in order to survive. Fascinating research shows that the tiny water flea grows a helmet or spikes in response to cues of danger from predators in the environment (Reger, Lind, Robinson, & Beckerman, 2017). Although humans may not grow actual helmets or spikes, experiences leave an autonomic imprint and over time create autonomic habits. "Our nervous system grows to the modes in which it has been exercised" (Blanco, 2014, p. 1). If your clients' autonomic patterns were created in an environment of unsafety, they often still move through life in ways that were once adaptive and are now limiting. When your clients predictably experience cues of safety and bring them into explicit awareness, they can shape their response patterns to

match the new environment. With practice, an integration process unfolds and repeatedly activated states become new embodied traits (Siegel, 2007).

When autonomic patterns begin to change, your clients find themselves in the unfamiliar experience of being between—not held in old patterns and not yet predictably in new ones. They may feel untethered, ungrounded, unsure of how to engage with others or how to move through daily living experiences. Attending to the beginnings of change and wiring in new neural expectations is an essential part of the integration process.

The integration process takes the small shifts that are the essence of autonomic shaping, brings implicit experiences into explicit awareness, and utilizes the emergent properties of the new patterns to create a new story. There is a gap between intention and action and adding an implementation intention increases the likelihood that your clients will reach their goals (Achtziger, Gollwitzer & Sheeran, 2008; Gollwitzer & Sheeran, 2006; Milne, Orbell, & Sheeran, 2002). When your clients use an implementation intention, they keep moving toward their goals even when they are feeling the high levels of cortisol and increased heart rate that are signs of a sympathetically dysregulated state (Wieber, Thürmer, & Gollwitzer, 2015). The first section, A New Rhythm of Regulation, offers a series of five exercises that help your clients use autonomic awareness to identify and implement goals.

The second section focuses on resilience. Resilience emerges when, either in perception or in reality, there are more resources than stressors (Ruini, Offidani, & Vescovelli, 2015). Autonomic overload occurs when an environment is filled with frequent cues of danger, when the autonomic nervous system can’t adjust to the needs of the moment, or when a survival response keeps going long after it should turn off. Resilience emerges when your clients can accurately detect and effectively respond to cues of safety and danger. Resilience is teachable, learnable, recoverable, and takes practice and awareness

(Graham, 2018). The second section, Resilience, offers two exercises to build resilience; Engaging the Vagal Brake and Building Resilience Routines. The capacity to manage distress and keep a healthy balance of resources to stressors relies on the actions of the vagal brake. The vagal brake exercise brings the biology of this ventral vagal circuit into useful form through metaphor. The second exercise gives your clients a way to create a personalized plan to build resilience by choosing actions that resource the capacities of their vagal brake and bring a flow of ventral vagal energy.

A NEW RHYTHM OF REGULATION

Let us not look back in anger, nor forward in fear, but around in awareness.

—JAMES THURBER

We are all creatures of habit. In fact, some studies have shown that 90% of daily actions are so routine they can be predicted by a few mathematical equations (Buchanan, 2007). “We establish physiological and behavioral set points or default patterns that, once established, the brain and nervous system strive to maintain” (McCraty & Zayas, 2014, p. 7). Your clients see the world through the lens of their autonomic expectations. Awareness of body state and awareness of emotional state are interconnected experiences that make it likely that more awareness of autonomic states will be of benefit in regulating emotions (Fustos et al., 2012).

Habitual autonomic patterns work in the background, bringing a familiar rhythm to your clients’ everyday experiences. When those patterns are anchored in a flexible autonomic nervous system, ventral vagal energy supports their ability to safely and successfully meet challenges and move through the day. This is a rhythm to deepen and celebrate. Ongoing activation of sympathetic or dorsal vagal energy

celebrate. Ongoing activation of sympathetic or dorsal vagal energy creates rigid response patterns, and with rigidity comes suffering. Here you need to help your clients gently shake up the system, interrupt the engrained patterns of protection, and enliven their ventral vagal capacities. Using practices to recognize, reflect, regulate, and re-story, your clients can create a new rhythm of regulation.

EXERCISE

Recognize

This exercise is the foundation for building new autonomic patterns. The simple two-step process is an easy way for clients to build the habit of knowing moment to moment what autonomic state is active.

BACKGROUND

Autonomic awareness is a protective factor. Without the ability to recognize states and state changes, you are at risk for remaining stuck in dysregulation. The question, “Where am I on my autonomic map?” is a simple way to build autonomic awareness.

STEPS

1. Notice. Bring awareness to your autonomic state. Use what you learned about your autonomic states from the exercises in Chapters 4 and 5 to tune in.
2. Name. Stay out of your story and identify your state. Where are you on your autonomic map?
3. Repeat these two steps often. Create ease with this practice until you can quickly and accurately place yourself on your autonomic map.

TIPS

While a seemingly simple skill, it takes repeated practice for your clients to become expert state detectors. Stop in your sessions to notice and name and help your clients create confidence with this skill. Take time with this step to build the foundation for the next steps.

with this step to build the foundation for the next steps.

EXERCISE

Reflect

Building on clients' ability to recognize their autonomic states, this exercise adds the next step of turning toward the state and spending a moment listening to the essential information held in the state.

BACKGROUND

Once the notice-and-name practice becomes easy and automatic, add the next step of turning toward your autonomic nervous system to listen for just a quick moment to what it is telling you. Don't spend a long time hearing the full story. Just take long enough to get the general idea of what is happening.

STEPS

1. Be curious about what just prompted a mobilization of your sympathetic system, a descent into dorsal vagal conservation mode, or an experience of ventral vagal regulation.
2. Listen to what your state wants you to know.
   - My sympathetic mobilization is telling me . . .
   - My dorsal vagal state is letting me know . . .
   - My ventral vagal system is inviting me to . . .
3. Listen for just a brief moment with curiosity and without judgment. Don't spend more than a minute or so listening. This practice is a quick experience of listening to the outlines of your story and not diving deeply into the details.

TIPS

This exercise builds your clients' ability to turn toward their autonomic experiences and reflect without getting pulled in. Your clients should spend just long enough to hear the essential information and not a full story. As clients listen, they begin to hear how their sympathetic and dorsal vagal states are a way their autonomic nervous system is

activating an adaptive survival response and how their ventral vagal state is offering a moment of regulation and connection.

EXERCISE

Regulate

Building on the Recognize and Reflect exercises, this exercise uses clients' awareness of their autonomic patterns to move into goal setting.

BACKGROUND

Everyday navigation of daily living involves setting goals and then acting to make your goals a reality. Goals are helpful in identifying what you want to achieve and are often stated in the form of an intention.

STEPS

1. Consider the autonomic goals you want to set. Ask yourself:
   - Where do I want my autonomic patterns to take me?
   - What do I want to change?
   - What do I want to deepen?
2. Write goals that address what you discovered. Begin each statement with the words "I intend to." For example: I intend to not get stuck in dorsal vagal collapse. I intend to more quickly manage my sympathetic response. I intend to find moments of ventral vagal happiness to savor. Find the words that express your autonomic goals and write your personal intentions.

TIPS

Autonomic goal setting helps your clients work with the autonomic states that underlie their personal narratives. Working with their biology first, your clients can shape new response patterns that create a foundation for new behaviors and beliefs.

EXERCISE

Create “If-Then” Statements

This exercise shows clients how to add an implementation intention to autonomic goals. Using the proven if-then formula, clients write goals to shape their responses to dorsal vagal, sympathetic, and ventral vagal experiences.

BACKGROUND

Once you identify your autonomic goals, the next step is to translate your intention into action by adding what is called an implementation intention. An implementation intention is an if-then statement that identifies when, where, and how you plan to respond to a situation. Writing implementation intentions brings awareness to experiences by creating a link between cues and responses, making it easier for you to recognize situations and take action.

STEPS

1. Set goals for responding to cues of safety and danger in new ways. Set goals for all three states. Make sure your goals aren’t too big (unrealistic as a starting point), too broad (undefined and hard to put into action), or too bland (uninteresting and don’t keep your attention). Set goals that begin with small steps and lead to a larger change, are well defined with tangible ways to measure, and entice you to want to see what happens when you follow through.
2. Use the beginning statement, “If this happens then I will” to write if-then statements for each of your identified goals.
3. Write statements for external cues (response to certain people, places, or events).
4. Write statements for internal cues (response to autonomic state changes).
5. Read your if-then statements and check your autonomic response. Make sure each statement brings a neuroception of safety. Rewrite any statements that trigger a move into a sympathetic or dorsal vagal response.
6. Use your statements and track what happens. As your responses

shift you may want to add new goals and write new if-then statements.

TIPS

The neuroception of safety is an essential element in the change process. To be successful, your clients' autonomic goals and if-then statements have to bring the right degree of challenge. Too much and the system moves into a survival response. Not enough and the system won't recognize the invitation to repattern. Help your clients track their movement toward a goal, celebrate reaching their goal, and then create new goals and if-then statements when they successfully realize their original ones.

The following examples are offered as a guide. If the goal is to return to regulation more easily, if-then statements might be written like this:

For external cues:

- If I'm going to be around my family, then I will make sure my talisman stone is in my pocket so I can reach it easily.
- If my work to-do list seems overwhelming, then I'll take a quick break to get up and move every hour.
- If I go to the coffee shop with friends, then I will tell them how much I like being there with them.

For internal cues:

- If I feel the beginning of disconnection, then I will send a text to my friend.
- If I notice my sympathetic system beginning to rev up, then I will use my sighing practice.
- If I get back to my state of ventral vagal ease, then I will put my hand on my heart and celebrate.

EXERCISE

Re-Story

Resisting the pull of old stories and giving new stories time to take shape

is an integral part of the change process. This exercise helps clients follow the subtle shifts that bring a new rhythm of regulation and bring attention to concrete markers of change.

BACKGROUND

Humans are meaning-making beings, automatically pulled toward story. Working with the skills of recognizing, reflecting, and regulating brings you to the important step of re-storying. As you integrate new patterns, you move out of your old stories and head toward new ones. This transition often brings with it discomfort and you can easily be pulled back into old familiar stories about yourself and the world. The re-storying process disrupts the habit of listening to an old story and encourages the development of a new one. Re-storying invites you to become an active author of your own autonomic adventure.

STEPS

1. What are the ways your autonomic nervous system is responding differently? Fill in the following sentences to bring awareness to the shifts that are happening.
   - Instead of my expected sympathetic mobilization I . . .
   - Instead of my familiar dorsal vagal disconnection I . . .
   - I notice I am more . . .
   - I notice I am less . . .
2. Write a story that speaks to your new pattern. Choose words that come from your ventral vagal state and keep that state online and active. For example, “I’m strong when I interact with other people” might bring sympathetic mobilization while “I have inner strength that serves me when I’m interacting with others” could keep you anchored in ventral.
3. Write about qualities and not behaviors. Use sentences that begin with “I am” (a quality) rather than “I do” (a behavior). *I am kind* is a different story than *I do kind things*.
4. Create a story that illustrates your new autonomic responses.
   - Use *I am beginning to* or *It is possible that* as the opening line to the new story.
   - Write in small increments. In the re-storying process, a short

story is more effective than a long essay.

TIPS

Through their stories your clients define who they are and how they find their way in the world. Embedded in their old stories are acts of protection that come from sympathetic or dorsal vagal states. Help your clients create new stories that are anchored in their ventral vagal energy and nourish their nervous systems.

RESILIENCE

Resilience—the capacity to bend with the wind, go with the flow, bounce back from adversity, is essential to the survival and thriving of human beings and human societies.

—LINDA GRAHAM

Through the lens of the autonomic nervous system, resilience is the ability to return to a ventral vagal state following a move into sympathetic or dorsal vagal responses. Autonomic state shifts in response to the challenges of everyday life are a normal and expected experience. The goal is not to always be in a state of ventral vagal regulation but rather to be able to flexibly navigate the small, ordinary shifts that a part of everyday life and build enough resilience to weather the ones that are traumatic. Your clients build resilience by moving through cycles of regulation, dysregulation, and the restoration of regulation.

Before birth, the capacity for resilience is shaped as a mother's levels of stress impacts the prenatal programming of her baby's autonomic nervous system (Bush et al., 2017). As we mature, ventral vagal activity measured through heart rate variability (HRV) is associated with resilience. People who have high HRV score higher on resilience questionnaires, recover more efficiently from acute

psychological stress, and are less vulnerable to the development of PTSD-and depression-related symptomatology (Carnevali, Koenig, Sgoifo, & Ottaviani, 2018).

Resilience helps your clients stay hopeful when things feel hopeless, engage an effective survival response in the face of danger, manage levels of stress in an ongoing stressful environment, and keep moving forward when the world around them is filled with suffering.

EXERCISE

Exercise the Vagal Brake

This exercise brings attention to the role of the ventral vagal pathway to the heart's pacemaker (the sinoatrial node) in regulating autonomic responses. Through the use of image and movement, clients are able to access and exercise the important regulating capacities of the vagal brake.

BACKGROUND

The vagal brake is responsible for speeding up and slowing down your heart rate. The vagal brake allows you to feel more sympathetic nervous system energy while keeping your ventral vagal system online and in charge. As the vagal brake begins to release, the mobilizing energy of the sympathetic nervous system that is in the background begins to move into the foreground. Then as the vagal brake reengages, the process is reversed, sympathetic energy moving to the background and ventral vagal back to the foreground. Think about the vagal brake working similarly to the brakes on a bicycle. Imagine you are riding a bike down a hill and you want to go a little faster. Release the brakes a bit and feel the wheels spin faster. Gently squeeze the brakes to slow down.

When your vagal brake relaxes but doesn't fully release, you have access to a range of responses, including feeling calm, engaged, joyful, excited, passionate, playful, attentive, alert, or watchful, while still safely anchored in the ventral vagal system. You can bring the energy necessary to respond to what is needed in the moment. When working well, the vagal brake supports flexibility in your responses and creates a

Well, the vagal brake supports flexibility in your responses and creates a sense of ease to transitions.

Using metaphor and imagery you can experiment with engaging, relaxing, and reengaging the vagal brake and experience the ways this part of the ventral vagal system helps you safely navigate everyday challenges. With ongoing practice, you create more flexibility in your responses and feel the benefits of a resilient autonomic nervous system.

STEPS

1. Find an image of your vagal brake that brings to life your sense of regulating the increase and decrease of energy in your ventral vagal pathways. Look for an image that gives you the feeling of controlling the dimensions of something. Some commonly used images include bicycle brakes, a door, a bridge, a gate, a water faucet, a volume control knob, and a dimmer switch. Let your imagination guide you as you find an image that you can manipulate and measure the changes.
2. Write a simple story about your vagal brake using the image. Describe your image and how you use it to increase energy and return to calm.
3. Use a movement. Not everyone creates imagery to come into connection with inner experience. For some people movement is the preferred method. Find a movement that changes shape to illustrate the increase and decrease of energy.
4. Connect your vagal brake image and/or movement to your breath cycle. A subtle pattern of relaxation and reengagement happens with every breath cycle. With each inhalation, the brake relaxes just a bit, allowing a slight speeding up of the heart, and then reengages on the exhalation to bring a return of the slower beat. Take a moment and play with these two pathways. Feel your vagal brake relax, then reengage with each breath in an ongoing cycle. Move through several breath cycles until it begins to feel natural.
5. Use the image and/or movement to intentionally engage, relax, and reengage the brake.
   - See yourself as an active operator of your vagal brake, shaping the rise and fall of energy. Bring the image to life—see it, hear it, feel yourself adjusting it, and feel your energy moving in

synchrony with the changing image.
    - Bring the movement connected to your vagal brake into awareness either in outward action or inward experience. Change the movement and feel the increase and decrease of sympathetic energy in your system.
6. Play with the experience of intentionally exercising your vagal brake.
    - Start with a small challenge, perhaps something that is commonly experienced in your day-to-day life. On a scale of intensity from 1–10, choose something in the 1–3 range.
    - Use your image and/or movement to relax the brake to meet your chosen challenge and reengage the brake when the challenge is over. Feel the influence you have over the ways your vagal brake works in service of managing the challenge.
7. Experiment with a variety of challenges. Build confidence in using your vagal brake to meet everyday challenges.
    - Once you feel confident in successfully meeting small challenges, choose a slightly stronger challenge. Notice how your vagal brake relaxes, allowing your energy to rise in the face of more intense challenges while maintaining the ventral vagal state of safety. Then reengage the brake and return to your ventral vagal starting point.
    - Practice using your vagal brake with environmental experiences.
    - Practice using your vagal brake with relationship stressors.

TIPS

The vagal brake is an embodied system of regulation that you can help your clients intentionally access and exercise. Without the vagal brake, your clients lose their anchor in the ventral vagal state of safety and connection and move into the sympathetic nervous system's protective states of fight and flight. Without the vagal brake they may stay stuck in sympathetic mobilization or continue the descent into dorsal vagal collapse. With ongoing practice, clients create more flexibility in their responses, learn to safely access the mobilizing energy of the sympathetic system, and feel the benefits of a resilient autonomic nervous system.

Here are some examples of vagal brake imagery:

- Open a bridge to allow big ships to pass through safely and then close it for the usual boat traffic.
- Open and close a door, letting in the amount of light and air wanted. Make the opening the right size just to look through or to walk through.
- Use a dimmer switch for a light fixture. There are many adjustments between on and off. Decide how much light I need moment to moment and move the dimmer switch up or down.

EXERCISE

Resilience Routines

This exercise helps clients take what they have learned about their autonomic patterns and choose practices that fit their personal needs around feeling nourished and increase their capacity to respond with resilience. Since resilience is a quality that can be enhanced over time, this exercise combines ongoing core practices with regularly changing practices.

BACKGROUND

Resilience is an emergent property of a ventral vagal state. As you build resilience, instead of responding to a challenge with an automatic move into a survival response, you are able to respond with more flexibility. And in the times when you are pulled into a survival response, rather than getting stuck there, you're able to return to the state of ventral vagal regulation. As resilience builds, your capacity for flexibility of response deepens.

STEPS

1. Create resilience routines that draw from practices that engage your body and brain in a variety of ways. Revisit Chapter 6 and see if there are shaping exercises from the different categories

that fit into your resilience routine.

2. Experiment with actions that bring moments of ventral vagal experience.
   - Look inward to breath and reflection practices.
   - Look outward into the environment of your home and nature.
   - Look at the way you move in the world and the people who accompany you.
3. Choose experiences that feel nourishing and ones that feel a bit challenging. You want a mix of practices that feel comfortable and are easy to engage with and ones that take concerted effort. Building resilience is about both deepening into ongoing practices that feel sustaining and inviting in new practices that bring the right degree of neural challenge for your system.
4. Find a few core practices that will remain constant in your resilience routine.
5. Create a second category of practices that routinely change.
   - Decide on the length of time you want to use. The time period can be anywhere from 1 week to 6 months.
   - Choose a few new practices to experiment with over your chosen time period. At the end of that time some practices may become core practices while you let others go. As you try out new practices, your resilience routines continue to develop.
6. Regularly review and revise your resilience routines. Some practices will become lifelong, while others will serve you for a time and then be replaced with new ones.

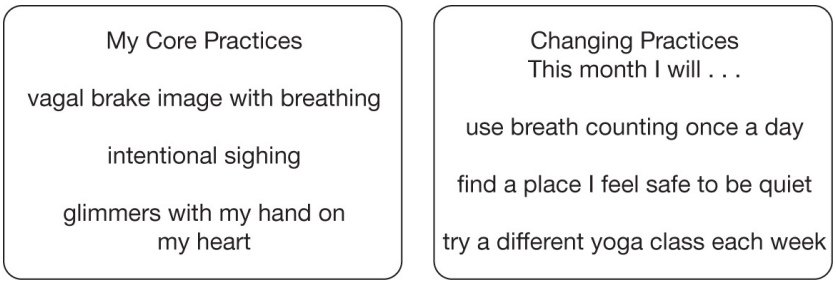

FIGURE 7.1. Sample Resilience Routines

TIPS

Resilience routines (Figure 7.1) help your clients build the capacity to

meet challenges without being pulled into and held captive by a survival response. Encourage your clients to take time finding two or three core daily resilience practices. These should be simple practices that they find easy to use and lead to an increased sense of actively regulating and resourcing. Have your clients share their resilience routines with you. During sessions you can use their core practices to support working at the edges of regulation.

CHAPTER 7 **SUMMARY**

If light is in your heart you will find your way home.

—RUMI

The word *integrate* comes from the Latin to make whole. When your clients integrate new autonomic rhythms, they make their systems whole in new ways. They move from a pattern of rigid responses to an autonomic platform that supports flexibility. Integration of new autonomic patterns happens over time and can be explicitly encouraged.

The exercises in Chapter 7 help your clients incorporate the skills they explored in Befriending, Attending, and Shaping. You can think about the process of integration through the four "D's": discover, disrupt, develop, deepen.

Discover. Your clients begin their journey to integration by discovering their patterns of protection and connection.
Disrupt. The next step toward integration is to disrupt familiar autonomic survival responses and the stories of mobilization and disconnection that accompany them.
Develop. Having interrupted old patterns, opportunities open for clients to develop new ways of responding that are grounded in ventral vagal safety.

Deepen. The final step is to bring together new responses and new stories.

Integration takes time, happens incrementally, and is a lifelong endeavor.

CHAPTER 8

CONNECTING TO OTHERS

We were all hungry, but it was Elizabeth who realized our true starvation was for connection, the company of other people . . . for fellowship.

—ANNIE BARROWS, THE GUERNSEY LITERARY AND POTATO PEEL SOCIETY

Through the process of evolution, anatomy and biology have been shaped to enable social engagement and reciprocal connection (Carter & Porges, 2012). Experiences of social relationships and loneliness significantly predict wellness, illness, and mortality. “There are perhaps no other factors that can have such a large impact on both length and quality of life” (Holt-Lunstad, Robles, & Sbarra, 2017, p. 527). The social environment effects biology. It has become apparent that social connections and physiology enter into a reciprocal relationship that impacts the ways genes are expressed (Cole, 2014). When people feel socially disconnected, they seem to have an increased inflammation response coupled with an impaired immune

response (Cole, 2009). Applying this understanding of the interconnection of physiology and psychology, the British town of Frome developed a project focused on building networks of social support and connection and found hospital admissions reduced by over 30% (Abel & Clarke, 2018). Your biology responds to being out of connection and your happiness is interwoven with the happiness of people with whom you are connected. Community can be a cure for illness.

"Life on Earth is fundamentally social" (Carter & Porges, 2012 p. 12). Connecting invites your clients into exploration of social connections, reciprocity, and co-regulation. Your clients connect with people whose autonomic patterns fit with theirs and feel familiar. Their relationships are often with people who are similarly dysregulated or whose autonomic responses mimic their childhood experiences. As a result of engaging in polyvagal exercises, your clients' autonomic patterns begin to change, and they are drawn to look for other people who attune to their new patterns. Looking at relationships through the lens of a reshaped system brings clarity to what is autonomically draining and filling. Autonomic resonance is a powerful guide for your clients to use in evaluating current relationships, shaping old relationships in new ways, and looking for new connections with people whose rhythms are similar.

Chapter 8 offers two categories of exercises that help your clients embrace the human longing and biological need to create community: Belonging, and Connecting to Something Greater than Self. Each of these offers ways to engage the autonomic nervous system in deepening pathways to connection. Belonging begins the process with three exercises that use the experience of reciprocity to help your clients understand their personal needs for connection and create ways to meet those needs. Connection to Something Greater than Self offers clients ways to connect to the autonomic experiences of gratitude, compassion, and awe and build connections beyond their immediate personal relationships.

BELONGING

Every heart sings a song, incomplete, until another heart whispers back.

—PLATO

We come into the world wired for connection, one autonomic nervous system reaching out to another. Connection is a biological imperative—essential to survival. Being predictably cared about creates a sense of belongingness (Baumeister & Leary, 1995). The autonomic nervous system requires reciprocity to regulate states and to feel safe (Porges, 2012). In fact, the quality of your clients' relationships has more impact on their health and well-being than the quantity (Ozbay et al., 2007). Although your clients may interact with lots of people in the course of a day, they can still feel profoundly lonely. They can be "alone together" (Turkle, 2011).

A sense of belonging to a group and having things in common with fellow group members brings satisfaction with life (Wakefield et al., 2016). In an ever-increasing feedback loop, when your clients are embedded in connections with friends, they are more likely to experience life satisfaction and when they experience life satisfaction, they are more likely to have stronger and more intimate connections (Amati et al., 2018). Your clients' individual sense of happiness is impacted by being part of a network of happy people (Fowler & Christakis, 2008).

EXERCISE

Rules of Reciprocity

This exercise helps clients look at experiences of intra- and interconnection in daily living and ways to create the right balance to

meet their autonomic needs (Figure 8.1).

BACKGROUND

You don't require reciprocity, proximity, and face-to-face interactions all the time. In fact, well-being is found in a balance of time with others and time by yourself. You have your own reciprocity requirements, and when they aren't met, your body feels the absence. Without the right measure of reciprocity, your autonomic state begins to shift from readiness for connection to preparation for protection. Incorporating a therapeutic dose of reciprocity (the amount necessary to bring the desired effect) into your daily living means first knowing your needs and then building sustainable connections and opportunities to meet those needs.

STEPS

1. Fill in the following equations to find your reciprocity rhythms. Recognize the signals that you've been on your own for too long, you've spent too much time connected to others, or you're in a sweet spot of symmetry.

The amount of time I want to spend on my own today is: Today I'm going to spend time alone doing:	= reciprocity balance	The amount of time I want to spend with friends today is: Today I'm going to connect with: And we're going to:
These work responsibilities mean that I work by myself: These things in my personal life mean that I'm on my own:	> alone and out of balance	I've neglected being with the people in my life who are important to me by not paying attention to: and not making time for:
I've lost track of my: I've been so busy with others I haven't made time for:	< with others and out of balance	I feel too involved in the life of: I feel over-saturated by doing things with others because I said yes to:

FIGURE 8.1. Reciprocity Equation Chart

2. Reciprocity is not a static experience. Return to this practice

2. Reciprocity is not a static experience. Return to this practice regularly to track when you are out of balance or in a rescuing relationship to yourself and others.
3. Take care of your connections.
   - Write reciprocity intentions that describe how you are going to pay attention each day to ways you are in and out of reciprocity. Examples might be, “I will track my reciprocity rhythms and take action when I’m out of balance” or “At the end of the day I’ll reflect on my moments of reciprocity.”
   - Create time and space for reciprocal interactions. Identify when, where, and with whom you can build predictable, sustainable opportunities for connection into your life.

TIPS

In beginning therapy it is expected that your clients’ equations will be out of balance. Often one of the things that brings clients to treatment is the experience of autonomic dysregulation that is an outcome of focusing too much on others or on themselves. Help your clients understand that there is no one single formula for balance; rather, each person creates their own formulas based on their personal autonomic needs. This is a process of finding and maintaining a balance between tending to self and connecting with others.

EXERCISE

Personal Connection Plan

This exercise helps clients identify what they are doing to feel connected, decide what they would like to try, and use that awareness to create a connection plan (Figure 8.2).

BACKGROUND

What does a map of your pathways to connection look like? Your personal plan brings a dual focus: what’s working (the things that are already in place) and what’s wanted (things to explore and invite in). The questions in this exercise reference people, but feel free to add pets to your exploration.

your exploration.

STEPS

1. Identify what's working.
   - Who are the people in your life with whom you feel a connection?
   - What are the things you do together that foster that connection?
   - What are the things you do to nourish your sense of connection to self?
2. Identify what you want.
   - Who would you like to invite into connection?
   - What might you do to explore new connections?

People I want to continue to connect with:	People I would like to get to know:
Things I want to continue to do with my friends:	Things I'd like to explore doing with others:
Things I want to keep doing to connect to my own experience:	New things I'd like to try on my own:

FIGURE 8.2. Personal Connection Plan

   - What would you like to explore on your own?
   - How does interacting with others in a playful way fit into your connection plan?

- How do moments of shared stillness fit in your connection plan?

3. Fill in the boxes to create your personal connection plan. Update your plan as you try new things and make new connections.

TIPS

Clients may feel the absence of connection as they work on this exercise. Moving into sympathetic or dorsal vagal reactions shuts down their ability to explore what they want. Help your clients anchor in the energy of their ventral vagal state so they stay in self-compassion when looking at what is present and have access to curiosity when considering what they want.

EXERCISE

Clusters of Connection

Connecting with others is a universally beneficial experience, but the ways people benefit from connection are individually created experiences. This exercise uses the categories of who, how, and how often to help clients look at the ways they connect with people in their networks.

BACKGROUND

There are many ways to reach for reciprocity. There are many pathways to connection. Who you connect with and how you connect is an individual experience. Find the ways your autonomic nervous system feels nourished and create relationships with people (and pets) that nurture your sense of being woven into a resilient network.

STEPS

1. Look at people in your life.
   - Make a list of the people to whom you are connected.
   - Listen to your autonomic response as you think about each person. Using a scale of 1–3, loosely connected; 4–7, pretty connected; or 8–10, very connected, identify how close you feel to these people. You may find that you have several people in

the 4–7 pretty connected range or one person in the 8–10 very connected range and feel very safe and supported with either configuration. It isn't a particular number of connections that matters, it's the ways your personal autonomic needs are met by those connections.

2. Look at how often you connect with people in your network. A match with others feels resourcing while a mismatch between your wish for connection and your experience of connection is painful.
3. Look at the ways you connect.
   - Create a pie chart to map your kinds of connection. Use the communication categories that fit for you. The two examples in Figure 8.3 show very different connection profiles, but each person identified feeling deeply connected to their network.

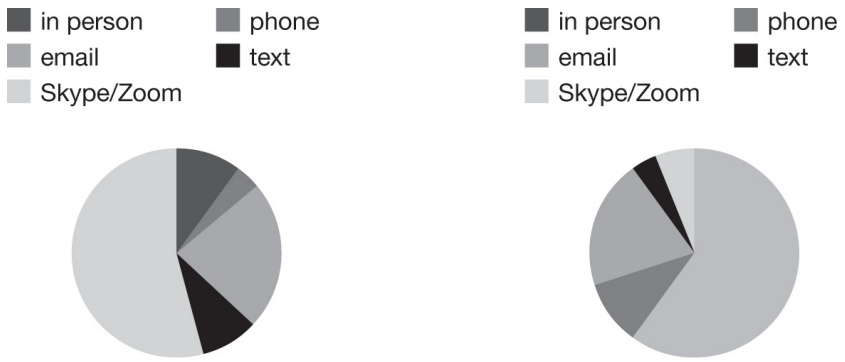

FIGURE 8.3. Types of Connection

4. Look at what you do when you connect.
   - quiet moments
   - physically active adventures
   - go out or stay in
   - favorite activities you love to return to
   - new things you want to try

TIPS

Your clients each have their own connection needs and ways of connecting and often judge their patterns in comparison to what they think is the right or normal way to connect. Help your clients change from thinking about ways of connecting as right or wrong and instead stay curious as they look at the different kinds of connection that are

curious as they look at the different kinds of connection that are personally autonomically satisfying.

CONNECTING TO SOMETHING GREATER THAN SELF

The world is full of magic things, patiently waiting for our senses to grow sharper.

—W. B. YEATS

Gratitude, compassion, and awe—called self-transcendent emotions—are experiences that bind people together. They bring benefits beyond individual experiences and create relationships that extend outside the family system. These experiences are associated with ventral vagal activity, bring physiological and psychological health, and may even be connected to your molecular well-being (Cole, 2014).

Gratitude is a universal experience, offered and received by people in cultures around the world (Emmons & Stern, 2013). “Whether it stems from the acceptance of another’s kindness, an appreciation for the majesty of nature, or a recognition of the gifts in one’s own life, gratitude enhances nearly all spheres of human experience” (Emmons & Stern, 2013, p. 846). Individual moments of gratitude weave together to create a more general sense of being grateful in daily life (McCullough, Tsang, & Emmons, 2004). Just as compassion can be deepened through practice, practice strengthens the gratitude response.

The ventral vagal state of safety creates a platform for compassion (Porges, 2017b). When you feel held in the safety of a regulated nervous system, you can look out into the world and see the ways other people are suffering and respond with compassion. Increased ventral vagal activity is linked to compassion and self-compassion and both are strengthened with regular practice (Neff & Germer, 2017; Stellar, Cohen, Oveis, & Keltner, 2015).

Awe is defined by two features: vastness (experiencing something larger than yourself or beyond your ordinary experience) and accommodation (a reorganization of your ways of thinking to adjust to the new experience) (Keltner & Haidt, 2003). Awe is an information-rich experience that pulls your attention outside yourself toward something greater than your individual experience and expands your frame of reference (Shiota, Keltner, Mossman, 2007). Awe reminds you that you are part of humankind, inextricably connected to the world.

EXERCISE

With Gratitude

This exercise brings attention to everyday experiences of gratitude that clients often miss. These experiences of gratitude are in the family of ventral vagal micro-moments that, when brought to conscious awareness, strengthen the pathways to regulation.

BACKGROUND

Sometimes gratitude comes in the form of life-giving or lifesaving events (a stranger donating a kidney, someone not leaving your side when you are in the depths of despair) that irrevocably change the way you think about and move through the world. More often the gifts of gratitude come through ordinary, everyday experiences. Simple interactions with people (holding a door open, offering a smile, recognizing someone's contribution), pets (your dog greeting you at the door, your cat nuzzling you awake in the morning), or in nature (the return of the sun after a stretch of rain or the rain after a period of drought, the first hint of spring) are opportunities for gratitude. Gratitude is good for your body and brain (fewer physical complaints, better heart health, less depression and anxiety, more happiness). A gratitude practice helps you see the small, everyday experiences of goodness that might otherwise pass by unnoticed.

STEPS

STEPS

1. Keep a gratitude list. Make a practice of noticing what you might otherwise take for granted.
2. Find ways to express your gratitude. Say thank you. Return the favor.
3. Use a breath practice to deepen into appreciation.
    - Imagine breathing into the beginnings of your ventral vagus at the base of your skull. Follow the pathway as it makes its way to your heart, and then breathe out of your heart. Follow this cycle of breath and imagine your autonomic nervous system supporting your experience of gratitude.
    - Breathe in with a word that acknowledges a moment to be grateful for. Breath out with a word that expresses your gratitude.

TIPS

Gratitude is often an easier experience for your clients to recognize and resource than compassion or self-compassion and builds the foundation for moving into those experiences. Because gratitude grows over time and seems to have lasting effects in increased ventral vagal experiences, changes in personal stories, and increased connections with others, an ongoing gratitude practice is a simple way for your clients to shape their intra- and interpersonal connections.

EXERCISE

Compassionate Connections

This exercise helps clients connect to their ventral vagal state and use the language of the autonomic nervous system with three small practices that build the capacity for compassion and self-compassion.

BACKGROUND

Through the eyes of compassion, from your own regulated nervous system, you can see another person’s dysregulated system, respond with regulation, and connect with kindness. From the energy of your ventral

vagal system, you can also connect inside and be with your own suffering in an act of self-compassion. Ongoing experiences build the capacity for connecting with compassion. Find the combination of practices that brings your ventral vagal system alive. Create your own compassionate connections.

STEPS

1. Create a compassion statement using the language of the autonomic nervous system.
   - Use language that recognizes another person's dysregulated state and names the ways your ventral vagal state helps you see them with compassion.
   - Decide on a timeframe for using your statement. You might choose to create a new statement each week or each day.
   - Notice people in need of compassion and use your statement to send a message either in silent thought or in spoken words.
2. Make this three-step compassion practice a routine part of your day.
   - Find your ventral vagal anchor.
   - Look through the energy of your ventral vagal system. See the other person not as bad or unworthy but as dysregulated, pulled into sympathetic or dorsal vagal protection, and unable to regulate.
   - Hold the other person in your ventral vagal energy. Let your nervous system send cues of safety toward theirs.
3. Create a self-compassion statement using the language of the autonomic nervous system.
   - Use language that acknowledges your own dysregulated state, identifies that dysregulation is a normal human experience, and reminds you that your autonomic nervous system knows the way back to regulation.
   - Decide on a timeframe for using your statement. You might choose to create a new statement each week or each day.
   - Notice when you are in need of compassion and say your statement to yourself either silently or out loud.

TIPS

TIPS

It is only from a state of being anchored in ventral vagal that your clients have access to compassion and self-compassion. Remind your clients that their ventral vagal state and compassion form a feedback loop that deepens both experiences. When they are anchored in ventral, they build their capacity for compassion; likewise, more moments of compassion strengthen their ventral vagal capacities. The ability for compassion and self-compassion is built over time. Understanding that compassion and self-compassion emerge from an autonomic state offers your clients a way to think about, talk about, and work with these practices and bring patience to the process.

Create your own examples or use these samples to illustrate autonomically guided language.

Sample statements for compassion:

- I see the suffering your dysregulation brings.
- I can hold you in my ventral vagal energy.

Sample statements for self-compassion:

- Even as I feel myself losing my anchor in ventral, I remember my system knows the way back.
- It's natural to move in and out of regulation.

EXERCISE

Awe Inspiring

For many clients, the experience of being alone and disconnected is one of the things that brings them to treatment. This exercise gives clients ways to bring the autonomic state of awe alive and feel connected to something larger than their individual experience.

BACKGROUND

You feel moved when you are awe-filled and motionless when you are awestruck. Awe lives along a continuum of ordinary to extraordinary. Some moments stop you in your tracks and demand your attention. Other everyday moments pass by without being recognized. People, nature

everyday moments pass by without being recognized. People, nature, architecture, the arts, spiritual experiences, and inexplicable events each have the potential to elicit feelings of awe. Where are your moments of awe each day that are waiting to be discovered?

STEPS

1. Build a reservoir of awe memories.
   - Remember a moment of awe.
   - Replay it in your mind and bring the richness of it back into full awareness.
   - Revisit it in writing to deepen the experience.
2. Notice where in your life you find awe.
   - Certain people inspire awe. Who are those people for you? They may be people you know and have a relationship with or people you know of and admire.
   - Places, the architecture of a particular structure, and natural formations in the outside world routinely bring experiences of awe.
   - Art and music predictably activate awe.
   - Spiritual experiences are awe-filled.
3. Either physically or through a memory, return to the awe-inspiring people, places, and events you identified in step two. Returning in person or revisiting in memory brings the experience and your ventral vagal response alive again.
4. Be open to the inexplicable events that unexpectedly appear. Let go of the need to understand and explain those moments and let in the experience of awe.

TIPS

Awe is an experience that is accessible to everyone. While an awe experience often leads to a desire to share the experience with others, it is first an individual experience that happens when people are by themselves. Although the state of awe is often unexpected, it can also be intentionally inspired. Help your clients find small moments of awe that are easily repeatable.

Here is an example of revisiting an experience and bringing the

richness of the memory alive through writing an awe story:

> I was visiting the medieval city of Bruges in Belgium a few years ago when I found a church. I was drawn into the church by its commanding Gothic architecture and the stillness I knew I would find within. As I entered the church, I went from being curious to something more, something palpable I could not explain. I walked along the nave toward the altar and came upon a series of paintings depicting the Passion of the Christ. As I walked from painting to painting, I could feel the pain and sadness of all humanity, and yet I could also feel a deep and abiding love. Tears streamed down my face as a force larger than myself flowed through me. I was everything at once: grief and joy, love and pain, anger and peace. When I left the silence of the sanctuary and climbed the stone stairs into the sunshine of the medieval town square, it was as if I was entering an entirely new world. I couldn't put words to what had just happened, but I knew I had touched a holy place, both inside and outside of myself. I am forever changed by my experience that day in Bruges when I knew that all was broken and all was right in precisely the same moment.

CHAPTER 8 **SUMMARY**

> *You discover that your longings are universal longings, that you're not lonely and isolated from anyone. You belong.*
>
> —F. SCOTT FITZGERALD

Connecting invites your clients to explore the questions, "Where are the places, what are the experiences, and who are the people that nourish my nervous system now?" Through this process of inquiry, your clients bring their implicit experience into explicit awareness in order to discover their new rhythms of regulation and experiment with creating daily living experiences that fit their changing autonomic

profiles. Recognizing the combination of newly established and still emerging autonomic pathways now available to guide their choices is often both exciting and alarming for clients. As they begin to connect to self, others, the world, and spirit in new ways, your clients may feel sad about the things they are letting go of, anxious about all the changes new perspective brings, or confident in connecting to their autonomic nervous system and ready for the adventure. Learning how to move through the world with new rhythms can be daunting. Help your clients hold on to the ventral vagal pathways they've built and tend to the new patterns that are taking root.

The exercises in this chapter support your clients in building inward and outward connections by engaging the power of their ventral vagal pathways. Simple awareness practices that lead to the creation of safe and sustaining connections are offered in combination with exercises to engage with the transcendent experiences that evoke a sense of being woven into a network much bigger than self.

SECTION II **SUMMARY**

Little by little, one travels far.

—J. R. R. TOLKIEN

Everyday life is filled with challenges. To safely navigate throughout the day, the autonomic nervous system quickly responds to both actual and perceived demands in order to assure survival in moments of danger and the ability to thrive in times of safety. With a flexible autonomic nervous system, your clients have the ability to meet those challenges with equanimity—to stand in the middle, anchored in a ventral vagal state. With a nervous system that has been shaped away from connection toward protection, a system that can neither self-regulate nor co-regulate with ease, a cascade of events is set in motion that ends in suffering. When your clients are stuck in old

patterns that use the mobilizing energy of the sympathetic nervous system or the shutdown response of the dorsal vagal system, they are separated from the biological resource of their ventral vagal system. These adaptive responses, once necessary for survival, now keep them from connecting to themselves, to others, and to the world around them.

With a foundation of understanding Polyvagal Theory, your clients can look at daily life and explore how to connect to the world through the lens of the autonomic nervous system. When you and your clients speak the language of the autonomic nervous system, you share a language—a kind of shorthand—that creates clarity and facilitates communication. With Polyvagal Theory as a guide, you can help your clients shape their autonomic nervous systems toward safety, regulation, and relationship. The steps presented in the BASIC sequence empower your clients to listen to their embodied stories, find cues of safety, and create new patterns that bring the possibility of health, growth, and restoration.

CONCLUSION

To live will be an awfully big adventure.

—PETER PAN

Science continues to demonstrate that your brain and body systems are in a constant state of change. The concept of neuroplasticity (the way brain networks reorganize) has been incorporated into mainstream thinking. In an explosion of interest in the past several years, Polyvagal Theory has not only been embraced by therapists but is finding its way into the legal system, medical settings, the business world, and schools. We are drawn to want to know more as we recognize the profound changes evoked in individuals, families, groups, systems, and even society when we are held in the safety of ventral vagal energy.

The autonomic nervous system is at the heart of daily living. The three circuits of the autonomic nervous system "co-arise, co-exist, and co-mingle to create the array of complex human physiological, emotional and behavioral states" (Sullivan et al., 2018, p. 5). These autonomic circuits continually assess safety and risk and initiate actions to help your clients navigate the demands of the day. With the evolutionary emergence of the ventral vagal system, clients have the

ability to regulate their autonomic nervous systems through connection with others in face-to-face interactions (Flores & Porges, 2017). Through a polyvagal lens, social engagement is the “go-to default activity” that people use to regulate (Lucas et al., 2016, p. 6). With a system shaped in safety, your clients are able to embody these patterns of connection. With a system shaped by trauma, their pathways to regulation through connection are disrupted and they are guided instead by patterns of protection.

Your clients’ stories begin in their bodies. Science has shown that behind the scenes, the autonomic nervous system, through habitual patterns of response, generates stories. With awareness and practice, you can help your clients reshape their responses and rewrite their stories. With a map of their autonomic circuits, you can help your clients use autonomic exercises to create new patterns, move out of adaptive survival responses, and begin to meet the ordinary, and perhaps even the extraordinary, challenges of daily life from an autonomically regulated state of safety.

“The capacity for affect regulation is not biologically guaranteed or innately hard-wired into our nervous system at birth” (Flores & Porges, 2017, p. 6). How often your clients are met with attunement or misattunement, how they are seen, heard, and held, and the ways they are offered the safety of co-regulation all combine to organize a personal autonomic profile. While their early life experiences establish their autonomic profile, ongoing experiences can modify it. Exercising neural circuits supports the essential ability to “immobilize without fear, mobilize without rage or anger, and socially engage with others” (Williamson et al., 2015, p. 2). Regularly exercising circuits of connection promotes flexibility and shapes a system that can respond and not simply react.

Helping your clients engage with their autonomic nervous systems through polyvagal exercising is an invitation for them to become students of their systems. Repatterning the autonomic nervous system happens over time, not only in therapy but in the time between

therapy. The following two vignettes offer a look at what is possible when clients engage in exercises to shape their systems and is a reminder that polyvagal exercises have impact when they are practiced over time.

Autonomic Exercising

Before I started using polyvagal exercises, I was stuck in a state of dysregulation. Although back then I didn't have words for it, I know now that my system was moving between dorsal vagal collapse and sympathetic activation in an endless, enduring loop. I was living a story of survival and suffering. Like most complex trauma survivors, I couldn't imagine feeling relaxed and present in the moment. I couldn't imagine feeling safe.

When I was introduced to Polyvagal Theory, I didn't know there was anything except a survival state and even when I learned about ventral vagal safety and connection, I rarely found myself in that place and couldn't hold on to the moments when I did. Now, after many months of practice, I find my way to ventral with relative ease and I've learned from experience that it's only when I have enough ventral energy on board that a positive outcome is possible.

Over the time I've been using polyvagal exercises, I've become much less reactive. I'm more tolerant, compassionate, and even self-compassionate. I experience moments of calm, curiosity, humor, and gratitude and worry less about what might happen to overwhelm me. Even my longing for co-regulation is no longer shameful. Now I know it's a normal, autonomic experience. My daily challenge is to tune in to what I need and then find ways to safely and wisely meet my needs both on my own and in connection with others.

An essential part of my autonomic exercising is to notice and name. In the beginning I had to physically stop and ask myself what state I was in and for a long time I could name dorsal,

sympathetic, and ventral but naming the nuances of those states was difficult. Now I feel the flow of big and small changes in my system and noticing and naming has become second nature to me.

When I'm not regulated, I find a ventral vagal anchor. I've created many anchors since I first learned about them, but my go-to one is still my breath. And recently I've discovered that the more I notice, name, and anchor in ventral, the more I can look at other people and see their states. While I'm still improving, tracking my states and seeing other people's states is incredibly helpful in learning to set boundaries and the biggest gift is that other people's dysregulation no longer automatically triggers me.

My favorite practice of all the exercises is finding glimmers. Life before polyvagal exercising was mostly black and white and finding a glimmer felt as impossible as finding a four-leaf clover. Now there are colors and, while I faithfully do the "find three glimmers a day practice," most of my days bring many more than three glimmers.

I have a regular autonomic exercise plan and am committed to daily practice. I know I am building new wiring and resilience. I feel it in my body, see it in the way I move through my day, and hear it in my stories.

An Expert State Detector

The notice-and-name practice is the foundation of my polyvagal exercise program. I'm skilled at putting myself on my autonomic map and sensitive to recognizing even subtle state shifts. I can tell when I'm in a ventral vagal state and things are emotionally difficult but manageable. I know when I'm getting close to slipping into sympathetic fight or flight. And I can track when I'm in a sympathetic mobilization, becoming overwhelmed, and heading toward shutdown. Noticing shifts and being able to tune in to the feeling that I'm just about to move into a different state gives me the moment I need to interrupt my familiar habitual

response and attempt something different. When I am able to name my state, that awareness translates into having some choice in my reaction. If I notice I'm heading toward sympathetic, which would normally bring an angry outburst, I try to use the energy in a different way, to use flight in a healthier way. I might end a conversation or leave a situation in a way that isn't aggressive. And if I'm sinking into dorsal, I've discovered that moving (shifting my body, standing up, moving to a different place) and looking for just a moment of social connection can stop the free fall.

There are still times when the shift happens so suddenly that I don't notice until it's already happened. Even then, if I can name the change, the experience feels less scary and I can move out of it more quickly. I'm trying to build a community of people who speak "polyvagal" because I don't feel so alone when there are people around who know the language. Sharing my state with someone who understands my autonomic shorthand can help me return to regulation quickly. I use the smile experiment when I notice the beginning pull toward dorsal. I head out to the places around me where I know there will be people and make a point of looking at the faces of clerks, customers, and people around me and smile. I've found with just a bit of feedback from another face, I can begin to move away from the dorsal vagal hole I'm in danger of falling in.

Noticing and naming is now built into my daily life and I find I not only attend to my own states but I'm also able to think about what's happening for others. When coworkers or family members direct their anger at me, I find myself wondering why their system is reacting in that way and I consider the underlying need. It used to be impossible for me to not get sympathetically triggered or retreat into dorsal vagal disconnection when someone was yelling at me or accusing me of something. Now I can usually see they are having an autonomic response of their own and most of the time I

stay regulated and even look at them with compassion.

Since beginning to use polyvagal exercises, I understand more about my autonomic nervous system. I know that while dorsal shutdown is my familiar pathway of protection and still feels more livable and less damaging than the anger of sympathetic, I also recognize the huge cost I pay in the way it limits having the connections I long for in my life. Seeing small changes add up to more regulation makes each day a bit easier even with the ongoing challenges in my life. I can often move through the day without my old survival responses taking control. I'm beginning to trust that my ventral vagal state will help me meet whatever the day brings.

I alone cannot change the world, but I can cast a stone across the waters to create many ripples.

—MOTHER THERESA

Polyvagal exercises are one way to bring William James' century old invitation to befriend our nervous systems into practical application. Polyvagal exercises are designed to engage the power of the autonomic nervous system and help clients (and therapists) move out of automatic survival responses into the possibilities held in the ventral vagal state. It's my hope that you will experiment with the practices yourself and feel the benefits both in your personal life and in your professional practice. Then, with a polyvagal exercise savvy therapist as a guide, your clients can explore practices and create an ongoing autonomic exercise plan that leads to shaping their systems in new ways and writing stories of well-being.

Through a polyvagal lens, benevolence is the active, ongoing use of ventral vagal energy in service of healing. Benevolence can be the stone we cast across the water. If we each are a regulated and regulating force in the world, we will change the world one autonomic

nervous system at a time.

APPENDIX

PERSONAL PROGRESS TRACKERS

Hope is an essential ingredient in change. Clients come to treatment with long-standing autonomic patterns that bring ongoing experiences of physical and psychological suffering and often carry a flavor of hopelessness. Tracking the nuances of autonomic reorganization is an important part of the therapy process. Bringing explicit attention to the subtle beginnings of change is a hope-filled action. Personal Progress Trackers offer concrete ways to note early successes, track small shifts, and identify the steps that are moving the autonomic nervous system in the direction of change.

Chapter 4: Befriending Personal Progress Tracker

Use the following questions to explore your deepening befriending capacities. Check in each week to see how you are becoming more able to tune in and turn toward your autonomic nervous system with the befriending qualities of curiosity and compassion.

- I notice my autonomic nervous system and the state I am in. (seldom, sometimes, usually)
- I can find my place on the autonomic hierarchy. (seldom, sometimes, usually)
- I have a variety of ways to connect to my autonomic nervous system. (a few, would like more, enough)

- I am able to be curious about where I find myself. (seldom, sometimes, usually)
- I am able to be self-compassionate and not self-critical about where I find myself. (seldom, sometimes, usually)

Chapter 5: Attending Personal Progress Tracker

Use the following questions to explore your deepening capacity to attend. Check in each week to see the ways you are becoming more able to track the autonomic path of your day and mark your moments of ventral vagal regulation.

- I am able to track my movement through changing states of activation. (seldom, sometimes, usually)
- I'm comfortable identifying cues of safety from another social engagement system. (seldom, sometimes, usually)
- I'm comfortable identifying cues of danger from another social engagement system. (seldom, sometimes, usually)
- I feel playful. (seldom, sometimes, usually)
- I find moments to savor. (seldom, sometimes, usually)
- I understand my personal needs around solitude. (seldom, sometimes, usually)
- I take care of my personal needs around solitude. (seldom, sometimes, usually)
- I find regulation in connection with art and nature. (seldom, sometimes, usually)

Chapter 6: Shaping Personal Progress Tracker

Use the following questions to explore your deepening capacity to nourish new pathways. Check in each week to see the practices that are shaping your system in new ways.

- I can identify shaping options that work for me. (one, several,

many)
- I engage regularly with practices to shape my system. (seldom, sometimes, usually)
- I use shaping practices from multiple sources.

Sound	Seldom	Sometimes	Usually
Movement	Seldom	Sometimes	Usually
Environment	Seldom	Sometimes	Usually
Breath	Seldom	Sometimes	Usually
Touch	Seldom	Sometimes	Usually
Reflection	Seldom	Sometimes	Usually

- I have places in my home that nourish my nervous system. (not yet, working on it, yes)
- I have places at work that nourish my nervous system. (not yet, working on it, yes)

Chapter 7: Integrating Personal Progress Tracker

Use the following questions to explore the ways your new patterns are beginning to integrate and support you in navigating the world in new ways. Check in each week to notice the places where integration is taking root and the places that are calling for your attention.

- I see more than one option when making decisions. (seldom, sometimes, usually)
- I trust the choices I make. (seldom, sometimes, usually)
- I listen to my body. (seldom, sometimes, usually)
- I understand the messages my body is sending. (seldom, sometimwes, usually)
- I move through my daily activities with ease. (seldom, sometimes, usually)
- I recognize old response patterns as they happen. (seldom,

sometimes, usually)
- I have ways to interrupt patterns that are no longer necessary. (one, several, many)
- I have ways to deepen new patterns. (one, several, many)
- I can restore my sense of regulation. (seldom, sometimes, usually)

Chapter 8: Connecting Personal Progress Tracker

Use the following questions to explore the ways you are feeling more connected to your own experience, to others, and to the world around you. Check in each week to bring awareness to your personal pathways to connection.

- I feel safe with other people. (seldom, sometimes, usually)
- I keep my social engagement system alive and online. (seldom, sometimes, usually)
- I know when my connection with others is out of balance. (seldom, sometimes, usually)
- I take action to come back into balance. (seldom, sometimes, usually)
- I know the kinds of connections I need to feel regulated. (seldom, sometimes, usually)
- I feel compassion for others. (seldom, sometimes, usually)
- I am self-compassionate. (seldom, sometimes, usually)
- I have experiences of gratitude and awe. (seldom, sometimes, usually)

EXERCISE WORKSHEETS

CHAPTER 4: BEFRIENDING EXERCISES

EXERCISE

Autonomic Landmarks—Stories of Landmark Moments

BACKGROUND

Landmarks give structure to our environments, forming cognitive anchors, marking points of orientation, and becoming references for communication. Autonomic landmarks are the internal reference points that mark the experience of states. We have personal landmarks that represent the embodied experience of a state and are stored in our memory. This is a moment that stands out from all the others, a moment you can look back on as a defining experience of an autonomic response. Identifying the landmark moment for each state is a way to quickly bring the properties that personify the state to mind.

STEPS

1. What are the stories of your dorsal vagal (collapse or shutdown), sympathetic (fight or flight), and ventral vagal (safe and connected) landmark moments? To make it easier to think about your states, you can give them descriptive names in addition to the physiological ones. Take time to look back and locate the moments in your memory. Find the times that stand out and become the archetype for each state.
2. Landmarks are recognizable by their names and characteristics. Write a story describing the landmark moment. Make sure to identify the concrete details of what happened, how you responded, what your body felt like, and what you thought.
3. When you are done, read through the story and identify the crucial moment. Use this to give the story a name.

EXERCISE

Ventral Vagal Anchors—Anchoring in Safety

BACKGROUND

The Merriam-Webster dictionary defines an anchor as “something that serves to hold an object firmly; a reliable support.” A ventral vagal anchor holds the connection to the energy of your ventral vagal system when experiences threaten to pull you into a sympathetic or dorsal vagal state. Your ventral vagal anchors help you find the way back to regulation and stay there. These are autonomic cues of safety that can be found in the categories of who, what, where, and when. You can use your anchors by reconnecting to the anchor or by activating the memory of the anchor. With regular practice, ventral vagal anchors strengthen your capacity to return to regulation.

STEPS

1. **Who.** Reflect on the people in your life and make a list of the ones who bring you a feeling of being safe and welcome. You might also have a pet who fills that role. First identify a person or pet who is present in your life. Then, if you wish, you can expand your search to also include people who are no longer living, people you haven’t met but who bring your ventral vagal state alive, and spiritual figures.
2. **What.** Think about what you do that brings your ventral vagal state alive. Look for small actions that feel nourishing, relaxing, and inviting of connection. Keep track of the things that bring moments, or micro-moments, of ventral vagal regulation.
3. **Where.** Take a tour of your world and find the physical places that bring you cues of safety. Look around your home, your neighborhood, your community, your workplace, a place you feel a spiritual connection. Bring to mind the everyday places you move through. Take note of the environments and name the ones that activate your ventral vagal state.
4. **When.** Identify the moments in time when you feel anchored in

your ventral vagal energy. Take a moment to go back and revisit those experiences. Bring them into conscious awareness and write them down.

5. **Create a portfolio of your ventral vagal anchors.** Decide how you want to gather your anchors together in one place: write them in a notebook, illustrate them in a journal, make a list and hang it in a prominent place, write on sticky notes and put them around your home and at work in places that are easy to see. Experiment and find the way that works for you, making sure you have easy access to your anchors.

EXERCISE

Befriending the Hierarchy

BACKGROUND

With the ability to name your states and recognize the shifts that happen between states, you can represent your experience of moving along the hierarchy. Portraying these movements in different ways expands that connection. As you engage in the process of designing hierarchies, you are engaging in an act of befriending.

STEPS

1. Draw a vertical line, divide it in thirds, and mark the three states (ventral, sympathetic, dorsal, or the words you choose to name your states).
2. Imagine moving along that line and feel the autonomic state shifts.
3. Illustrate the small increments of change that happen as you travel down and up the hierarchy using:
   - color to represent your states and transitions from state to state, blending shades to illustrate the full range of the autonomic hierarchy
   - words to label the continuum of your experience from dorsal through sympathetic to ventral
   - photos of faces to show how the many ways your states are expressed
   - images of animals to represent states
   - pictures of places that bring the points along the continuum to life
   - nature scenes that portray the many stops you make along the hierarchy
   - names of songs that carry the energy of states
4. Create a few illustrated hierarchies to get a sense of how different designs work for you. See if you resonate with one particular way of representing the hierarchy or if you connect with several different styles.

5. Choose one or more hierarchies and create an ongoing practice of using it (or them) to find your place and name your state.

EXERCISE

Autonomic Trees

BACKGROUND

A tree is a commonly used metaphor. The tree of life is often used to illustrate both evolutionionary processes and patterns of relationships. Using a tree metaphor, you can investigate your autonomic experiences: with trees representing regulated responses and ones representing reactive systems. There are many ways to dive into discovering the qualities of autonomic trees, and each brings its own pathways to befriending the embodied experience of your autonomic nervous system.

Art: Making art is a safe way to explore autonomic states. Creating images of regulated and reactive trees invites you to bring your autonomic states to life and befriend them through color and design.

Writing: Sitting down to write the stories of regulated and reactive autonomic trees requires a stance of curiosity that lends itself to befriending.

Movement: Imagined or enacted movement is a way to feel the rhythms of your regulated and reactive trees. Autonomic trees can feel as if they are stomping and swaying, their trunks bending or twisting, their branches reaching up and out, and their spring buds emerging or autumn leaves falling.

STEPS FOR AUTONOMIC TREE ART

1. Set up your creative space. Gather various-sized papers and other art materials.
2. There are thousands of species of trees, many living only in one specific place in the world. Your regulated and reactive trees live in your personal world and have their own unique characteristics. Visualize their roots, branches, and leaves. See their forms, shapes, and colors.

shapes, and colors.

3. Create your trees. You might design a tree that illustrates all three states, one regulated and one reactive tree, or a family of regulated and reactive trees.
4. Reflect on your designs. What autonomic experiences do they represent?
5. Periodically return to your trees and connect to your personal tree kingdom.

STEPS FOR WRITING TREE STORIES

1. If you have created your tree maps, you can use those as an entry point for listening. Otherwise, bring your regulated and reactive trees to life by focusing on an internal image.
2. Use the following prompts to begin to write a story for each of your trees:
   - The (roots, trunk, branches) of my tree bring . . .
   - When I sit under my tree, I . . .
   - When I put my arms around my tree, I . . .
   - When I listen to my tree, I hear . . .
3. Read your story and add any other information you want to complete it.
4. Give your story a title.

STEPS FOR MOVING TREES

1. Visualize your tree and feel its movement inside your body.
2. Either see the movement in your mind’s eye or let the movement come into physical expression. Choose the way that brings a neuroception of safety.
3. Explore the ways your tree moves. Ventral vagal regulation is experienced in many different ways along the continuum of stillness to joy-filled passion. Reactivity includes both the intensity of sympathetic mobilization with fight and flight and the absence of energy in dorsal vagal disappearance, disconnection, and collapse.
4. Repeat the process with all of your trees.
5. Build an ongoing practice of moving with your trees.

EXERCISE

Body Language

BACKGROUND

With an ability to safely connect to your autonomic states and bring that embodied experience into explicit awareness, you have access to the important autonomic information that is guiding your daily experience.

STEPS

1. Find the place in your body where you feel most connected to your ventral vagal state. Bring the qualities of that experience into explicit awareness and add language to describe it.
2. Find the place in your body where you feel most connected to your sympathetic state. Bring the qualities of that experience into explicit awareness and add language to describe it.
3. Find the place in your body where you feel most connected to your dorsal vagal state. Bring the qualities of that experience into explicit awareness and add language to describe it.
4. Connect to the three places in your body where you identified feeling each state most fully. Move from one place to another. Feel the ways your experience changes as you shift your focus.
5. Connect to your ventral vagal state of safety and connection. Tune in to how this is expressed in your body. Identify the qualities of your breath, muscle tone, and posture. Track the flow of energy throughout your body and notice any movements connected with this state.
6. Move to your sympathetic nervous system and consider the activation of the mobilizing energy of fight and flight. Tune in to how this is expressed in your body. Identify the qualities of your breath, muscle tone, and posture. Track the flow of energy throughout your body and notice any movements associated with this state.
7. Move to your dorsal vagal state and consider the ways collapse and shutdown are experienced. Tune in to how this state is

expressed in your body. Identify the qualities of your breath, muscle tone, and posture. Track the flow of energy throughout your body and notice any movements associated with this state.

8. Move from state to state and notice the changes that happen. Become familiar with the ways your body moves through states.

EXERCISE

The Continuum Between Survival and Social Engagement

BACKGROUND

Between the two ends of autonomic responses, there are many points along the way. Some bring a nuanced experience of an autonomic shift while other points are where you make a bigger step from one state to another. Using a continuum is a way for you to map the progression of small steps that connect two opposite end points. To create this continuum, bring focused attention to the particular ways you move between protection and connection.

STEPS

1. Draw a horizontal line and name the two ends of your continuum. What is your label for engagement? What is your label for disconnection?
2. Start at either end. Identify the first small step out of that state toward the other end. Repeat this, marking small steps along the way until you reach the other end.
3. Mark the midpoint where you feel the larger shift from connection to protection. The midpoint is a good way to identify this moment of change.
4. Remember you are always moving along this continuum, sometimes firmly planted in one place and other times pulled from one end to the other. Stop and see where you are. Use the midpoint to first see if you are on the side of protection or closer to the state of connection. Then identify more precisely where you are on your range of responses.
5. Return to your continuum and practice placing yourself on it until it becomes second nature for you to know where you are and in which direction your autonomic nervous system is taking you.

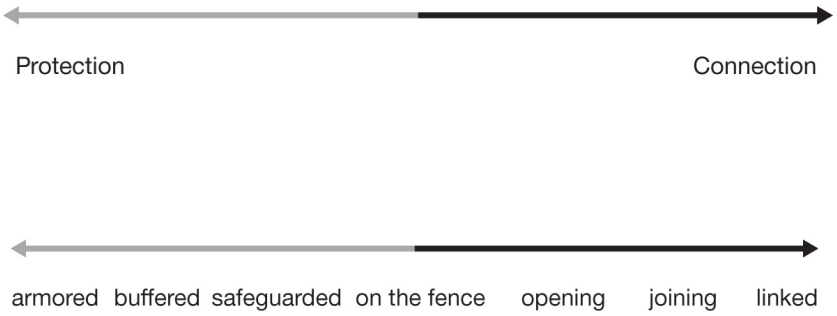

FIGURE 4.2. Between Protection and Connection Continuum and Example

EXERCISE

The Social Engagement Scale

BACKGROUND

Rather than a straightforward on or off mode, the social engagement system can be online and bring a range of responses. Sometimes you may feel a pull to enter into conversations and at other times feel a deep contentment in sitting back and listening. One moment you may be moving in synchrony with another person, while the next brings the joy of being an observer. Between the two ends of engagement there are a variety of experiences. In addition to the expected everyday fluctuations, the capacity for social engagement is impacted by illness and wellness. In a state of illness, the social engagement system retracts, responding to the physiological demand to attend to internal conditions. In a state of wellness, the social engagement system is at work in the external environment, seeking and signaling readiness for connection.

STEPS

1. Use the scale to fill in your personal experience of the points between “open and engaged” and “internal and engaged.” Start by naming each end and then label the points between.
2. Consider where you are right now. Stop and find your place on your scale.
3. Reflect on recent experiences and see where you were on your scale.
4. Look at when your place on the scale fits with the environmental and relational demands of the moment and when there is a mismatch.
5. Recognize any patterns to your placement on the scale. Look for people, places, and experiences that predictably take you to a certain point along the scale. Become curious about the characteristics of the interactions that activate that response. Get to know your personal social engagement profile.

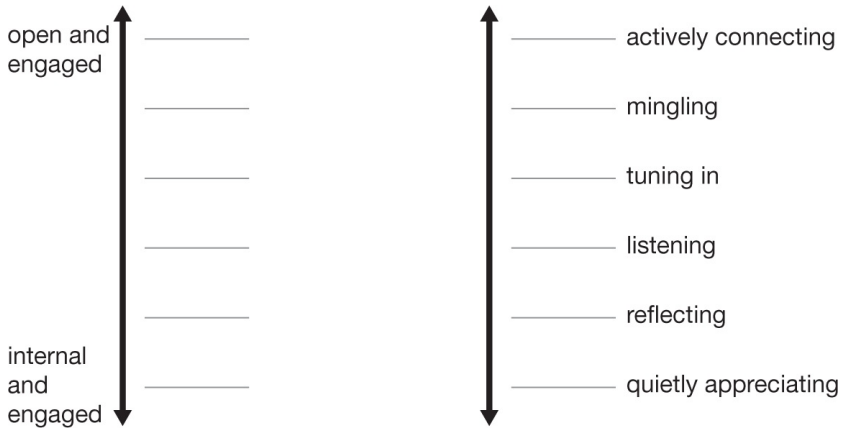

FIGURE 4.3. Social Engagement Scale and Example

EXERCISE

A Neuroception Notebook

BACKGROUND

Neuroception, the messages the autonomic nervous system receives and records from inside your body, in the environment around you, and between you and other people, provides a valuable stream of information when brought to conscious awareness. When you bring perception to neuroception, you can find reminders of ventral vagal possibilities and identify moments of messiness and distress. Keeping a neuroception notebook is one way to bring explicit awareness to the ways the autonomic nervous system is working in the background shaping your life.

STEPS

1. Divide a notebook in sections for the three categories of neuroception: ventral vagal safety, sympathetic danger, and dorsal vagal life-threat. Use your own words to name the sections.
2. Carry the notebook with you and write in it as you feel your state shifting. Or create time at the end of the day to look back and reflect on your experiences.
3. Look for the specific cues that activated your state changes. Write down the cues of safety, danger, or life-threat you have identified.
4. Find any predictable patterns in the cues that move you toward connection or into protection.

CHAPTER 5: ATTENDING EXERCISES

EXERCISE

Autonomic Alphabets

BACKGROUND

Looking beyond the primary description of a state creates an expanded understanding of the ways each of your states can be experienced. Finding the variety of flavors of each state encourages you to become aware of the subtle ways your states shift.

STEPS TO CREATING YOUR ALPHABET:

1. Find a word that begins with each letter of the alphabet to describe qualities of your autonomic three states. (You may have to get creative with the letter X.)
2. Begin by creating your dorsal vagal alphabet.
3. Move up the hierarchy and create your sympathetic alphabet.
4. Continue to the top of the hierarchy and create your ventral vagal alphabet.
5. Use your alphabets. When you notice a familiar feeling, a quality you identified in one of your alphabets, stop and name the state. When you notice you are in a state, go to your alphabet and find the quality.

EXERCISE

Autonomic Names

BACKGROUND

In Shakespeare's *Romeo and Juliet*, Juliet asks "What's in a name?" In fact, your name is often the first label you are given, and is an important way you identify who you are. Looking at your name through the qualities of autonomic states invites you to experience who you are in different ways.

STEPS TO WRITING YOUR NAME:

1. Use the letters of your name to describe who you are in a dorsal, sympathetic, and ventral state.
2. Create several autonomic name descriptions for each state and compare the effects.

EXERCISE

Autonomic Short Stories

BACKGROUND

Adding language to autonomic events is a way to become acquainted with states and state changes. The plots of your short stories illustrate a slice of an autonomic experience. This is a quick writing exercise designed to bring attention to a specific autonomic point in time and spend a moment getting to know it.

STEPS

1. Use these five prompts to write your autonomic short story. Spend no more than a minute or so on each.
   - My autonomic state is . . .
   - My system is responding to . . .
   - My body wants to . . .
   - My brain makes up the story that . . .
   - When I review my short story, I notice . . .
2. When you feel a state change, take a couple of minutes to listen in and follow the five prompts.
3. When you want to appreciate where your autonomic nervous system has taken you, follow the prompts and write a short story.
4. Track how your stories change as your autonomic responses begin to reshape.

EXERCISE

Attending over Time

BACKGROUND

While atomic clocks measure time with precision and accuracy, it seems your personal experience of time is changed by your state of engagement with it. Time sometimes seems to stand still and other times fly by. You can feel stuck in a state of dysregulation or unable to hold onto a state of regulation. Using increments of time to attend to state changes adds chronology to your understanding of how you move through daily experiences. Attending over time, both in short and long intervals, invites you to see the ongoing ebb and flow of your autonomic nervous system and the ways it responds both in moment-to-moment shifts and in patterns over time.

SHORT-DURATION ATTENDING STEPS:

1. Decide on a 5- or 10-minute increment as your measure of time. Use the following series of prompts to check in three times over that span of time.
   - In this moment my autonomic state is . . .
   - And I am feeling . . .
   - Now my autonomic state is . . .
   - And I am feeling . . .
   - And now my autonomic state is . . .
   - And I am feeling . . .
2. Repeat this exercise a few times a day for several weeks.
3. Look for any patterns that emerge. When are the times you respond flexibly and when are the times you get stuck? Are any changes happening over the course of tracking?

LONG-DURATION ATTENDING STEPS:

1. Longer time periods offer an expanded, bird’s eye view of your experience. Decide on a timeframe to use. You can experiment with doing the exercise in the morning, at the end of the day, or

even once a week.

2. Answer the following four questions.
   - *Where am I?* The starting point is where you are right now. Begin with noticing your current state.
   - *Where have I been?* From your present reference point, reflect back and notice any state changes.
   - *What does this mean for where I might be heading?* With an understanding of your movement from past to present, bring curiosity to the trajectory you have found. Is there a pattern? Does it make sense to you when you see it clearly?
   - *What do I want to do now?* Is this a path you want to follow or a pattern you want to interrupt?
3. Repeat this exercise over successive days or weeks and track emerging patterns.

EXERCISE

Daily Pie Charts

BACKGROUND

We tend to give our days a label—this was a good day or a difficult day, a quiet day or a busy day—based on one particularly intense moment or on a string of related experiences. When you name your days in this way, you often miss the moments that didn't fit the pattern. When considering the day through an autonomic lens, looking at the relationship between states and the relative amount of time spent in each gives a more complete picture of your daily experience. With a pie chart, ventral vagal, sympathetic, and dorsal vagal experiences are seen as part of an integrated autonomic system. The global flavor of your day is a result of the contributions of each. The design of a pie chart (Figure 5.1) offers an uncomplicated image of the overall sense of a day and brings the feeling of the day alive in shape and color. What name would you use to describe each of the days illustrated here?

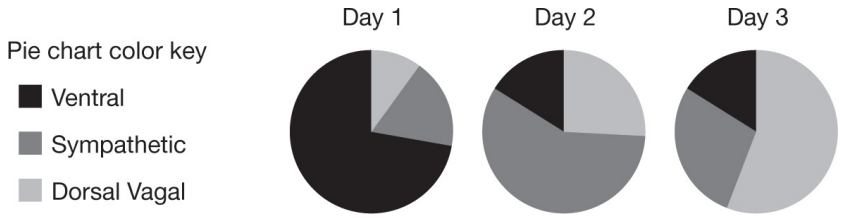

FIGURE 5.1. Daily Pie Charts

STEPS

1. What does your autonomic pie chart look like? Use a blank circle each evening to review your day.
2. Choose the colors you want to represent each state and divide your pie into ventral vagal, sympathetic, and dorsal vagal pieces.
3. Name your day.
4. Make a collection of your daily charts. Use your collection of daily charts to get a sense of your autonomic experience over a period of time. With a series of charts, you can look at the ebb and flow of

states and the impact on your general autonomic experience.

- Is there a day of the week that repeatedly brings the same autonomic responses?
- What is the overall tone of a week?
- Is there a pattern to your weekends?
- If you are in a time of transition, use your pie chart to see how your autonomic nervous system is responding.

EXERCISE

Daily Tracker—Three Different Things

BACKGROUND

An end-of-the-day reflection during which you listen to the subtleties of autonomic change is a good way to look back at the autonomic path you've traveled. With a habit of autonomic reflection, implicit knowing and explicit awareness combine to bring you into a deeper understanding of the ways the autonomic nervous system shapes your days. Remembering that the autonomic response is always considered an adaptive one, don't look for what is better, but instead look for what is different. A regular tracking practice brings attention to the small shifts in patterns that highlight the ways your system is reorganizing.

STEPS

1. Review the day and identify three different ways your autonomic nervous system responded.
2. Bring attention to what happened. You might notice a slightly less intense response to an event or an easier recovery into regulation. Or maybe you recognize a different kind of response—sympathetic mobilization in place of a dorsal vagal collapse or a moment of ventral vagal connection instead fight or flight.
3. It's equally important to attend to what didn't happen. The absence of a reaction is also a good measure that a response pattern is changing and that your system is moving toward regulation.
4. Keep a journal of your daily "three different things" experiences. As small changes begin to add up, new autonomic patterns take root.

5. Review your daily journal periodically to see how your responses are changing. Look back over the range of autonomic responses and consider the larger picture of change that is happening. Is there a shift? If so, in what direction? Consider the intensity, frequency, and duration of your states and state changes in your reflection.

EXERCISE

The Autonomic Request for Connection

BACKGROUND

The autonomic nervous system is a relational system. Through your biology you are wired for connection. Eyes, voices, faces, and gestures telegraph cues that it is safe to explore a relationship. The elements of the social engagement system are essential to assessing safety and danger. Yet, through the ways the nervous system has been shaped by your personal experiences, you might miss or misread those invitations.

An ongoing stream of signals of welcome and warning are received and sent through the pathways of the social engagement system. The muscle around the eyes (the orbiculares oculi) opens and closes the eyelid and contributes to the wrinkles around the eyes that express emotions. This is where the nervous system looks for signs of warmth and an invitation to connect. Prosody (patterns of rhythm, tone, frequency in the voice) is an important nonverbal signal and sends messages of welcome or warning to another nervous system. Facial expressions convey social information. An unmoving face is seen as sign of danger, while a mobile face is experienced as alive and sending social information. Finally, turning and tilting the head signals availability and interest.

You can begin to understand the conversation that is taking place between two nervous systems when you are aware of the cues you are sending and can accurately interpret the cues you are receiving. As you become familiar with this way of listening, you'll find you are able to navigate relationships more skillfully.

STEPS

1. Make a practice of looking at eyes, listening to voices, seeing facial expressions, and watching for social gestures. Bring explicit awareness to your present-moment experiences with another social engagement system. Use the following prompts to build skill in noticing:

- Their eyes are signaling . . .
- Their tone of voice sounds . . .
- Their face is expressing . . .
- Their gestures convey . . .

2. Identify the specific characteristics that invite connection or prompt a move into disconnection. Exactly what is it about the other person's eyes, voice, face, and movements that sends cues of safety or danger to your nervous system?
3. Ask yourself if your response is a match for the present-moment situation or linked to a prior experience.
4. As you get to know your responses to another social engagement system, bring attention to your own end of the interaction using the same questions.
   - My eyes are signaling . . .
   - My tone of voice sounds . . .
   - My face is expressing . . .
   - My gestures convey . . .

EXERCISE

Pathways to Playfulness

BACKGROUND

You can be playful both by yourself and with others. Playfulness and a sense of well-being go together. A playful attitude supports seeing new perspectives and being able to cope with adversity. As Dr. Seuss (1960) said, fun is good.

STEPS

1. Get to know yourself as a playful person. Look at the conditions that support your sense of playfulness:
   - Identify where, when, and with whom you feel your sense of playfulness emerge.
   - Identify where, when, and with whom you feel your sense of playfulness disappear.
2. Track your experiences of the different kinds of playfulness. Identify where you find yourself on your autonomic hierarchy when you engage in, or think about engaging in, these kinds of playfulness:
   - playing with others
   - playing with thoughts and ideas
   - spontaneous play
   - daydreaming

EXERCISE

Playful Moments

BACKGROUND

Playfulness is an important quality that contributes to well-being. As you find ways to create opportunities for moments of playfulness, you can become a more playful person and experience the joy and creativity that accompanies that.

STEPS

1. Notice how often, easily, and intensely you engage in a playful experience.
2. Increase your playful experiences. Find the ones that bring a smile and the ones that bring energy and play in those ways a little bit more.
3. Expand your playfulness. Experiment with experiences in the kinds of play that aren’t in your play repertoire.

EXERCISE

Personal Preferences Around Solitude

BACKGROUND

Distinct from loneliness, which has been shown to have a multitude of negative physical and psychological outcomes, entering into moments of solitude has positive benefits for well-being. Practicing a moment of solitude is an autonomic exercise that creates an experience of feeling centered and peaceful.

STEPS

1. Locate the experiences of solitude and loneliness on your autonomic hierarchy. Feel the difference between them.
2. Explore where in your daily environment you find solitude.
3. Nature is often where people go to find a private place to escape to when they are surrounded by the demands of the day and the autonomic nervous system is needing room to breathe.
   - Reflect on your daily experiences to discover where you choose to find solitude.
   - Identify what kind of natural habitat are you drawn to.
   - Notice where in your everyday natural environment are the places you can predictably visit and feel the benefits of solitude.
4. Solitude is a state of being and doesn't have to take place in isolation. Solitude is also found in spaces where there are other people.
   - Identify the places and spaces you visit every day that include other people and also offer you an opportunity for a moment of solitude.
5. Notice when you reach for solitude.
   Consider what is happening in your life that prompts you to seek quiet.
   - Look at your physical environment.
   - Consider the actions of people around you.
   - Reflect on the number, frequency, and kinds of requests for

your time and attention.

6. Identify how much solitude you need.
   Focus on your moments of solitude and the length of time that brings a sense of nourishment.
   - Consider when a few moments of solitude meet your need.
   - Compare that to when you need a longer experience of solitude to feel nurtured.
   - Notice how you know when your system has taken in enough solitude and you're ready to rejoin the world outside yourself.

EXERCISE

Attending to Stillness

BACKGROUND

Over the course of evolution, humans developed the ability to become still as a way to rest and renew. Sometimes, instead of feeling nurtured by stillness, the beginning of calm can bring cues of danger and a sense of vulnerability. As your autonomic nervous system begins to move from action to quiet, you might feel your sympathetic nervous system reacting with mobilizing energy or you might feel pulled into dorsal vagal collapse. Bring curiosity to identifying the elements that add safety to your experiences of rest so you can find your way to the places where you can receive the benefits of moments of quiet.

STEPS

1. Identify restful and restless environments.
   - Many people label environments with lots of people, activity, sound, and movement as restless. Workplaces and the daily commute are two environments that are often cited as mobilizing and not restorative. In comparison, the natural environment and at home are often identified as places to rest and renew.
   - Find the environments at the two ends of your experience—places that bring you a feeling of restlessness and places that offer you the opportunity to rest.
2. Attend to the qualities of the spaces that bring you a rhythm of rest
   - location
   - size and shape of the space
   - colors, sounds, and textures
3. Consider when you want to be by yourself and when you want to be with others (people or pets).
4. Make a list of the combination of qualities you've identified. Go out and find places that offer those.
5. Create a plan to regularly visit the places you identified as offering

the opportunity for rest.

6. Create your own space, incorporating qualities you identified that support you in resting in a moment of stillness.

EXERCISE

Savoring Snapshots

BACKGROUND

To savor is to take a moment of ventral vagal regulation and the feeling of a sense of safety and experience a story of connection to self, to another, or to nature. Savoring is a quick practice whereby you capture a ventral vagal moment and hold it in your conscious attention for just a short time. Moments to savor routinely happen in the course of everyday living. Because a 20- to 30-second snapshot is all that is needed to benefit from the practice, it is easy to do during the natural flow of your day.

STEPS

1. Look for a ventral vagal moment to savor, bring it into conscious awareness, and place your attention on it for 20–30 seconds. In the beginning, if the experience of savoring is challenging, start with micro-moments of savoring (5–10 seconds). Each micro-moment shapes your system. Over time, your ability to savor will build to the 20–30 second maximum that defines a savoring experience.
2. Practice savoring each day. Begin with finding one moment to savor each day. As savoring becomes easier, increase the number.
3. Track your savoring moments.
   - Keep a savoring notebook or a joy journal.
   - Reflect at the end of the day to find and savor moments you may have missed.
   - Create an agreement to share savoring moments with a friend using technology or in person.
   - Organize a savoring circle—online, in person, or a combination of the two.
   - Create a savoring album using simple illustrations of your savoring moments and adding captions.

4. Establish a habit of savoring.
    - Remind yourself that moments to savor are common occurrences in everyday life.
    - Be on the lookout for the small moments that bring you into a ventral vagal state.
    - Set a goal to see and savor a certain number of moments each day.
    - Invite a friend to savor with you.

EXERCISE

Attending Through Art

BACKGROUND

Art comes in many forms and no special training is necessary to benefit from seeing it. Art speaks to the body through your autonomic pathways and brings responses that can lead to new ways of thinking about yourself and the world. Finding ways to invite art into your life is an act of listening to your autonomic nervous system and discovering the particular ways you connect.

STEPS

1. Explore the ways that are easily available to you to see and be with art. Museums, artists' workshops, public art spaces, arts festivals, and an illustrated art book are just some of the options.
2. Identify the kinds of art you are drawn to. View different kinds of artwork (photography, sculpture, drawing, painting, ceramic, mosaic, textiles, and other forms of art) and notice how you respond.
3. Decide how and how often you need to connect to art in order to feel as if you have enough art in your life.

EXERCISE

Attending in Nature

BACKGROUND

Nature, both in real life and through viewing images, offers relaxing and restorative opportunities. Abundant in the natural world are fractals, simple patterns that repeat over and over creating increasing complexity (the nautilus shell, a leaf, a pinecone, broccoli buds, dandelions, ice crystals, clouds). Viewing fractals for just a few moments brings a regulating autonomic response. Find the particular places and ways to connect with nature that bring your ventral vagal system alive.

STEPS

1. Attend to the natural environment around you and track your responses. Identify the places that bring you into ventral vagal regulation, sympathetic mobilization, and dorsal vagal disconnection.
2. Visit the places that are regulating for you either in person, through images, or in a combination of both.
3. Look for fractals as you move through your day. Stop for a just a few seconds to take them in.
4. Find images of fractals or objects that have the characteristics of fractals and notice the ones that bring an intense ventral vagal response. An internet search will bring up a wealth of images, and the plants and trees around you offer living examples.
5. Display fractal images or objects in a way that you can easily return to them. (A screen saver, photos on your phone, or a flowering plant or cactus in your home or office are some suggestions.)

CHAPTER 6: SHAPING EXERCISES

EXERCISE

Energy and Actions Map

BACKGROUND

Activities that shape the autonomic nervous system fall along a scale of passive to active. There are times when thinking about moving, remembering a connection with a friend, or simply looking up toward the sky is the right choice and other times when you need to take action, put your body in motion, or head out into the world and seek social connection. Choose an experience that brings a return of energy when the dorsal vagal immobilizing collapse is present, a way to safely discharge energy when feeling the frenetic activity of the sympathetic state, and an action that deepens the feeling of regulation when anchored in the safety of ventral vagal.

STEPS

1. Label your state in the box at the top of the Energy and Actions map. Identify your state through its biological name (dorsal, sympathetic, ventral) or name it in a way that has meaning for you.
2. For sympathetic and dorsal vagal states, move along the line between passive and active and identify actions that take you in the direction of a return to the ventral vagal state of regulation. Use the left side to identify self-regulating actions and the right side to identify co-regulating actions.
3. For your ventral vagal state, move along the line between passive and active and identify actions that deepen your experience of safety and connection. Use the left side to identify self-regulating actions and the right side to identify co-regulating actions.
4. Complete a map for each state.
5. Use your maps to find a resource that is in the range of energy that fits your needs in the moment.
6. Update your maps as you create additional resources.

6. Update your maps as you create additional resources.

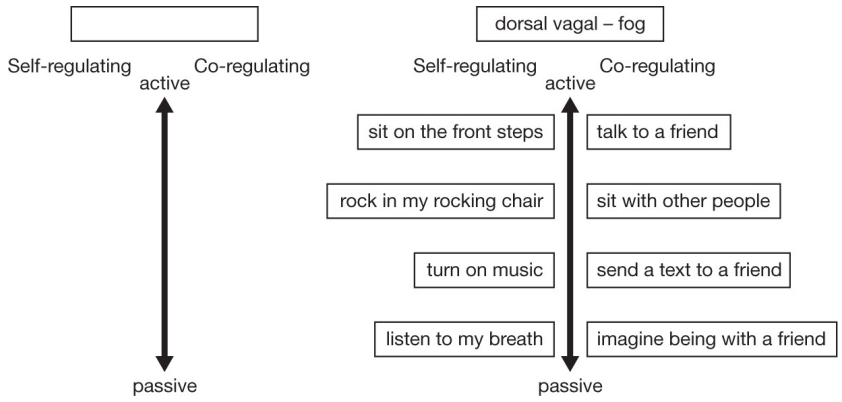

FIGURE 6.1. Energy and Actions Map and Example

EXERCISE

Finding Glimmers

BACKGROUND

Glimmers are the micro-moments of ventral vagal experience that routinely appear in everyday life yet frequently go unnoticed. To ensure survival, human beings are built with a negativity bias. This means you are biologically wired to pay more attention to negative events than positive ones and can often miss the ventral vagal moments that coexist with moments of dysregulation. Things like seeing a friendly face, hearing a soothing sound, or noticing something enjoyable in the environment go unnoticed. A fundamental step in shaping your system is seeing a glimmer, pausing to take it in, and then beginning to look for more.

STEPS

1. Set an intention to look for a certain number of glimmers each day. Choose a number that feels doable to begin. If glimmers are an unfamiliar experience, watch for a single glimmer. As finding glimmers becomes easier, set a new goal.
2. Notice when you feel a spark of ventral vagal energy. Look for glimmers in your daily activities. Glimmers happen regularly, but because they are micro-moments you need to be on the lookout for them.
3. See, stop, and appreciate your glimmers. Create an easy way to acknowledge a glimmer when it happens. You might bring attention to the moment by simply saying “glimmer” or with a small movement (perhaps your hand on your heart).
4. Track your glimmers. Create a daily glimmers notebook or keep a running list.
5. Look for glimmers in specific places, with particular people, at certain times. Find the ways your glimmers routinely appear.
6. Share your glimmers. You might text your glimmers to a friend, make talking about daily glimmers a family nighttime ritual, or share your list of weekly glimmers to share with your therapist.

Find the way that works for you.

EXERCISE

From Glimmer to Glow

BACKGROUND

When you recognize the micro-moment of a glimmer, you feel the spark of your ventral vagal system. Just as sparks can be used to ignite a fire, glimmers can be turned into the deeper experience of a glow. With a glimmer, you pause just long enough to acknowledge that a ventral vagal moment is happening in the flow of your day. With a glow, stop and celebrate the glimmer. Take time to soak it in and give it deeper meaning.

STEPS

1. Notice a glimmer and stop and let the experience fill you. Move beyond a few seconds and stay with the experience for a half a minute or more. Give the glimmer time to become a glow.
2. Feel what happens as you move from connecting for a micro-moment to a longer experience of taking in.
3. Listen to the story that accompanies the glow.
4. Describe your experience of the glimmer and the glow. Notice how the experience changes. For example, a particular glimmer moment might be described as quick hit of happiness that brings a smile, and when you turn it into a glow, the experience feels like basking in the warmth of the sun while breathing a sigh of contentment.

EXERCISE

The Sound of Your Voice

BACKGROUND

The autonomic nervous system uses tone of voice as a way to discern safety. You respond to intonation before you take in information. The way you speak changes the way you feel, the story you tell, and changes the way people around you hear what you are saying.

STEPS

1. Experiment with the ways your voice impacts the way you feel. Tell, or record, a short story in different tones of voice. Notice where the different tones of your voice take you on your autonomic map.
2. Track the way the same word spoken in different tones of voice elicits a different state and feeling. Choose a word, speak it in different ways, and follow the ways your states and feelings shift. Try out a variety of words and notice the specific ways of speaking that elicit certain states and feelings.
3. Talk about a difficult experience using different tones of voice. Track what happens to your autonomic state. Find the way of speaking that brings you into a ventral vagal state. Notice the way of speaking that helps you see options and take regulated actions.
4. Find a friend and experiment with sound. Talk in different tones of voice and get feedback on their response. Ask your friend to do the same and track your own responses.

EXERCISE

The Music in Your Life

BACKGROUND

Music is all around you, affecting your physiology and your feelings. Along with activating a ventral vagal response, music has a paradoxical effect that allows you to safely connect to, and even enjoy, your sympathetic and dorsal vagal states.

STEPS

1. Take an inventory of the way music is a part of your life.
   - Music listening: Do you regularly listen to music? Have a favorite radio station? Favorite songs or artists? Do you go to hear live music?
   - Music making: Do you make music? Do you play an instrument or sing by yourself or with others?
2. Assess how much music is in your everyday life.
   - Is there enough music in your daily experience?
   - Do you miss music and want to hear more?
3. If your everyday experience is already filled with music, acknowledge the role of music in your life and identify the ways music is a regulating resource.
4. If your inventory brings a recognition that you have a desire for more musical moments, begin to look for ways to add music to your daily experience.
5. Identify the particular pieces of music that take you to different places on the autonomic hierarchy. Sing along, play along, or move along with the music. Use different selections to safely join with your sympathetic and dorsal vagal states and dive into all the flavors of ventral vagal.

EXERCISE

Moments of Movement

BACKGROUND

Movement occurs along a continuum of expression: simple through complex, micro-movements to full body motions. Each autonomic state has different levels of energy that you can connect with and use to shape your experience. Intentional use of movement is a way to engage your dorsal vagal and sympathetic states, making them less intense and persistent, and it's also a way to deepen your ventral vagal capacities.

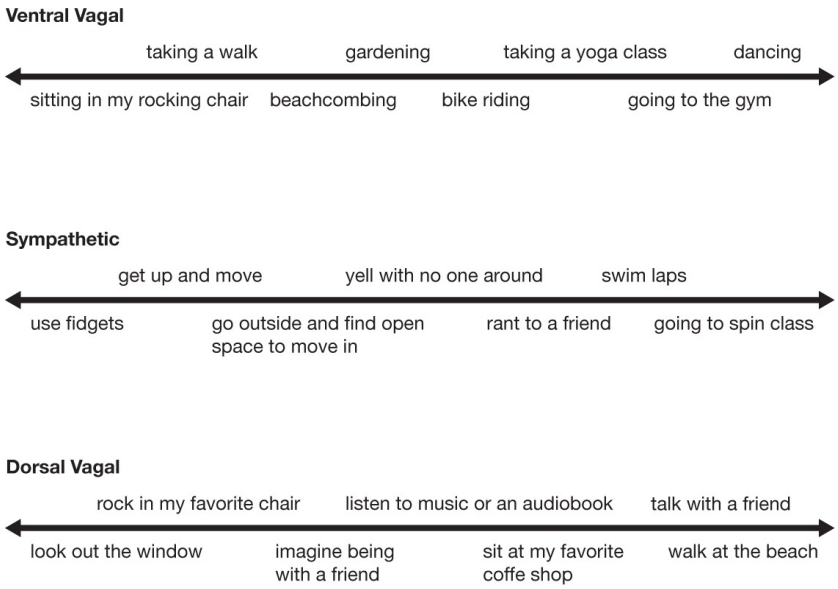

FIGURE 6.2. Movement Continuums

STEPS

1. Choose an autonomic state. Using a line to represent ways you move, identify movements at either end. Look for movements that engage the least and most energy available to you in the state.
2. Identify movements that happen between the ends. In dorsal vagal, look for movements that begin to gently energize you. In sympathetic, look for movements that use the activated energy in organized and safe ways. In ventral vagal, look for movements

that prolong the experience.

3. Design a series of movement lines to bring awareness to the range of movements that are possible in each autonomic state.

EXERCISE

Imagined Action

BACKGROUND

Motor imagery is a way for you to be in motion when the environment you're in doesn't support moving, when physical challenges make moving difficult, or when making a movement doesn't feel safe and instead activates a protective survival response. Imagined movement practices, either as a replacement for or as a complement to movement, are another way to get the benefits of moving and experience safely moving through space.

STEPS

1. Identify a movement you are drawn to but haven't brought into action yet. Play with it. Imagine yourself safely bringing the action to life. See yourself doing it. Sense your body moving on the inside. Feel the emotions that accompany your moving. Hear the story of who you are as you move.
2. Once you get the feel for imagined movement, create a series of movements. Use your imagination to move in ways you have always wanted.
3. Make time each day to bring one of your movements to life on the inside.
4. Notice if, over time, using motor imagery invites bringing the movement out of your imagination into the world or if it is autonomically nourishing when it remains an imagined experience.

EXERCISE

Labyrinth Walking

BACKGROUND

People have been walking labyrinths for centuries. Unlike a maze, a labyrinth has one path and no dead ends. Often thought of as a path to transformation, when you enter a labyrinth, there is a release of connection to the everyday world, a sense of receiving wisdom when you reach the center, and a subtle shift in your sense of yourself and the world when the circuit is completed. When walking a labyrinth there is first a slight increase in mobilization followed by a return to calm making this a gentle autonomic exercise.

STEPS

1. Investigate labyrinth-walking options. The location of thousands of labyrinths around the world as well as access to virtual and printed ones are available at https://labyrinthsociety.org
   - Walk a full-size labyrinth.
   - Navigate a virtual labyrinth on your computer.
   - Trace a printed labyrinth.
   - Walk a labyrinth with your fingers using a finger-walking guide.
2. Identify your physiological response to each of the different labyrinth-walking options. Which ones feel the most regulating?
3. Notice any ways your thinking shifts over the course of your labyrinth walk.
4. Keep track of the stories about yourself and the world that you connect with on your labyrinth walks.
5. Find an easily accessible form of labyrinth-walking you can use to return to regulation when you notice a rise in stress.
6. Combine different forms of labyrinth-walking to create a regular practice.

EXERCISE

Find Your Breath

BACKGROUND

There are many ways of breathing. Sometimes breath comes in a quiet and rhythmic cycle and other times it arrives in an erratic and stressed way. Different rhythms of breathing change your physiology, making breath a direct route to shaping your autonomic responses. Use the autonomic hierarchy to map the many kinds of breaths you breathe each day.

STEPS

1. Begin by bringing awareness to what kind of breathing happens in your ventral vagal, sympathetic, and dorsal vagal states.
2. Experiment with different kinds of breath. Notice how each impacts your autonomic state. Identify breaths that are mobilizing, calming, disconnecting, and connecting.
3. Create a breath map.
   - Using a line to depict the autonomic hierarchy, come into connection with each state and feel the ways of breathing that happen there.
   - Breathe in different ways and see where the breath takes you. Place those breaths on your breath map.
4. Use your breath map to find your place on the hierarchy.

ventral vagal	full, deep, easy, steady, slow, long, calming, filling, even, regular, flow between heart and belly, healthy, sustaining
sympthetic	sharp, short, fast, loud, forced, irregular, tight, restricting, fiery, gasping
dorsalvagal	shallow, silent, unfulfilling, flat, empty, weak, depleting

FIGURE 6.3. Sample Breath Map

EXERCISE

Understand Your Breath

BACKGROUND

The diaphragm is the most important muscle in the process of breathing. The diaphragm divides your torso into two parts: the chest cavity inside the ribcage where the lungs and heart reside and the abdominal cavity where the stomach, liver, intestines, and adrenal glands are found. With each breath cycle, the diaphragm changes shape. On an inhalation the muscles of the diaphragm contract and the diaphragm flattens, stretching the lungs to make room for more air. On the exhalation the muscles of the diaphragm relax, restoring the natural curve of the diaphragm to help push air out. When you need extra strength to lift things, during exercise, or in a sympathetically charged state of fight or flight, your breath moves up from your belly to your chest. While this is necessary in the moment, if used for prolonged periods, chest breathing brings anxiety and fatigue. Belly breathing on the other hand emphasizes moving the abdomen, letting it fill and expand on the inhale, empty and contract with each exhale. Belly breathing engages the diaphragm, deepens the breath, and activates the ventral vagal system, inviting a return to regulation.

STEPS

1. Get a feel for the way your diaphragm works.
    - Hold your hands in front of you, fingers interlaced, elbows at your side. In this position, your hands take on the shape of the curve of the diaphragm.
    - Inhale, raising your elbows pointing them outward and let your fingers flatten.
    - Exhale, relaxing your arms letting your elbows fall to your side as your fingers return to the shape of the curve.
    - Follow this cycle, letting your motion reflect the rhythm of your breath as you imagine the action of your diaphragm.
2. Play with changing the rhythm of the motion and synchronizing your breath. Speed the motion up and slow it down. Track the

ways your autonomic state shifts with different breath rhythms.

3. Listen to the stories that accompany state shifts.
    - Practice connecting the action of your diaphragm with your breath and listening to the story.
    - Breathe into your chest and track the way your autonomic state changes. Bring awareness to the stories that accompany the change.
    - Breathe into your belly and track the way your autonomic state changes. Bring awareness to the stories that accompany the change.

EXERCISE

Follow Your Breath

BACKGROUND

Some of the ways to follow your breath are to attend to each cycle, track the ways your breath moves in your body, add movement to your breath cycle, and create a mantra to tie intention to inhalation and exhalation.

STEPS

1. Count your breaths. Breath counting (counting each exhalation) has been a part of mindfulness training for over 1500 years.
   - Begin with short sets—between 3 and 10 exhalations. Experiment until you find the number that brings you into the ventral vagal place on your breath map.
   - Count to that number of exhalations and begin again. Experiment with repeating the cycle two or three times to find the number of repetitions that brings a balance between challenge and nourishment.
2. Find the places you feel breath moving in your body.
   - Some of the common places to find your breath are the abdomen, chest, heart, throat, just under the breastbone, in the side ribs, and in your lower back.
   - Choose two places and put one hand on each. As you inhale and exhale, feel your breath moving between your hands. Find places that offer an easy pathway to feel the breath flowing between your two hands.
3. Create a mantra. The use of mantras is common in mindfulness practice and is a way to bring focused intention to your breath.
   - Find a word or a phrase for each inhalation and exhalation that brings awareness to:
     - the feeling of energy rising and falling (mobilize, calm)
     - sensing inward and outward connection (tune in, reach out)
     - moving between action and rest (attentive, peaceful).
     - Honor the ways your autonomic nervous system and breath

are interconnected. Let your breath and body guide you in finding your own words and phrases.

4. Take breath outside your body and add movement.
   - There is a strong connection between breath and posture. Experiment with changing postures (lying down, sitting, or standing; posture slumped, straight, or slightly curved) and listen to the story that accompanies each shift.
   - Integrating breath and arm movements strengthens the muscles used in breathing and increases lung capacity. Experiment with adding arm movements to your breath cycle. Try it both seated and standing. Let your body lead the way. Invite your arms to illustrate your inhalation and exhalation. Notice how your movements change when the quality of your breath changes. Find a pattern that feels restorative and create a daily practice of moving with your breath.
5. Add a sigh. Sighing resets the respiratory system, affects your physiological state, and impacts the story that emerges. Humans sigh many times an hour and those spontaneous sighs are a sign your autonomic nervous system is looking for regulation. You can intentionally sigh to engage your system in that process.
   - Become aware of the times you spontaneously sigh as your system looks for regulation. Make a practice of noticing. Spend a moment actively appreciating the wisdom of your biology.
   - Intentionally sigh. Experiment with a sigh to interrupt a sympathetically activated moment or to bring some energy into a dorsal vagal moment of collapse. Create a habit of bringing a sigh to a difficult situation. Breathe a sigh of relief or sink into a sigh of contentment to deepen a state of regulation and nourish a story of well-being.

EXERCISE

Green, Blue, and Flowering

BACKGROUND

It is a generally accepted that the *green effect* (the impact of being in green spaces) is a powerful contributor to physical and psychological well-being and that being in a *blue environment* (around or in the water) reduces stress and enhances well-being. Even the simple act of directly connecting to the earth's surface, known as grounding, is an autonomically regulating experience. Drawing on the power of the environment and feeling nurtured by nature is a natural way to shape your system toward well-being.

STEPS

1. Head outside into the natural world.
   - Walk in the woods. Forest bathing, a term coined in Japan in the 1980s denoting the benefits of being in a forest environment, is regulating and restorative.
   - Find the green spaces around your home and work. Regularly return to the places that bring you into a ventral vagal state.
2. Find your way to water.
   - Being by the water is an autonomically regulating and restorative experience. Locate the places around you that offer you the opportunity to be in a *blue environment*. Look toward the ocean, rivers, lakes, ponds, streams, and fountains in city parks.
   - Being in the water brings its own benefits. Cool water experiences have been shown to bring a sympathetic nervous system response, and immersion in warm water lowers sympathetic activation and increases ventral vagal influence. Find a way to immerse yourself in the temperature of water that fits your autonomic need in the moment.
3. Make a physical connection to the earth's surfaces.
   - Walk barefoot in the grass, on the ground, or in the sand.

- Dig your hands in the dirt or in the sand.

4. Bring the outside in.
    - Add flowers and plants to your home and work environments and benefit from their autonomically regulating effects.
    - The smell of clean air and wet earth is something all animals and especially humans are sensitive to. Track what happens in your body and where your autonomic nervous system takes you when you encounter those smells.
    - Experiment with scent. The smells found in nature are powerful activators of autonomic states. Juniper, lavender, rose oil, and bergamot are some of the scents that have been shown to bring relaxation and regulation. Rosemary, grapefruit, and fennel increase alertness.
    - Discover the fragrances that your autonomic nervous system finds renewing. Experiment with different ways to use them. Living or dried objects from the natural world, candles, essential oils, and body creams are some possibilities. Incorporate your chosen fragrances into your everyday experience.
5. View nature.
    - Looking out a window at the natural world for as little as 5 minutes facilitates the return to regulation following a distressing experience.
    - Images can be used to complement your time in nature or as a stand-in for spending time in nature when opportunities in real time are limited. Find pictures of nature that are autonomically regulating for you.

EXERCISE

A Ventral Vagal Space of Your Own

BACKGROUND

Danish people have one all-encompassing word for a lifestyle that brings well-being. *Hygge* describes a way of living that is cozy, caring, content, friendly, and safe. This speaks to our longing to create and inhabit environments that are filled with cues of safety and inspire an enlivening of ventral vagal energy. Bringing these qualities into your home and workplace in small and simple ways is an act of autonomic shaping.

STEPS

1. Listen to your autonomic nervous system and become aware of what is present in your environment.
   - Look around your home and see where your sympathetic and dorsal vagal systems begin to activate. Identify what brings those states alive.
   - Consider the objects around you that bring a flavor of dissatisfaction or unease.
   - Look around your home and find the places that feel cozy, comforting, and connecting. Identify what makes them feel that way.
   - Notice the objects around you that inspire safety, contentment, and warmth.
   - Do the same with your workplace.
2. Make a list of the places and things in your home and work environments that bring a feeling of safety and connection. Identify the specific qualities that feel regulating and nourishing to your nervous system.
3. Bring curiosity to what might be possible. Look for spaces at home and at work (a room, a corner, or even a shelf) that could become a place of ventral vagal inspiration for you.
4. Find objects that bring your ventral vagal system alive and bring them into your space. Make small changes and track your

autonomic response to each. Remember, small moments add up to a tipping point. Look for the moment when a space feels welcoming. Stop and take that in.

5. Ventral vagal spaces are filled with abundance, but abundance does not mean that your spaces are filled with lots of things. Abundance and scarcity are felt not in the presence of absence of objects but in your autonomic states. Find the balance of open and filled spaces that brings you an autonomic feeling of abundance.

EXERCISE

Writing Your Reflections

BACKGROUND

Your autonomic states carry a wealth of information. Adding words brings a different kind of awareness to your autonomic stories. Even if you don't think of yourself as a writer, your autonomic nervous system benefits as you listen to your state and begin to put words on paper.

STEPS

1. Think of a time when you experienced a dysregulated response. Take just a few minutes to write about it. Listen to your sympathetic or dorsal vagal survival state and write what you hear.
2. Think of a time when you felt the flow of ventral vagal energy. Turn toward that experience. Listen and write what your ventral vagal state wants you to know.
3. Choose a period of time and set an intention to write about an experience from each autonomic state. A suggested timeframe is once a week over the course of 6 weeks. After the initial writing period, if it feels like a positive experience, set the next intention.
4. Find someone to share your writing with or bring your writing to your therapy sessions. You hear your stories in a new way when you tell them to someone. In the telling, deeper awareness and different insights often emerge.

EXERCISE

Reflecting with Compassion

BACKGROUND

Compassion emerges from a ventral vagal state and then shapes your system toward experiencing more ventral vagal energy. Loving-kindness meditation is an ancient practice that focuses on self-generated feelings of love, compassion, and goodwill toward oneself and others. Loving-kindness meditation engages the power of the ventral vagal system first through self-compassion and then by offering compassion to others.

The traditional four phrases of loving-kindness meditation are, “May I be happy. May I be healthy. May I be safe. May I live with ease.” Some variation of these four phrases has been used for centuries. Jack Kornfield and Sharon Salzberg, two giants in the field of meditation, note that it’s okay to adjust the words to find the phrases that are most personally meaningful. What words bring these statements alive for you? Let your ventral vagal state guide you.

STEPS

1. Look at the four categories (happy, healthy, safe, and living with ease) through the language of the autonomic nervous system.
   - Find the words that you would use and write your own four phrases. Here is one example of the four phrases:
     - May I find glimmers every day.
     - May I be nourished by the flow of ventral vagal energy.
     - May I be filled with a neuroception of safety.
     - May I live in the rhythm of a regulated nervous system.
2. Say your phrases out loud. Listen to the words and feel how they land in your system. You’ll know you’ve found the right words when you feel a deep connection to your ventral vagal system.
3. Say the phrases to yourself (“May I”). Then send the phrases to others (“May you”) beginning with someone you feel safe and connected to, then a neutral person, then someone you may have an unrepaired rupture with, and finally to all living beings.

4. Share your four phrases with someone else. This might be a friend, a family member, or your therapist. Say the phrases to the other person and also have them read your phrases back to you. Notice what happens when you offer and receive your unique phrases. Track your autonomic response to the experience of first offering compassion and then of receiving compassion.

CHAPTER 7: INTEGRATING EXERCISES

EXERCISE

Recognize

BACKGROUND

Autonomic awareness is a protective factor. Without the ability to recognize states and state changes, you are at risk for remaining stuck in dysregulation. The question, “Where am I on my autonomic map?” is a simple way to build autonomic awareness.

STEPS

1. Notice. Bring awareness to your autonomic state. Use what you learned about your autonomic states from the exercises in Chapters 4 and 5 to tune in.
2. Name. Stay out of your story and identify your state. Where are you on your autonomic map?
3. Repeat these two steps often. Create ease with this practice until you can quickly and accurately place yourself on your autonomic map.

EXERCISE

Reflect

BACKGROUND

Once the notice-and-name practice becomes easy and automatic, add the next step of turning toward your autonomic nervous system to listen for just a quick moment to what it is telling you. Don’t spend a long time hearing the full story. Just take long enough to get the general idea of what is happening.

STEPS

1. Be curious about what just prompted a mobilization of your sympathetic system, a descent into dorsal vagal conservation mode, or an experience of ventral vagal regulation.
2. Listen to what your state wants you to know.
   - My sympathetic mobilization is telling me . . .
   - My dorsal vagal state is letting me know . . .
   - My ventral vagal system is inviting me to . . .
3. Listen for just a brief moment with curiosity and without judgment. Don’t spend more than a minute or so listening. This practice is a quick experience of listening to the outlines of your story and not diving deeply into the details.

EXERCISE

Regulate

BACKGROUND

Everyday navigation of daily living involves setting goals and then acting to make your goals a reality. Goals are helpful in identifying what you want to achieve and are often stated in the form of an intention.

STEPS

1. Consider the autonomic goals you want to set. Ask yourself:
   - Where do I want my autonomic patterns to take me?
   - What do I want to change?
   - What do I want to deepen?
2. Write goals that address what you discovered. Begin each statement with the words “I intend to.” For example: I intend to not get stuck in dorsal vagal collapse. I intend to more quickly manage my sympathetic response. I intend to find moments of ventral vagal happiness to savor. Find the words that express your autonomic goals and write your personal intentions.

EXERCISE

Create “If-Then” Statements

BACKGROUND

Once you identify your autonomic goals, the next step is to translate your intention into action by adding what is called an implementation intention. An implementation intention is an if-then statement that identifies when, where, and how you plan to respond to a situation. Writing implementation intentions brings awareness to experiences by creating a link between cues and responses, making it easier for you to recognize situations and take action.

STEPS

1. Set goals for responding to cues of safety and danger in new ways. Set goals for all three states. Make sure your goals aren’t too big (unrealistic as a starting point), too broad (undefined and hard to put into action), or too bland (uninteresting and don’t keep your attention). Set goals that begin with small steps and lead to a larger change, are well defined with tangible ways to measure, and entice you to want to see what happens when you follow through.
2. Use the beginning statement, “If this happens then I will” to write if-then statements for each of your identified goals.
3. Write statements for external cues (response to certain people, places, or events).
4. Write statements for internal cues (response to autonomic state changes).
5. Read your if-then statements and check your autonomic response. Make sure each statement brings a neuroception of safety. Rewrite any statements that trigger a move into a sympathetic or dorsal vagal response.
6. Use your statements and track what happens. As your responses shift you may want to add new goals and write new if-then statements.

EXERCISE

Re-Story

BACKGROUND

Humans are meaning-making beings, automatically pulled toward story. Working with the skills of recognizing, reflecting, and regulating brings you to the important step of re-storying. As you integrate new patterns, you move out of your old stories and head toward new ones. This transition often brings with it discomfort and you can easily be pulled back into old familiar stories about yourself and the world. The re-storying process disrupts the habit of listening to an old story and encourages the development of a new one. Re-storying invites you to become an active author of your own autonomic adventure.

STEPS

1. What are the ways your autonomic nervous system is responding differently? Fill in the following sentences to bring awareness to the shifts that are happening.
   - Instead of my expected sympathetic mobilization I . . .
   - Instead of my familiar dorsal vagal disconnection I . . .
   - I notice I am more . . .
   - I notice I am less . . .
2. Write a story that speaks to your new pattern. Choose words that come from your ventral vagal state and keep that state online and active. For example, “I’m strong when I interact with other people” might bring sympathetic mobilization while “I have inner strength that serves me when I’m interacting with others” could keep you anchored in ventral.
3. Write about qualities and not behaviors. Use sentences that begin with “I am” (a quality) rather than “I do” (a behavior). *I am kind* is a different story than *I do kind things*.
4. Create a story that illustrates your new autonomic responses.
   - Use *I am beginning to* or *It is possible that* as the opening line to the new story.

- Write in small increments. In the re-storying process, a short story is more effective than a long essay.

EXERCISE

Exercise the Vagal Brake

BACKGROUND

The vagal brake is responsible for speeding up and slowing down your heart rate. The vagal brake allows you to feel more sympathetic nervous system energy while keeping your ventral vagal system online and in charge. As the vagal brake begins to release, the mobilizing energy of the sympathetic nervous system that is in the background begins to move into the foreground. Then as the vagal brake reengages, the process is reversed, sympathetic energy moving to the background and ventral vagal back to the foreground. Think about the vagal brake working similarly to the brakes on a bicycle. Imagine you are riding a bike down a hill and you want to go a little faster. Release the brakes a bit and feel the wheels spin faster. Gently squeeze the brakes to slow down.

When your vagal brake relaxes but doesn't fully release, you have access to a range of responses, including feeling calm, engaged, joyful, excited, passionate, playful, attentive, alert, or watchful, while still safely anchored in the ventral vagal system. You can bring the energy necessary to respond to what is needed in the moment. When working well, the vagal brake supports flexibility in your responses and a creates sense of ease to transitions.

Using metaphor and imagery you can experiment with relaxing and reengaging the vagal brake and experience the ways this part of the ventral vagal system helps you safely navigate everyday challenges. With ongoing practice, you create more flexibility in your responses and feel the benefits of a resilient autonomic nervous system.

STEPS

1. Find an image of your vagal brake that brings to life your sense of regulating the increase and decrease of energy in your ventral vagal pathways. Look for an image that gives you the feeling of controlling the dimensions of something. Some commonly used images include bicycle brakes, a door, a bridge, a gate, a water

faucet, a volume control knob, and a dimmer switch. Let your imagination guide you as you find an image that you can manipulate and measure the changes.

2. Write a simple story about your vagal brake using the image. Describe your image and how you use it to increase energy and return to calm.
3. Use a movement. Not everyone creates imagery to come into connection with inner experience. For some people movement is the preferred method. Find a movement that changes shape to illustrate the increase and decrease of energy.
4. Connect your vagal brake image and/or movement to your breath cycle. A subtle pattern of relaxation and reengagement happens with every breath cycle. With each inhalation, the brake relaxes just a bit, allowing a slight speeding up of the heart, and then reengages on the exhalation to bring a return of the slower beat. Take a moment and play with these two pathways. Feel your vagal brake relax, then reengage with each breath in an ongoing cycle. Move through several breath cycles until it begins to feel natural.
5. Use the image and/or movement to intentionally engage, relax, and reengage the brake.
   - See yourself as an active operator of your vagal brake, shaping the rise and fall of energy. Bring the image to life—see it, hear it, feel yourself adjusting it, and feel your energy moving in synchrony with the changing image.
   - Bring the movement connected to your vagal brake into awareness either in outward action or inward experience. Change the movement and feel the increase and decrease of sympathetic energy in your system.
6. Play with the experience of intentionally exercising your vagal brake.
   - Start with a small challenge, perhaps something that is commonly experienced in your day-to-day life. On a scale of intensity from 1–10, choose something in the 1–3 range.
   - Use your image and/or movement to relax the brake to meet your chosen challenge and reengage the brake when the challenge is over. Feel the influence you have over the ways your vagal brake works in service of managing the challenge.
7. Experiment with a variety of challenges. Build confidence in using

7. Experiment with a variety of challenges. Build confidence in using your vagal brake to meet everyday challenges.
   - Once you feel confident in successfully meeting small challenges, choose a slightly stronger challenge. Notice how your vagal brake relaxes, allowing your energy to rise to more intense challenges while maintaining the ventral vagal state of safety. Then reengage the brake and return to your ventral vagal starting point.
   - Practice using your vagal brake with environmental experiences.
   - Practice using your vagal brake with relationship stressors.

EXERCISE

Resilience Routines

BACKGROUND

Resilience is an emergent property of a ventral vagal state. As you build resilience, instead of responding to a challenge with an automatic move into a survival response, you are able to respond with more flexibility. And in the times when you are pulled into a survival response, rather than getting stuck there, you're able to return to the state of ventral vagal regulation. As resilience builds, your capacity for flexibility of response deepens.

STEPS

1. Create resilience routines that draw from practices that engage your body and brain in a variety of ways. Revisit Chapter 6 and see if there are shaping exercises from the different categories that fit into your resilience routine.
2. Experiment with actions that bring moments of ventral vagal experience.
   - Look inward to breath and reflection practices.
   - Look outward into the environment of your home and nature.
   - Look at the way you move in the world and the people who accompany you.
3. Choose experiences that feel nourishing and ones that feel a bit challenging. You want a mix of practices that feel comfortable and are easy to engage with and ones that take concerted effort. Building resilience is about both deepening into ongoing practices that feel sustaining and inviting in new practices that bring the right degree of neural challenge for your system.
4. Find a few core practices that will remain constant in your resilience routine.
5. Create a second category of practices that routinely change.
   - Decide on the length of time you want to use. The time period can be anywhere from 1 week to 6 months.

- Choose a few new practices to experiment with over your chosen time period. At the end of that time some practices may become core practices while you let others go. As you try out new practices, your resilience routines continue to develop.

6. Regularly review and revise your resilience routines. Some practices will become lifelong, while others will serve you for a time and then be replaced with new ones.

My Core Practices	Changing Practices This month I will . . .
vagal brake image with breathing	use breath counting once a day
intentional sighing	find a place I feel safe to be quiet
glimmers with my hand on my heart	try a different yoga class each week

FIGURE 7.1. Sample Resilience Routines

CHAPTER 8: CONNECTING EXERCISES

EXERCISE

Rules of Reciprocity

BACKGROUND

You don't require reciprocity, proximity, and face-to-face interactions all the time. In fact, well-being is found in a balance of time with others and time by yourself. You have your own reciprocity requirements, and when they aren't met, your body feels the absence. Without the right measure of reciprocity, your autonomic state begins to shift from readiness for connection to preparation for protection. Incorporating a therapeutic dose of reciprocity (the amount necessary to bring the desired effect) into your daily living means first knowing your needs and then building sustainable connections and opportunities to meet those needs.

STEPS

1. Fill in the following equations to find your reciprocity rhythms. Recognize the signals that you've been on your own for too long, you've spent too much time connected with others, or you're in a sweet spot of symmetry.
2. Reciprocity is not a static experience. Return to this practice regularly to track when you are out of balance or in a resourcing relationship to yourself and others.
3. Take care of your connections.
   - Write reciprocity intentions that describe how you are going to pay attention each day to ways you are in and out of reciprocity. Examples might be, "I will track my reciprocity rhythms and take action when I'm out of balance" or "At the end of the day I'll reflect on my moments of reciprocity."
   - Create time and space for reciprocal interactions. Identify when, where, and with whom you can build predictable, sustainable opportunities for connection into your life.

The amount of time I want to spend on my own today is: Today I'm going to spend time alone doing:	= reciprocity balance	The amount of time I want to spend with friends today is: Today I'm going to connect with: And we're going to:
These work responsibilities mean that I work by myself: These things in my personal life mean that I'm on my own:	>\ alone and out of balance	I've neglected being with the people in my life who are important to me by not paying attention to: and not making time for:
I've lost track of my: I've been so busy with others I haven't made time for:	< with others and out of balance	I feel too involved in the life of: I feel over-saturated by doing things with others because I said yes to:

FIGURE 8.1. Reciprocity Equation Chart

EXERCISE

Personal Connection Plan

BACKGROUND

What does a map of your pathways to connection look like? Your personal plan brings a dual focus: what's working (the things that are already in place) and what's wanted (things to explore and invite in). The questions in this exercise reference people, but feel free to add pets to your exploration.

STEPS

1. Identify what's working.
   - Who are the people in your life with whom you feel a connection?
   - What are the things you do together that foster that connection?
   - What are the things you do to nourish your sense of connection to self?
2. Identify what you want.
   - Who would you like to invite into connection?
   - What might you do to explore new connections?
   - What would you like to explore on your own?
   - How does interacting with others in a playful way fit into your connection plan?
   - How do moments of shared stillness fit in your connection plan?
3. Fill in the boxes to create your personal connection plan. Update your plan as you try new things and make new connections.

People I want to continue to connect with:	People I would like to get to know:
Things I want to continue to do with my friends:	Things I'd like to explore doing with others:
Things I want to keep doing to connect to my own experience:	New things I'd like to try on my own:

FIGURE 8.2. Personal Connection Plan

EXERCISE

Clusters of Connection

BACKGROUND

There are many ways to reach for reciprocity. There are many pathways to connection. Who you connect with and how you connect is an individual experience. Find the ways your autonomic nervous system feels nourished and create relationships with people (and pets) that nurture your sense of being woven into a resilient network.

STEPS

1. Look at the people in your life.
   - Make a list of the people to whom you are connected. Listen to your autonomic response as you think about each person. Using a scale of 1–3, loosely connected; 4–7, pretty connected; or 8–10, very connected, identify how close you feel to these people. You may find that you have several people in the 4–7 pretty connected range or one person in the 8–10 very connected range and feel very safe and supported with either configuration. It isn't a particular number of connections that matters, it's the ways your personal autonomic needs are met by those connections.
2. Look at how often you connect with people in your network. A match with others feels resourcing while a mismatch between your wish for connection and your experience of connection is painful.
3. Look at the ways you connect.
   - Create a pie chart to map your kinds of connection. Use the communication categories that fit for you. The two examples in Figure 8. 3 show very different connection profiles, but each person identified feeling deeply connected to their network.
4. Look at what you do when you connect.
   - quiet moments
   - physically active adventures
   - go out or stay in

- favorite activities you love to return to
- new things you want to try

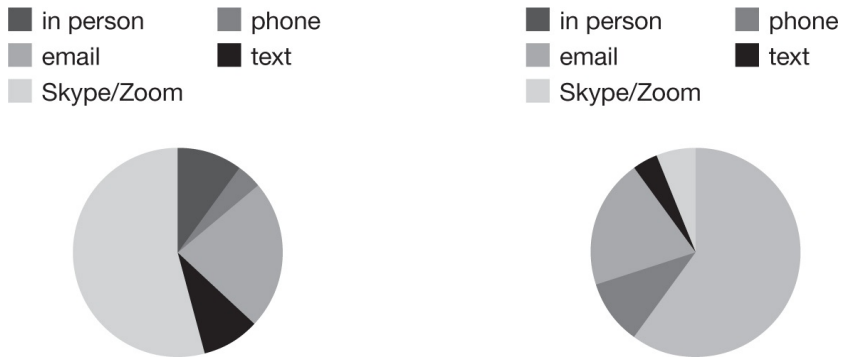

FIGURE 8.3. Types of Connection

EXERCISE

With Gratitude

BACKGROUND

Sometimes gratitude comes in the form of life-giving or lifesaving events (a stranger donating a kidney, someone not leaving your side when you are in the depths of despair) that irrevocably change the way you think about and move through the world. More often the gifts of gratitude come through ordinary, everyday experiences. Simple interactions with people (holding a door open, offering a smile, recognizing someone's contribution), pets (your dog greeting you at the door, your cat nuzzling you awake in the morning), or in nature (the return of the sun after a stretch of rain or the rain after a period of drought, the first hint of spring) are opportunities for gratitude. Gratitude is good for your body and brain (fewer physical complaints, better heart health, less depression and anxiety, more happiness). A gratitude practice helps you see the small, everyday experiences of goodness that might otherwise pass by unnoticed.

STEPS

1. Keep a gratitude list. Make a practice of noticing what you might otherwise take for granted.
2. Find ways to express your gratitude. Say thank you. Return the favor.
3. Use a breath practice to deepen into appreciation.
    - Imagine breathing into the beginnings of your ventral vagus at the base of your skull. Follow the pathway as it makes its way to your heart, and then breathe out of your heart. Follow this cycle of breath and imagine your autonomic nervous system supporting your experience of gratitude.
    - Breathe in with a word that acknowledges a moment to be grateful for. Breath out with a word that expresses your gratitude.

EXERCISE

Compassionate Connections

BACKGROUND

Through the eyes of compassion, from your own regulated nervous system, you can see another person's dysregulated system, respond with regulation, and connect with kindness. From the energy of your ventral vagal system, you can also connect inside and be with your own suffering in an act of self-compassion. Ongoing experiences build the capacity for connecting with compassion. Find the combination of practices that brings your ventral vagal system alive. Create your own compassionate connections.

STEPS

1. Create a compassion statement using the language of the autonomic nervous system.
   - Use language that recognizes another person's dysregulated state and names the ways your ventral vagal state helps you see them with compassion.
   - Decide on a timeframe for using your statement. You might choose to create a new statement each week or each day.
   - Notice people in need of compassion and use your statement to send a message either in silent thought or in spoken words.
2. Make this three-step compassion practice a routine part of your day.
   - Find your ventral vagal anchor.
   - Look through the energy of your ventral vagal system. See the other person not as bad or unworthy but as dysregulated, pulled into sympathetic or dorsal vagal protection, and unable to regulate.
   - Hold the other person in your ventral vagal energy. Let your nervous system send cues of safety toward theirs.
3. Create a self-compassion statement using the language of the autonomic nervous system.

- Use language that acknowledges your own dysregulated state, identifies that dysregulation is a normal human experience, and reminds you that your autonomic nervous system knows the way back to regulation.
- Decide on a timeframe for using your statement. You might choose to create a new statement each week or each day.
- Notice when you are in need of compassion and say your statement to yourself either silently or out loud.

EXERCISE

Awe Inspiring

BACKGROUND

You feel moved when you are awe-filled and motionless when you are awestruck. Awe lives along a continuum of ordinary to extraordinary. Some moments stop you in your tracks and demand your attention. Other everyday moments pass by without being recognized. People, nature, architecture, the arts, spiritual experiences, and inexplicable events each have the potential to elicit feelings of awe. Where are your moments of awe each day that are waiting to be discovered?

STEPS

1. Build a reservoir of awe memories.
   - Remember a moment of awe.
   - Replay it in your mind and bring the richness of it back into full awareness.
   - Revisit it in writing to deepen the experience.
2. Notice where in your life you find awe.
   - Certain people inspire awe. Who are those people for you? They may be people you know and have a relationship with or people you know of and admire.
   - Places, the architecture of a particular structure, and natural formations in the outside world routinely bring experiences of awe.
   - Art and music predictably activate awe.
   - Spiritual experiences are awe-filled.
3. Either physically or through a memory, return to the awe-inspiring people, places, and events you identified in step two. Returning in person or revisiting in memory brings the experience and your ventral vagal response alive again.
4. Be open to the inexplicable events that unexpectedly appear. Let go of the need to understand and explain those moments and let in the experience of awe.

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"This book is a beautiful example of the notion that 'sensing, naming, and identifying what is going on inside is the first step to recovery.' Deb Dana lucidly guides you to travel deep inside of yourself to become aware of how your internal surveillance system—the safety settings of your autonomic nervous system—is the foundation of the way we feel, act, and think. This is a valuable manual to help you address your inner physiology and thereby create the necessary conditions for safety and connection."

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"Whether or not you are familiar with Polyvagal Theory, I highly recommend this invaluable resource and guide. Deb Dana eloquently explains the physiology of fight/flight/freeze responses and offers creative strategies to increase self-awareness while simultaneously providing resourcing for re-grounding, self-soothing, resilience, and the capacity for safe connection with others. Step-by-step guidance for incorporating breathwork, guided imagery, somatic resourcing, journaling, art modalities, and movement provide a terrific roadmap for healing work that can be achieved both in and out of the therapist's office."

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ABOUT THE AUTHOR

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