PLAY © CREATIVITY

IN PSYCHOTHERAPY



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Introduction

PSYCHOTHERAPY IS SERIOUS business. Our patients frequently face life-and-death issues on the opposite end of the spectrum from fun and games. Psychotherapists harbor a tremendous amount of responsibility when encountering deep unhappiness, trauma, and at times, unthinkable horrors within their patients. Given such a somber state of affairs, what does play and creativity have to do with psychotherapy? On the surface, one might think, "Very little!" Yet, as you dive into the chapters ahead, we hope you'll reach the opposite conclusion; for this book arose out of our conviction that play and creativity have everything to do with the deepest levels of healing, growth, and personal transformation within psychotherapy.

From an evolutionary perspective, play became highlighted in the mammalian brain in service of open growth and flexible adaptation to ever-changing environmental conditions. Through play, young children learn the roles, rules, and relationships of culture, while expanding their window of tolerance for a wide range of emotions—areas that overlap tremendously with the domain of psychotherapy. Through play, children push to their very edges of what is tolerable and understandable as they wrestle, spin, twirl, hurl, and leap into novel states of mind. Certainly, novel experiences are necessary for change within psychotherapy. Apart from other mammals, children's play is uniquely characterized by imagination—an important aspect of the psychotherapeutic process that has been historically overlooked and theoretically undervalued. When lost in the fun and pleasure of a moment in play, children explore novels forms of thought, speech, action, and social interaction. Meanwhile, novel response is the hallmark of full engagement and healthy adaptation within psychotherapy.

Both developmentally and within psychotherapy, play that engages creative imagination represents a safe way to experiment with people, objects,

concepts, and culture at the very edges of being and becoming. Carl Rogers (1954) was a pioneer of psychotherapy in the middle of the last century who recognized the need for open, flexible minds. In his pearl of an essay, "Toward a Theory of Creativity," Rogers asserts presciently,

In a time when knowledge, constructive and destructive, is advancing by the most incredible leaps and bounds . . . , genuinely creative adaptation seems to represent the only possibility that man can keep abreast of the kaleidoscopic change in his world...Unless man can make new and original adaptations to his environment as rapidly as his science can change the environment, our culture will perish. Not only individual maladjustment and group tension, but international annihilation will be the price we pay for a lack of creativity. (p. 250)

Rogers defined the creative process (p. 251) as "... the emergence in action of a novel relational product, growing out of the uniqueness of the individual on the one hand, and the materials, events, people, or circumstances of his life on the other." By not restricting creativity to some particular content, Roger's definition includes ordinary activities like discovering new sauces in the kitchen, or finding a clever new technique to communicate in our offices or to students in the classroom. Scholars often distinguish between Creativity with a big "C" versus creativity with a little "c." The big "C" variety is reserved for geniuses and savants who make major discoveries in science or who usher in new forms in art. The little "c" variety involves the creativity of everyday life, which includes micro-acts of novelty, spontaneity, humor, and improvisation that help each moment to sparkle and each day to stand out from the last.

When patients enter psychotherapy for trauma, the therapeutic process frequently involves the reduction of negative symptoms, including crisis resolution. Psychotherapists privileged enough to extend treatment beyond the short-term often enter more positive realms of deep connection and personal growth, which is where new unfoldings of personality become possible. Perhaps the most important little "c" type of creativity involves the creation of one's self throughout the lifespan. Within psychotherapy, the task of self-creation and the co-construction of the self become emergent relational processes. A playful attitude in therapists promotes an atmosphere of safety, support, and nonjudgment for patients, which sets the foundation for novel response and creative shifts. Simultaneously, a playful attitude helps therapists to stay curious and engaged, which protects them from burnout and empathy fatigue.

In so many ways, play and creativity speak to the heart and soul of what all psychotherapists engage in—or perhaps should engage in doing!

In the Chapter 1, Mihály Csíkszentmihályi presents a panorama of nature's drive toward creativity. Through his "deer-flavored morality tale," Csíkszentmihályi muses about how the young fawn must break away from its mother to eventually stand on its own wobbly legs in order to face life's novel challenges. The author's poetic image emphasizes those tiny, ongoing moments of creativity, with a little "c," as they parallel the existential human condition. Each of us must likewise move beyond the carefree play of childhood to flexibly face life's novel challenges with creative solutions.

Whereas the fawn deals with its immediate surroundings only, we humans face more open possibilities. Not only must we define who we are, but we must also define who we want to become. This creative mandate extends to how we view ourselves as psychotherapists. Each clinical moment, in turn, becomes an opportunity to practice the art of psychotherapy creatively, with a little "c," as we attend to the uniqueness of this patient in this moment with full presence and novel responses. In this way, we come to our work with a beginner's mind, an openness to be with whatever arises, as it unfolds in therapy.

In Chapter 2, Stuart Brown and Madelyn Eberle take a closer look at the nature of play itself, whose hallmark features include that it is inherently rewarding, voluntary, spontaneous and un-self-conscious. Play may seem frivolous on the surface, yet it serves an essential purpose in all mammals. Within animals, plays helps to socialize and develop adult skills. Within young children, play fosters creativity through imagination, while developing empathy through perspective-taking. Within adults, play helps to quiet the mind and bring pleasure to the player.

Alongside the capacity for positive emotions, intrinsic motivation, and rejuvenation throughout the lifespan, Brown and Eberle underscore the dark, potentially disastrous side of play's absence. Children chronically deprived of unstructured play in service of more "purposeful" activities can become excessively conformist on the surface, while struggling to manage rage and even murderous impulses underneath. The author's takeaway message is that play remains critical throughout the lifespan for everyone, for fostering adaptive minds, resilient emotions, and flexible bodies.

In Chapter 3, Aldrich Chan and Dan Siegel dive into brain processes underlying play, creativity, mindfulness, and other forms of meditation. The authors describe three interconnected neural circuits. The default mode network (DMN) is of primary interest in this chapter. The DMN remains highly active, even during resting states, such that it consumes a high percentage of the brain's metabolic energy. The DMN comes into play whenever we ponder

introspectively, project ourselves into the future, think about our relationships, or engage our moral compasses.

The DMN works hand in hand with the salience network (SN), which consists of neural circuitry that determines what we consider as most important for us to attend to on a moment-to-moment basis. The SN operates like a kind of switchboard, shifting back and forth between inner concerns of the DMN and outer concerns as regulated by the central executive network (CEN). Whereas the DMN involves conceptual issues arising during imaginative play, mind wandering, and creative endeavors, the CEN regulates external tasks and environmental changes, as cued by perceptual events related to the five senses. In this chapter, Chan and Siegel also indicate which neural structures underlie various kinds of meditation practices, including what shifts and grows with greater expertise, as well as clinical implications of this research.

In Chapter 4, Allan Schore and Terry Marks-Tarlow propose a two-person, relational model of how mutual love "leavens" both play and creativity. Within early development, maternal and mutual love serve as primary motivational forces to energetically jump start positive emotions, motivations, and behaviors. During the first two years of life, the capacity to love and play concretely as well as symbolically originate in the emotional and relational processing of the right brain.

When brains, bodies, and minds are optimally cared for from birth onward, children naturally open up to novel experiences and explore developmental edges through play and imaginative activities. The mutual exchange of love fuels a young child's desire to explore the environment, drink in novelty, and eventually fire up the imagination in service of creativity. As children grow and develop, this initial dose of love gets internalized and becomes transmuted into passionate engagements throughout life, including a love for life itself.

In Chapter 5, Pat Odgen addresses the somatic, or body, side of things. She suggests that to be creative, we must extend beyond our comfort zone in order to take risks and push past the confines of the familiar. Yet, as creatures of habit, we humans also love to sink into routine and thrive in the comfort of the familiar. In general, the more secure we feel in our bodies, minds, and relationships, the wider our window of affect tolerance, and the more inclined we will feel to stretch beyond our usual boundaries.

The author presents five basic movements which underlie more complex sequences: yielding, pushing, reaching, grasping, and pulling. We yield to let go—into each other, into gravity, and into the comfort of our beds. We yield to open up to playful promptings and creative products of the unconscious mind. We push upon solid foundations: the fetus pushes out of the womb; we

push to differentiate self from other and to push away that which offends, disgusts, or violates our boundaries. We reach to go beyond ourselves, often out of desire to connect with people or objects in the environment. Reaching manifests openness, interest, and curiosity—all ways to say "yes" to novel experience. We grasp to take hold of what we desire, gaining the opportunity to explore it further with multiple senses. Finally, we pull objects and people we desire closer, beginning in infancy with the nipple. Pulling epitomizes the positive, intrinsic motivation necessary for play and creativity. Ogden asserts that an extensive movement vocabulary provides the somatic foundation to support flexibility and variety in our physical actions.

In Chapter 6, Theresa Kestly examines play across cultures and disciplines, beginning with what she learned upon moving to the small Navajo village of Rough Rock, Arizona, where fire dances provided her first taste of how thoroughly play can be integrated into the sacred as well as ordinary spaces of indigenous peoples. Kestly became inspired to pursue a degree in psychology and then return to her growing fascination with play through sand tray therapy.

Kestly adopts the framework of interpersonal neurobiology to describe her cultural discoveries. She understands the sand tray to offer a right-brain language of touch and imagery that is developmentally more foundational than words. Sand tray is among many forms of play that enables a safe environment in which to experiment with novelty, as well as broaden positive emotions and motivations, while expanding behavioral repertoires. Kestly's chapter demonstrates increasing cultural attunement through her innovation of round sand trays to replace traditional rectangular ones, both with Navajo and Korean people, who naturally tend to "think in the round."

In Chapter 7, Lou Cozolino presents a personal look at play and creativity in the training of psychotherapists. He begins by contrasting early, idealistic images of what academia should be with his own rude awakening as a teacher within a "trade school" classroom. By recognizing how his preformed images stifled his creativity, Cozolino seized upon the opportunity to create his own philosophy and approach to teaching psychotherapy graduate students. Just as the author had to revamp his own expectations, so too must new therapists do the same in their clinical training, essentially by "starting from scratch." The creative challenge for any psychotherapy teacher then becomes cultivating an atmosphere of safety and trust that allows students to take emotional risks and play with new ideas. Cozolino accomplishes this by using humor, telling stories, and encouraging students to face their own demons. To be an effective psychotherapist requires that trainees take the heroic journey inwards,

in order to identify personal wounds, dark corners of the unconscious mind, and the accompanying vulnerabilities that inevitably come into play during clinical sessions.

Cozolino identifies his own set of learning principles by sharing personal stories that embody them. Readers learn the importance of embracing the unexpected; providing a caring, receptive audience; working with rather than trying to dispel personal demons; and recognizing how profoundly we are shaped by unconscious aspects of mind and body. By revealing his own demons and struggles, including the trials and tribulations of his clinical training, the author evinces a creative attitude, models risk-taking, employs humor, and adopts a playful style in an essay that serves as a powerful teaching tale to inspire other teachers.

In Chapter 8, Terry Marks-Tarlow underscores the importance of play and creativity in psychotherapists in the form of clinical intuition. Whereas preset techniques and manualized treatment may address generalized symptoms, only clinical intuition can attune to the particulars of *this* person, in *this* moment, with *this* personal history, and *this* particular therapist. Not only is each individual patient unique, but so is the interpersonal chemistry that arises within each dyad. Whereas cognitive therapies and prefabricated suggestions rely on verbal, explicit processes initiated in top-down fashion, clinical intuition draws upon perceptual and emotional processing as guided from the bottom-up by implicit processes.

To be fully present, authentic, and effective, therapists must continually tune into interpersonal novelty, to render psychotherapy an inherently creative enterprise. Only clinical intuition, and not clinical deliberation, is grounded enough within the full context and complexity of each moment to register this level of nuance. Clinical intuition supports an open stance that permits spontaneity and the emergence of safe surprises. Psychotherapists who model this level of internal grounding in turn inspire patients to do the same. When two people take the risk of being fully present and authentic with one another, this promotes a truly intersubjective, two-person clinical space. Even in the face of hardship or trauma, a playful attitude in therapists can cultivate safety, curiosity, and freedom for mutual exploration and growth.

In Chapter 9, Paula Thomson explores the relationship between unresolved attachment issues, trauma, and creativity. During ancient times, Plato suggested that when the muse visits a traumatized artist, this can unleash transient states of madness. Prior to Thomson's research, such ideas have had little empirical investigation. The author describes how optimal early family experiences promote creativity and creative achievement throughout the lifespan. Her studies found that dancers and actors tend to demonstrate greater

attachment security compared to nonclinical samples. Yet, Thomson's lab also found a higher distribution of unresolved mourning in artists compared to the general population. In addition, artists with PTSD demonstrated both more anxiety during the creative process as well as higher levels of shame, anxiety, depression, and dissociation. Dissociation is a common internal response to pain and trauma that allows children to disconnect from intolerable experiences and intensity of feeling.

Happily, participation in the arts appeared to promote positive states of mind including flow in all artists. This was the case despite the presence of unresolved trauma, as well as more negative states, such as anxiety, depression, dissociation, and shame. While various artists, like dancers, singers, musicians, actors, and comedians, may share similar career conditions, they also have unique stressors and needs; these differences must be understood and taken into account in order for psychotherapeutic treatment to be effective.

In Chapter 10, Victoria Stevens examines musical dimensions of psychotherapy, likening the ineffable quality of deep, relational healing to the experience of playing music. Both go beyond words; both involve the *feel* of things; both depend intimately on the art of timing. Stevens begins by discussing nonspecific aspects of treatment, asserting that technique is less important than the quality of connection. To create a strong therapeutic alliance depends intimately on the ability to read nonverbal, body-based, affective communications from moment-to-moment, both in ourselves and in others. Relevant cues include facial expression, posture, gesture, movement, and vocal prosody.

With relational skills so highly rhythmic, all psychotherapists are musicians at heart, as we move unconsciously in sync with breathing and postural changes in others, and flexibly adjust to tiny sensory and affective shifts. When analyzing musical dimensions of interpersonal neurobiology, Stevens identifies three important features: resonance, synchrony, and attunement. Resonating with the emotions and states of others enables patients to deeply "feel felt," as Daniel Siegel would say. Synchronizing with body movements and mental rhythms conveys empathy and understanding, while attunement to the inner worlds of our patients is how we convey safety and trust. By attending to all of the elements of music—rhythm, tempo, volume, pitch, timbre, melody, and harmony—therapists can enhance their own musical sensitivity in order to better read and respond to the nonverbal communications of patients.

In Chapter 11, Phyllis Booth, Dafna Lender, and Sandra Lindaman introduce the technique of Theraplay® as an engaging, play-based, and relationship-focused intervention that is interactive, physical, and fun. Within this system of psychotherapy, parents are included in sessions with their children, so that they may become more sensitively attuned and emotionally available. The aim

is to create warm, responsive engagement that builds trust, facilitates emotion and arousal regulation, amplifies interactive repair, and ultimately leads to secure attachment, in hopes of ensuring lifelong mental health within children.

The authors review the history of Theraplay as connected to John Bowlby's attachment theory. Four key dimensions of the system are identified—structure, engagement, nurture, and challenge—and amply illustrated with case examples. The Theraplay clinician models and then guides parents to attend to their child's cues, and to reflect on the meanings of their own and their child's experience. The system focuses naturally on the pre-verbal, brainstem, and limbic levels of development, where synchrony, rhythm, facial expression, vocal prosody, movement, and play are the primary modalities. The play-based action is multisensory, aimed to induce calming, nurturing touch, stimulating fun, and soothing care. Clinical histories, dialogue, and reflections bring the case material alive. Through play-filled experiences described here, children learn how to connect with others, to enjoy human company, to experience happiness, and to reconnect with the feeling that life is worth living.

In Chapter 12, Jaak Panksepp, founder of the field of affective neuroscience, identifies seven emotional-motivational-action circuits in the mammalian brain that are genetically driven, yet in need of stimulating social and physical environments for healthy development. Among these are the urge to PLAY—a natural mind-body-brain "tool" designed by Mother Nature to facilitate higher cortical brain development and social adaptation. In the United States, the diagnosis among children of attention deficit hyperactivity disorders (ADHD) has been increasing at an alarming rate, alongside the prescription of psychostimulants. The author suggests that one major reason for the increased incidence of ADHD may be the diminished availability of real social play among children.

While psychostimulants may "work" to help children inhibit impulsive urges and increase academic focus, their long-term effects on growing brains remain inadequately characterized. Research shows that psychostimulants reduce playfulness in young animals and humans alike. They also appear to increase vulnerability for depression, and for drug addiction and abuse later in life. Panksepp struggled to obtain funding for his research on play; he feared that natural solutions to the problem of ADHD may be unpopular among social policy makers under the influence of big pharmacological companies. Panksepp calls out for careful evaluation of whether intensive social play interventions can alleviate ADHD symptoms without any side effects in children. His other recommendations include regular physical play incorporated into early education, as well as the establishment of play "sanctuaries" for at-risk

children, in order to facilitate frontal lobe maturation and the healthy development of pro-social minds.

In Chapter 13, Marion Solomon extends the importance of a playful attitude into couple's psychotherapy. She notes that many, if not most, clients enter psychotherapy finger-pointing—identifying their partner as the source of the problem, and asking for help to change the other as the solution. Solomon resists this perspective, instead maintaining that each person needs tremendous support, love, and recognition, exactly as he or she is, in order to change within him/herself. As a way to cut under long-held defenses and help her clients recognize the incredibly vulnerable, need-filled core hidden deep within each person, Solomon introduces two sets of matryoshkas, or Russian nesting dolls, all of which possess the same shape, as encased each inside the other.

By encouraging clients to take the dolls apart and hold the tiniest ones in their palms, Solomon helps her clients to reconnect with the earliest developmental phases in themselves and in each other—times when they felt needy, vulnerable, and susceptible to relational ruptures and traumas. By reminding couples that this tiny childlike part remains perpetually alive inside, the author hopes to engender empathy and greater understanding of one another. Solomon emphasizes that we are all social beings with social brains that sync up and fire as well as wire together. Because we are built to thrive in company, the author suggests we resist cultural messages that pathologize our social needs and inadvertently promote loneliness by pointing toward individualistic achievement rather than relationships as the source of greatest meaning and fulfillment in life.

In Chapter 14, Jonathan Lynn transports us onto the theater stage, where through his extensive experience as a director, he serves partly as friend, parental figure, and boundary maker—not unlike leading a psychotherapy group. To facilitate high levels of creativity, Lynn wants his actors to feel safe in order to play and take risks. The task of creating emotional safety is akin to handling transference and countertransference issues, especially in learning how to distinguish everyone else's projections from the director's concerns. Meanwhile, the director must retain control over the group process, lest his cast and crew suddenly feel unsafe such that play becomes impossible.

Lynn specializes in comedies. He notes that laughter is clearly therapeutic, and we easily conceive of comedies as warm and fuzzy. Yet Lynn sees the underbelly of comedy as high in aggression, often in the form of ridicule. The dark side of humor is evident in language used by comedians of "killing" the audience or "knocking them dead." With ingredients of comedy fundamental to the human condition, the audience functions like a tribe, asked to identify

with circumstances portrayed, in order to laugh *at* the victim. Meanwhile, plays often take the moral high ground of warning about terrible things that can happen to whoever breaks society's rules or taboos. There are cultural trends in what is considered funny, which means that the line between good and bad taste is ever moving and rather thin. After working with hundreds of comedians and comedy writers, Lynn concludes most of them to be angry and depressed under the surface. Comedy can serve as a safe outlet to express underlying rage, but unfortunately is *not* a cure.

In Chapter 15, Rita Lynn, a psychoanalyst with decades of experience, extends the explorations of her husband. Lynn observes from her own clinical practice that patients deprived of play as children are more likely to use humor as a defense. These are often high achievers who struggle to experience joy, and who oscillate between comedy and darkness, while stating everything of significance only indirectly, as an aside. Lynn shares poignant case examples of patients who use humor as a cloak while relaying some aspect of personal history as a joke. With the patient as the butt of the joke, the therapist is invited into the laugh. Meanwhile, the horror of it all remains hidden in shame, under histories of accommodation, out of terrors of abandonment or fears of overwhelming the therapist with the rage and pain that lurk underneath.

Only by cutting underneath the humor and attending to what is missing from the narrative can therapists hope address underlying feelings and help to heal old wounds. Yet, in the very same chapter that Lynn explores multiple cases of humor used as a defense, she also cautions us against simplistically dismissing the utility of humor in psychotherapy. Lynn believes humor can be used as a skillful clinical intervention for accessing underlying rage or as a creative way to express a needed metaphor. In depressed or overly serious patients, sometimes to share a laugh becomes a signal of healing.

In Chapter 16, Zoe Galvez and Betsy Crouch address the therapeutic potential of theater improvisation as a clinical intervention for building resilience. Given that no one escapes loss or other devastating circumstances in life, the difference between success and failure comes down to maintaining a positive mindset. This chapter offers improvisational exercises as a clinical tool to build confidence, gain comfort with the unknown, and address self-conscious attitudes that inhibit creative expression.

The exercises apply as readily to individual, couples, or group work. The "intentional listening" exercise invites players to slow down, really hear, and respond precisely to each other's verbal communications. "Make your teammate look good" helps players shift from an inward focus and self-conscious worry to an outward focus of attending and supporting partners instead. "Resilient response" helps people work more comfortably with mistakes.

"Yes... and" challenges players to open up more fully to life by accepting whatever comes our way in contrast to the more common everyday "No... but" stance and response. "Voice your ideas" grants permission to believe in ourselves and risk sharing our ideas. By the end of this chapter, readers are left with an embodied feel for improvisation as a whole mind-body-brain vehicle to prompt change and spontaneity.

In Chapter 17, Bonnie Goldstein explores elements of play and creativity in the treatment of early attachment issues with children and adolescents. By working with younger patients, the author capitalizes on children's plasticity of mind, body, and brain, in order to intervene before their sense of self or patterns of behavior become too deeply ingrained. By utilizing a group therapy milieu, Goldstein helps youngsters explore triggers and experiences related to loss, social anxiety, oppositional behavior, and other relational traumas. As anger, fear, a sense of danger, and other defensive responses emerge naturalistically, novel responses become possible within a context of safety, support, curiosity, and respectful response. By promoting a safe environment, Goldstein helps group members take in social feedback, gain new insights, and expand social repertoires.

Goldstein employs a somatic focus, by harnessing mindfulness techniques with a sensorimotor approach. The author's creativity is evident in her clinical descriptions of thinking "on her feet," as well as "out of the box." When a new member, Danielle, sits in her car, frozen with social anxiety and unable to enter the building, the author meets her exactly where she is by conducting "roadside therapy." Outside the building, Goldstein shows the teen how to tune into her breath, calm down, and ground herself through focusing on minute-to-minute, body-based experience, eventually, Danielle becomes ready to join the group. Goldstein's playfulness is evident in a group "moment of meeting" between Danielle, an immigrant who struggles with shame, and lan, a bully who regularly expresses intolerance of differences. In order for the teens to engage more safely, Goldstein employs two large medicine balls. Each is encouraged to communicate with the other while bouncing, swaying, and dynamically regulating the distance between them. In this way, through play, the author choreographs a shared experience of co-regulated arousal, enhanced mutual understanding, increased trust, and self-acceptance.

In Chapter 18, Steve Gross demonstrates resilience in action through his play with traumatized children. In the United States, relational traumas resulting from abuse, neglect, or household dysfunction present a leading health and mental health problem for children. Toxic stressors disrupt play while derailing healthy brain development. To address these problems. Gross and his team of Playmakers travel wherever there is need. Using humor and play,

Gross strives to "grow the good" back in children, with moments of fun and laughter becoming a salve against the pain of tragedy.

Rather than defining play as an activity, or something we do, Gross defines play in terms of *bow* we do anything. He identifies four important domains addressed through play: 1) *Joyfulness* involves enduring positivity, or a deep, felt sense of appreciation and contentment regardless of circumstances; 2) *Social Connection* highlights humans as social beings whose quality of life is defined by community and relationship to others; 3) *Active Engagement* requires the capacity to "be here now," enthusiastically immersed in every activity; 4) *Internal Control* promotes agency and the sense of being worthwhile, competent, and special, which becomes possible only after basic safety needs are met. Gross's underlying mission is one of optimism, of choosing to see and focus on the good in one's self, the good in others, and the good in the world around us. In this complicated, often distressing world, we could all use a bit of this salve from time to time, especially in our role as caregivers.

References

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5

Play, Creativity, and Movement Vocabulary

Pat Ogden

Go and play. Run around. Build something. Break something. Climb a tree. Get dirty. Get in some trouble. Have some fun.

—G. Brom, The Child Thief

To BE CREATIVE is to experiment with new ideas, concepts, activities, and actions in ways that transcend rules and habitual modes of thinking, feeling, and moving. Existing norms must be inhibited in favor of taking the risks that will challenge learned ways of being. As Anna Freud said, "Creative minds have always been known to survive any kind of bad training." We must relinquish what we know as we go outside our comfort zone to teeter on the edge of our windows of tolerance (Siegel, 1999) where uncertainty reigns. However, human beings are clearly creatures of habit. The manner in which we think, feel, and act is based on early learning and established into routines over time. Habits, including those of movement, gesture and posture, afford us a sense of security and safety in that they are implicit "proven" adaptations to particular environmental conditions, designed to produce optimal outcomes: If a child's parents tout stoicism, her body and breath may constrict in an effort to conceal her vulnerable emotions, winning the acceptance of her attachment figures. Such habits, if unexamined, persist into the future regardless of whether or not they are

adaptive to current conditions, squelching our vitality and inhibiting novelty. To be playful and creative is to challenge habitual responses in order to move, think, and feel in new, unfamiliar ways—to seek out and grapple with the risks that enliven us by their unpredictability and expand our windows of tolerance. This requires a spacious window of tolerance of tolerance to start with, and then expands the window further.

The borders of a window of tolerance lie at the extremes of hyper- and hypoarousal. If our windows are wide enough, we can tolerate and be present with the uncertainty and novelty inherent in play and creative endeavors without arousal reaching extremes of hyper- or hypoarousal. The width of each window of tolerance is directly related to how much stimulation is required to elicit a threshold of response. If we have a generally wide window, meaning our threshold of response to stimulation is relatively high, we welcome and even relish in the greater extremes of arousal. People with a generally narrow window, having a lower threshold of response, might experience the same extremes of arousal as unmanageable and dysregulating. The width of our windows naturally fluctuates throughout the day, but if we have a relatively

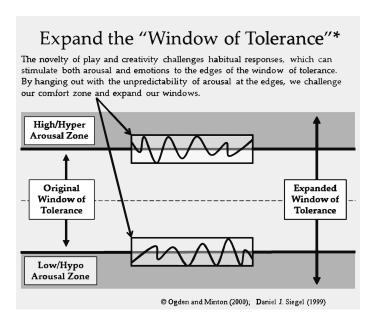


FIGURE 5.1 Window of tolerance chart. (Courtesy of Pat Ogden)

spacious window, we can process complex and stimulating information more effectively.

If we had caregivers who provided either comfort or stimulation as needed to prevent our arousal from remaining uncomfortably high or low for long periods of time, we are likely to more spacious windows. Such caregivers not only help their child recover from negative states of distress, fatigue, and discomfort, but also actively engage in play, producing ". . . an amplification, an intensification of positive emotion, a condition necessary for more complex self-organization" (Schore, 2003, p. 78). Through these salubrious early experiences with attachment figures and other persons of significance, we develop an internal confidence in our ability to regulate wide variances in arousal and respond flexibly to stimuli. This nourishes a safe base *inside ourselves* that can be relied upon throughout the lifespan as the ground from which we effortlessly seek out the novelty that expands our windows even more.

An extensive movement vocabulary supports flexibility and variety in our physical actions. In 1952, Roger Sperry stated, "The brain is an organ of and for movement. The brain is the organ that moves the muscles. It does many other things, but all of them are secondary to making our bodies move" (p. 298). In fact, only organisms that move from one location to another require a brain; and the brain depends on movement for its development (Ratey, 2002). The immediate action we make, whether reaching for a paintbrush, or shaking our heads "no" at the thought of an art class, is determined by what we expect to happen in the very next instant. Our brains continually compare the wealth of sensory stimulation from our immediate environment to memories of the past in order to make an action adaptive to present circumstance (Llinas, 2001). Movement habits reflect predictions about what is to come based on the repeated experiences of the past, the result of fitting sensory input into learned categories. Ratey (2002, p. 55) has pointed out that "We are constantly priming our perceptions, matching the world to what we expect to sense and thus making it what we perceive it to be." When actions become routine, they are relegated to procedural learned behaviors, and we no longer use top-down cognitive processes to regulate them, leaving our minds free to learn and tend to novel stimuli. Without the expectations that influence perceptual priming, each experience would be completely novel, and although we might engage in unique and creative ways with the environment, we could be quickly overwhelmed by the vast amount of information. So procedural habits are necessary, but they can constrain our movement vocabulary, truncate our impulse to play, and inhibit our creativity. This chapter will explore the interface between arousal tolerance, movement vocabulary, creativity, and play, and how to use movement to inspire the creative impulse that resides within us all.

The Role of Movement

Through movement the fetus, infant, child, and adult continually learn about themselves, others, and the world in an ongoing interactive dance. Each interaction, each movement adjustment, communicates one's location in space, the nature of human relationships, and one's place in the world. We develop movement memory, "achieved from a sophisticated feedback system that detects errors made as the movement is learned. The feedback system uses these errors as a basis from which to generate a new, more accurate [or adaptive] sequence of commands, eventually leading to a successful performance. We modify and learn through movement every second of our waking day whether we are active or inactive" (Ratey, 2002, p. 205). Movement memory develops over time, and is obvious in such tasks as tying shoelaces or playing a musical instrument, but often not so clear in subtle physical accommodations to environmental and interpersonal cues. For instance, if a child enthusiastically gesticulates and puffs up his chest while describing his latest fantasy, but is met with the mother's admonishment to stop making things up, a disapproving facial expression, and a pulling back of her body, the child's expanded chest deflates, his movements become restricted, and the excitement vanishes from his voice and eyes. If such interactions are repeated over time, this child's body will probably become chronically constrained. Mable Todd (1959) emphasized that function precedes structure: the same movement made over and over again will ultimately mold the body. It is likely that for this child, creativity, imagination, playfulness, and spontaneity will be truncated, because such a constrained physical organization will not support these qualities.

An embodied sense of self develops through the call and response of movement dialogue between the child and significant others. "Good enough," attachment figures advance the child's movement complexity so that "action sequences remain to some extent fluid and flexible throughout life; the nature of the consequences that are anticipated for a given action will change as the context of interaction changes and with development of the individual's powers" (Bucci, 2011, p. 6). Thus, as our brains compare current information with past data, there is the possibility of an "upgrading" (Llinas 2001, p. 38) of our movement, which expands our movement vocabulary further. However, schemas become more and more rigid in increasingly less functional environments, impeding new learning (Bucci, 2011) and constraining movement flexibility. Whether expansive or curtailed, the movement habits we form over time reflect and sustain implicit meanings and expectations, and thus can either encourage or inhibit creativity and play. The legacy of trauma and attachment failure, with their consequential neuropsychological deficits, constrains our

bodies, inhibits the development of our movement vocabulary, and restricts a fluid response to novelty. Cannon (In Press) states that it may be that learning to live more in the "spirit of play" than in the "spirit of seriousness" is the end goal of all therapy.

Winnicott (1971) posited that psychotherapy patients could benefit from opportunities for "formless experience, and for creative impulses, motor and sensory, which are the stuff of playing" (p. 64). It is widely shown that movement improves creativity. Lakoff and Johnson (1999) assert that concrete embodied experience is at the root of cognition, and that concepts are embodied in sensorimotor systems. For example, gestures can provide a direct representation of spatial relationships and have been shown to both boost the ability to solve spatial problems and to improve the ease and facility of verbal expression (Goldin-Meadow & Beilock, 2010). Even a repetitious movement like walking enhances creativity. Opezzo and Schwartz (2014) found that going for a walk, especially outdoors, increased creative thinking by over 50 percent as measured by the ability to generate an analogy. They concluded that, "Walking opens up the free flow of ideas, and it is a simple and robust solution to the goals of increasing creativity . . ." (p 1142). Cognitive scientists often correlate fluidity of thought with creativity and play (Hofstadter, 1995). Slepian and Ambady (2012) hypothesized that "fluid, creative thinking is grounded in fluid movement." They explored the relationship between fluid movement and creative thought, through several studies that induced fluid and non-fluid body movement, finding that three domains were strengthened by fluid movement: creative generation, cognitive flexibility, and the ability to make remote connections. The authors noted that "Fluid movement enhanced creative but not analytic performance (only the former requires fluid thought) . . . " (p. 4).

Similarly, a variety of cross-cultural and cross-species studies show that spontaneous, fluid movements are characteristic of play and signal other members of the social environment to play as well. These include a relaxed, open body posture and a tilting of the head, often accompanied by a whimsical expression on the face (Bekoff & Allen, 1998; Caldwell, 2003; Donaldson, 1993). The physical movements of play are more random, fluid, and non-stereotyped. They change quickly and are spontaneously expressed in children and animals in a variety of leaps, rolls, and rotational movements (Goodall, 1995). In contrast, movements characteristic of non-playful or overly serious interactions tend to be constrained, stereotyped, rigid, agitated, or nervous (Beckoff & Byers, 1998; Brown, 1995).

It follows that psychotherapy that directly works to expand movement vocabulary and increase fluid movement might enhance our clients' capacity

for play and creativity. Bainbridge-Cohen's five fundamental movements—yield, push, reach, grasp, and pull (Bainbridge-Cohen, 1993)—provide a useful map for exploring physical actions and expanding movement vocabulary. Each of these actions are defined below, and illustrated through case examples of clients who either overuse the action or have difficulty engaging it, both of which impede creativity and play.

Yield

To yield means to let go. We yield our weight to the force of gravity, letting go into the support of the ground; we yield to the care of another, or to the comfort of our beds as we fall asleep at night.

When securely attached infants experience a sense of safety in the arm of the mother, they are able to relax in her support and care. The capacity to actively relax in contact rather than passively becoming immobile is the hallmark of yielding (Aposhyan, 1999). Yield is a restful, alert state that encompasses qualities or receptivity, trust, surrender, and the taking in of nourishment. It pertains to being rather than doing. The body is at peace, the



FIGURE 5.2 Yield. (Courtesy of Terry Marks-Tarlow)