

# FEATURE

## Dysponesis Hits the Spot: A Translation for and by Children

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*The understanding of dysponesis, its impact on mental and physical health, and its significant role in classroom performance and achievement continues to grow primarily through work by researchers and practitioners in the Association for Applied Psychophysiology and Biofeedback (AAPB) and the International Society for Neuronal Regulation (ISNR). The research is substantive, yet there is a glaring absence in the general health and education literature about the breadth of this phenomena and its consequences for children. This article briefly highlights dysponesis and observes how and why its effects are on the rise in youngsters. Children easily grasp this concept and intercept its potential consequences. Our challenge is to provide self-regulation techniques at an early age to interrupt the onset of this process. This article on dysponesis will be followed in later issues of Biofeedback with more detailed practical strategies excerpted from the author's Kiddie Quieting Reflex: A Choice for Children.*

### Translating It Better Than We Can

In a conversation between physician George Whatmore and the author, the former expressed delight and admiration for a remarkable bare-bones translation of his work on dysponesis. In the mid-1980s, a group of 12-year-old Detroit innercity youngsters involved in an educational workshop on reducing distress in their lives synthesized Whatmore's research and applications about faulty bracing into a four-line jingle in succinct street language: "Dysponesis hits the spot/Makes your muscles tight-like knots/Loosen up and just let go/Watch your body brains just flow" (Stroebel, 1982). One unfamiliar with this physiopathologic state might underestimate the emotional and physiologic intricacies captured in this simplistic observation. Equally impressive is that these kids grasped the cause and effect and basic component of self-regulation techniques. In revisiting Whatmore's work, you will see that these kids got it spot on.

### Definition and Consequences

Whatmore states that dysponesis is a reversible physiopathologic state composed of covert errors in energy expenditure that interfere with the nervous system and control of organ functions. Coined as *faulty bracing*, the combined mental and physical efforts of "try hard harder" and "grin and bear it" are capable of producing functional disorders within the organism. Whether inherited constitutional characteristics or bracing patterns acquired through life experiences, dysponesis—*dys*, meaning bad, faulty, or wrong, and *ponos*, meaning effort, work, or energy—is linked to all aspects of human reactivity (Whatmore & Kohli, 1979, p.380).

Dysponesis is a necessary safety action in the initial stages of the emergency fight/flight reflex. In many instances, it occurs in a now-and-then situation. Conversely, it becomes an indiscriminate learned response. If left unchecked, it can significantly impair many aspects to learning and impact health. "Dysponesis affects the inner machinery that controls, i.e., respiratory function, gastrointestinal activity, cardiovascular function, skeletal and smooth muscle activity. It can produce clinical symptoms that might be attributed erroneously to anatomical or biochemical pathology and produce fatigue, exhaustion, insomnia, headache, backache, hyperventilation, anxiety and depression, indigestion, and others" (Whatmore & Kohli, 1979, p. 380). Whatmore cautions that in treating dysponesis alone, one might overlook other developing illnesses and disease.

### Kids Get It

Children as young as age 3 can learn about faulty bracing postures (the tighty spots) and how to interrupt and change these responses with the 16 Body Friends of the *Kiddie Quieting Reflex: A Choice for Children and Families* (Stroebel, 2005b). The self-contained program provides easy to understand metaphors for the interactivity of mind/body and physiologic self-regulation

strategies. The Kiddie QR program introduces kids to sequential fun exercises that teach self-awareness and self-regulation skills with eyes open and for the task at hand. Absent from most children's responses in this learning experience are the adult scripts of, "But I can't..." or, "Could you explain more about..." Kids just do it. They work their muscles and bones to their safe advantage like shifting toy car gears.

Kids catch on quickly that faulty bracing is connected to their thoughts and feelings and can produce "a weird, shaky feeling inside" and specific muscular discomfort. With age-appropriate interpretations, kids can understand that their musculature takes its commands from a central signaling system in their brain. The brain does not have a screening process to signal the muscles and other body systems that one stressful event is minor, requiring little or no action, or another is major and signaling real danger for immediate emergency responses. One should encourage the kids to identify what might be a Red Alert (real danger) and what might be a Pink Alert ("the maybe danger"). Encourage the kids to differentiate these alerts by tensing and relaxing as they identify who/what/where brings the bracing. This is a critical step in helping children to avoid sustained patterns of learned faulty bracing—one effort pitted against another.

Kids are uniquely adept at self-examination and redirecting messages in language and action plans that boggles the adult mind. They understand that dysponesis is like a kink in the garden hose where the water squirts in unexpected directions. Kids learn about what upsets homeostasis and potentially makes what they call the "squishy smooth muscles" *spaz out*—go into spasm—as they encircle the blood vessels in the digestive system, air passages in the lungs, heart, and even "in my skin and eye balls," as one 5-year-old child said. Given healthy body tricks for inducing flowing heaviness and warmth with breathing techniques and other sequential strategies, kids feel equipped to interrupt faulty bracing. Rigid Robot, one of the 16 KQR Body Friends, takes the all-in-one prize, as he encapsulates the conceptual and interactive process of dysponesis. Rigid Robot demonstrates what Cram (1997) calls the three domains of emotion, posture, and movement (tissue is added later). With fun, safe antics, Rigid Robot and the other Body Friends exchange thoughts, emotions, and behaviors to mimic faulty bracing from head to toe. The Kiddie Bunch strategize and practice doing the 6-second QR: Quieting Reflex (Stroebel, 1989) to either prevent or interrupt faulty bracing.

## Lethargic and Highly Aroused States

What makes one youngster kick and scream and another shut down in apparent quiet rigidity? Paradoxically, both the lethargic and highly aroused child experiences some degree of dysponesis. The hyper child is body rigidity in motion—dysponesis on the fly! The outward posture of the inactive child may appear limp; yet if there were a magic zipper on the chin to the toes to view the insides, it could well reveal smooth muscles in spasm and taut skeletal muscles. Both states produce sensations of discomfort and significantly alter mental functioning, emotionality, and physical response. Peripheral biofeedback—assisted self-regulation and neurotherapy are highly effective for addressing these states.

## Dysponesis Categories

Whatmore and Kohli (1979) categorizes dysponesis as performing efforts (learned motor skills, such as walking, talking, and lifting); representing efforts (i.e., self-signals from thinking, remembering, anticipating, daydreaming, worrying, past experiences, future events, problems, goals, and concepts); and attention efforts (by which the organism allows impulses arriving from some sense organs to have a greater influence on the nervous system function than those arriving from others (pp. 390–394). Children easily grasp the categories of Whatmore and Kohli as redirected into the following groupings.

Bracing for the worrisome consists of conscious and unconscious bracing postures, which represent effort from thinking, remembering, anticipating, and worrying. Generally children who are highly anxious either seek information or avoid it. For example, a child who is yelled at consistently might consciously prepare for the verbal assault by protectively bracing for the dreaded event, even though no physical threat is present. His body assumes a fixed position with his hands clenched and his shoulders tightened with facial and head tension. Over the course of time, this emotional and muscular defense becomes the habitual reaction in the child's behavior. Unconsciously, this faulty bracing carries over to other situations unrelated to the initial fear.

Bracing for the dreads is an anticipatory emotional and physical maneuver. These dreads can be linked to perceived or previous experiences of a world too harsh and become learned responses related to situations and/or individuals. Some can describe their dreads; others cannot or are afraid to tell anyone. They may say, for example, "I don't like school," when in fact it is a bully

on the school bus whom they fear. Many kids are unsure of what they dread, yet they can describe specific anxiety-related bodily sensations, as they exhibit a significant range of behaviors from the withdrawn to the highly aggressive. Unconsciously, this reactive pattern carries over to other situations unrelated to the original threat.

Bracing for the imaginary is characteristic of developmental stages in early childhood and usually occurs along with transient physiologic manifestations. When the imagined worry becomes exaggerated and prolonged, the expenditures of mental and physiological energies take their toll in a variety of learned bracing patterns. Anticipatory anxiety, fatigue, and distraction interfere with early learning experiences, confidence, and health. Even more disturbing today is that many normal early childhood fears of loss, separation, and monster figures are becoming stark realities with the alarming growth of child exploitation. Media messages of “children beware” and adult warnings of “watch out” can create a conscious or unconscious state of continuous vigilance with accompanying dysponetic patterns. Thus come brutal truths from Antoine De Saint-Exupery’s story of *The Little Prince*, which states, “Children, watch out for the baobabs.” As one adolescent said in a biofeedback session, “I’m so angry that so much is out of my control. I turn to anything that makes me feel less afraid” (Stroebel, 2005a).

Bracing for performance in this instance is unlike the natural playtime activities of children. Rather, this bracing is inextricably linked to children who sustain excessive arousal levels and behavior styles, which can lead to health risks in their adulthood. The Bogalusa Heart Study (1982–2004) is a significant longitudinal project (Wolf, Hunter, & Bersonson, 1982) on cardiovascular profiles in children and adolescents in relationship to current health; the subjects are followed into their adulthood. Researchers noted that “Type A children performed in a more accelerated or intense manner than did Type B children, and with competitive achievement, striving, time urgency, impatience, and aggression” (Wolf et al., 1982). Bhat (2002) states that the two diseases most associated with Type A behavior are high blood pressure and heart disease. Neurofeedback specialist George Rozelle (2005) observes typically increased high beta, or gamma, activity is experienced by a child as hypervigilance, free floating anxiety, rumination, or sleeplessness. The harder the child tries to perform certain tasks, the more blocked he becomes, with ever-increasing feelings of embarrassment and failure. The

attention deficit/hyperactivity disorder (ADHD) or LD child under pressure to perform may exhibit increased theta and increased high beta at the same time. Performance bracing is frequently coupled with growing anxiety and depression to such an extent that one cannot meet reasonable expectations.

## Tribute

As a tribute to George Whatmore, I mention this anecdote. On a QOR Body Dysponesis Spy Watch with a small group of 7-year-old kids, I said, “Dr. Whatmore would be so proud of you because you can do the Spy Watch for dysponesis. He invented dysponesis.”

“How’d he do that?” asked one of the kids.

Another child said, “Well, with his inside spy bulb to see the *tighty spots*.”

Quick as a flash, another said, “I know, let’s call him Dr. Whatbulb!”

With deepest respect for our former AAPB member, scientist, and physician, I believe you have been paid the highest compliment for your contribution by the toughest critics—the Kiddie Bunch. Although their kiddie physie may be slightly frizzie, it is *spot on*.

## Conclusion

We know that children empowered with solution-based self-regulation skills inculcate both the expectancy and active principles of biofeedback with or without instrumentation. Use the jingle “Dysponesis hits the spot” in your practice and classrooms. Kids’ interpretations are priceless. Children become healthier. We become wiser.

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