

The Self-Reg View on Series.

by Dr. Stuart Shanker

The Self-Reg View on: Depression

I had such a thought-provoking experience the other day. Friends had asked me to talk to their young teen about some trouble he'd gotten into at school over, of all things, his refusal to finish a science project. His teacher had given him an extension and, when he missed this, gave him a '0' and refused to look at what he'd done. The boy was in obvious distress when we met; his face was drawn and pasty, his voice strained, he was drumming his fingers and shuffling his feet. Ever so gently I asked if I might see the project and what I saw absolutely blew me away; it was, quite simply, brilliant, and what's more, very nearly finished.

This was starting to become puzzling. When I asked him what else he needed to do in order to hand it in he started shouting that it would be impossible, even though all it would have taken was maybe fifteen more minutes. Yet in his mind the task was overwhelming. Then he started complaining that what he'd done was awful, too idiotic for anyone to see; yet I quite honestly thought that it was extraordinary, both in conception and design. So the mystery deepened.

When he saw that I wasn't going to "take his teacher's side" (his words) he began to open up a little. Everyone, he told me, was always yelling at him. Everything he did was useless. When I asked him to tell me about what was really bothering him here he answered, seemingly off-topic, that he had no friends. And when I asked him to tell me one good thing that had happened the previous week he couldn't.

In short, I started to feel that his actions needed to be reframed. But no one at school had even for a moment considered this possibility. Rather, they saw him as "oppositional," or "unmotivated," which is why his parents had asked for the meeting. Could I get him to make more of an effort when they had so clearly failed? But whatever was going on with their son, I didn't think the problem was due to a lack of grit; and if that were the case, then being treated harshly for "not trying hard enough" could only make his irritability worse.

The more I thought about this, the more I began to wonder whether the real problem was that he was flirting with depression. It is certainly a problem afflicting an extraordinary number of our children and youth. The latest data coming out of Canadian Institute for Health Information paints a grim picture. They report that between 10 and 20% of all children and youth may report a mental health disorder. The total number of 12-19 year olds in Canada said to be at risk for developing depression is a staggering 3.2 million. Approximately 5% of male youth and 12% of female youth, age 12 to 19, have experienced a major depressive episode.

It goes without saying that we want to understand why this is happening; but before we get to the "Why" we need to think carefully about the "What." For the fact is that, as was the case with this young teen, we often miss or even misread the signs.

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This is especially the case with children, where these problems often start and can easily become entrenched if not attended to.

My friend Ira Glovinsky recently sent me his talk on “Pediatric Bipolar Depression,” which provides a masterful overview of the complex problems involved in diagnosing BPD in young children. Not only do the primary symptoms of BPD overlap with other disorders, but their expression varies from child to child, and, of course, according to the child’s developmental level. What’s more, there are various sub-types of the disorder, and subtle variations within these “phenotypes.” All too often the symptoms look just like ADHD or ODD, so one of the biggest challenges is trying to determine whether the child is struggling with one or the other, or all three? Or something else altogether!

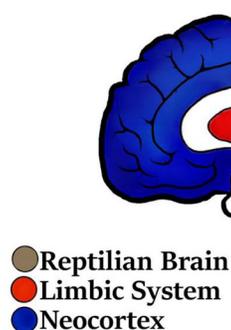
One often hears the complaint that the reason we are seeing so many children and youth being diagnosed with an internalizing or externalizing disorder is all because of the Diagnostic and Statistics Manual of Mental Disorders (DSM): that by broadening the symptoms for a disorder, or fashioning “new” disorders, the DSM is in no small part creating the “epidemic of epidemics” that we are witnessing. Given the pre-eminence of some of the voices expressing this concern, it is obviously an issue that we cannot ignore. Yet it is important to understand the reasoning behind the successive editions of the DSM, or the reason why we created the Psychodynamic Diagnostic Manual (PDM).

The point is, the better we can understand what we are seeing, the better we can respond. The last thing we want to do is treat a child for ADHD (by putting him on a stimulant medication when what he is really struggling with is BPD. And the last thing we want to do is punish a teen for his “noncompliance” when his behavior is actually a sign of depression.

Paul Keedwell has raised the very interesting question whether, because it is so widespread—in fact, universal—and because we see depression in nonhuman primates, there must be some sense in which depression serves an important function; otherwise why would nature have preserved it. But it is hard to see how this argument might apply to a child or youth. Moreover, it is one thing to speculate about the function of transient episodes of being depressed, and quite another the possible “benefits” of depression.

Going through brief periods of being depressed may well be adaptive: in fact, one of the aspects of our brain’s “stress-hierarchy” that we currently group together under “freeze”. To understand why this is the case we need to go back to our model of the “triune brain,”:

The Evolution-Designed Brain



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Of course, there aren't really three separate brains, each dancing to its own tune, but a single highly integrated entity, with all of the various systems following the same score. Especially when it comes to dealing with stress.

In normal non-stressful conditions, when we are in Learning Brain mode, the prefrontal cortex is not only active in terms of emotion-regulation, problem-solving, communication, self-awareness and social awareness, but at the same time, is inhibiting the operations of the limbic system, which can interfere with all of these "higher" functions. But stress releases our prefrontal "brakes" on the amygdala and the hippocampus (e.g., the subgenual PFC and the dorsolateral PFC) and, in fact, acts as something of a brake on the orbitofrontal cortex and nucleus accumbens.

The result is a heightened level of arousal and anxiety, keeping our attention focused on the threat; a shift in cognition, from working memory to stored fear-based memories; and a moderate reduction in dopamine, and thus, "pleasure-seeking" behaviour. If the "amygdala alarm" continues to sound, however, the effects will reach down to the brain stem (e.g., the locus ceruleus), activating the release of norepinephrine to fuel fight-or-flight. Then what happens, as we carefully examine in Foundations 1 of our TMC courses, is a wave of metabolic changes: e.g., effects on heart rate and breathing; the dilation of blood vessels in skeletal muscle and the corresponding constriction of blood vessels in the gut; inflammatory and blood-clotting changes to prepare the body for possible injury; and conversely, the suppression of "expensive" metabolic processes such as the immune system or the secretion of human growth factor.

When the stress is over and homeostasis restored the "brakes" get reapplied. This is a major function of "freeze." It not only prompts us to wait quietly for the stress to pass, but in

so doing enables us to restore energy. Energy that is desperately needed to climb back into the realm of social engagement. Energy needed for the shift from Survival to Learning Brain. Energy to develop "adaptive" coping strategies for managing stress, rather than "maladaptive" strategies that may momentarily suppress unpleasant sensations but make things worse in the long run.

The problem is that this adaptive process is subverted when the stress is excessive, uncontrollable, and unremitting. When that happens, the entire system becomes, in Philip W. Gold's words, "dysregulated."

Gold makes the incredibly important point that depression as such—i.e., the mood disorder—is comparable to an autoimmune disorder: i.e., a condition in which our adaptive response to stress "has gone awry." The subgenual prefrontal cortex and dorsolateral prefrontal cortex remain shut down, giving free reign to anxiety and fear-based memories. Attention is kept focused on the search for threats, real or imaginary. Fear-based thoughts run rampant. Sleep is disrupted so as to heighten hypervigilance. Anhedonia sets in so that we don't expend energy on experiences that we ordinarily find pleasurable (including eating, exercise, and sex). Diurnal cortisol patterns are disrupted, which is why mornings are so hard in cases of "melancholic" depression. The unfettered mammalian brain itself becomes the primary source of the "uncontrollable and unremitting" stresses that keeps the system "awry."

The reason this dysregulated pattern is so difficult to dislodge—what dynamic systems theorists refer to as an "attractor"—is that all five domains of our Self-Reg model become bound up together in a spiraling negative-feedback loop. Stuck in a low-energy/high-tension state, our negative emotions run rampant, further depleting energy. Our thinking is distorted (negative bias), triggering negative emotions. We are unable to mindread

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or, for that matter, “mind-display,” preventing us from re-engaging socially, and leaving us to struggle futilely on our own with our negative emotions. Empathy shuts down, thereby depressing the very desire for social interaction. The engine keeps running on high and energy reserves are constantly exhausted. In this state of heightened limbic arousal, our “alarm” is constantly going off. We become locked in a self-perpetuating cycle of energy exhaustion. Hence the reason why it is so hard to get out of bed, stay motivated, be positive. Why it is so hard to finish the science project, or to take pleasure in what you’ve done, or why you see yourself or your actions in the worst possible light.

The only way to disrupt such a dysregulated and dysregulating state is by breaking the stress cycle, which brings us back to the teen I mentioned at the outset: why was he over-stressed? To answer that question is going to take some exhaustive Self-Reg work: by him, his parents, and his teachers. But the starting point is to recognize—and all of them need to recognize this—that his “refusal” to finish his nearly finished science-project was nothing of the sort; it was a cry for help. He himself had no idea why he couldn’t finish; and his outbursts were really avowals: primitive expressions of the pain and exhaustion he was suffering. Yet no one had understood this fact, leading to what in effect were dysfunctional interbrain interactions.

One of the key findings in the important NEMESIS study on depression that was conducted in the Netherlands was that ongoing social isolation is a key factor in post-depression declines. But if we don’t hear what a child or teen is telling us through his behaviour, we can play a significant role in keeping him social dis-engaged. One of the more troubling aspects of the self-control paradigm is how it primes us to be exasperated by behaviours that we don’t understand. But in a case like that of this

young teen, the most important question we can ask is simply: Why?

In the grand scheme of his education this science project was rather trivial; yet somehow it had been transformed into a major battle of wills. You could easily tell from the amount of thought and work that had gone into it that at some point the project had given him great pleasure and stimulation. What had changed this? Was it simply the result of typical teenage procrastination that somehow spun out of control? Had a peer said something to him about it, which triggered this response? But why had it suddenly become such a major stressor in its own right? Was it the project itself, or something deeper?

These are weighty questions: not the sort of thing that a young teen can easily answer on his own. For that he needs our help. He needs a strong and nurturing relationship with us. And for that to happen we may have to abandon our own sense of frustration, or disappointment, or even our preconceptions about what is in a child or youth’s “best interests,” and start to listen: with all of our senses.