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GLIMMERS: RESILIENCE INFORMED REFRAMES

Keep Calm and Glimmer On

ej seibert

The Neurobiology of Trauma

How often do we — meta style — *think* about our brains? The neuroscientists among us might answer: all the time! But let's go deeper – how many of those who frequently engage in intellectual theorizing about the brain also track autonomic nervous system activity and work to become conscious of its impact on the rest of the body? Do we know when we are flooded with cortisol or oxytocin (Cleveland Clinic [CC], 2021, 2022)? Are we aware when our rate of eye blinks per minute increases (Rubin, Hein, Das, & Malara, 2017), or when our skin temperature changes by half a degree (Herborn et al., 2015)? Do we notice incremental physiological alterations in the people around us?

In truth, we and our students experience micro-shifts all the time as our nervous systems receive and process information. The changes are more pronounced in those with acute trauma histories, but the pandemics of COVID and white supremacy culture (Okun, 2020) have increased everyone's exposure to trauma. Dr. Jacob Ham (2017) gives a brief overview of "the survival brain" versus "the learning brain," and explains how it is only possible to integrate new information when the brain is in a calm enough state to do so; this point is relevant to any of us who teach.

In terms of understanding the survival brain, Dr. Daniel Goleman explains "the amygdala hijack" (Macnamara, 2022) which happens when we "flip our lids" — a common phrase we use to refer to the experience of the prefrontal cortex going offline as our non-rational brain takes over during a moment of high stress (Siegel as described in Carrington, 2022). Diving a bit deeper, we know that the "Biology of Toxic Stress" (Redford, Pritzker, Scully, & Schwartz, 2017) means that fight-flight-freeze-fawn responses can become ingrained into neural pathways when stressors are experienced chronically over time. Thus, the intensity of a stress response doesn't always match the present moment.

That is quite a list of resources. You might not have time to explore them all. So, the takeaway? Stress and trauma impact our brains, notably changing how we teach and learn; this fact has always been relevant — perhaps increasingly so. All of that might sound a bit dire. Isn't this a series focused on resilience? Yes. The question the toxic stress video (Redford et al., 2017) floats in our direction is: now what do we do?

Neuroplasticity and Resilience

My first article in this series describes glimmErs: those little things which help us feel connected, purposeful, hopeful, and whole (Dana, 2018). The concept of neuroplasticity offers a hopeful glimmer. In *The brain that changes itself* (2007), Dr. Norman Doidge shares case examples of people who have overcome brain-related challenges that were previously considered insurmountable. Although those individual narratives are important, what I want to boost here is the concept that we can reshape our neural pathways. The next question is: how?

In *My grandmother's hands* (2017), Resmaa Menakem talks about collective and generational traumas that are held in the body, such as those associated with racism and skin tone. While the book does not delve into gender or other intersecting identities, and while it presents a Black/white dichotomy which does not contain the level of nuance those of us who are mixed or ambiguous might be seeking, it does offer foundational exercises for examining and considering the ways our nervous systems respond to one another in relationship. It leads readers through body scans, grounding, sounding, and anchoring — practices which lead to greater awareness and more intentional action. Another resource in this area is *The politics of trauma* (Haines, 2019), which considers somatics with a justice-oriented lens.

How this Translates to the Classroom

Returning to focus on teaching, you might remember that in my previous article I mentioned an anti-racist pedagogy circle I attend. Last year when Loretta Ross mentioned Menakem's book there, the only people who had heard of it were me and a yoga instructor from the Exercise and Sports Studies department. Most therapists in the area have read it, and I admit to some surprise that it hadn't crossed the desks of the many brilliant faculty members in the room. It was a good reminder that, historically, academia has not easily made space for engaging our physical embodiment. It's time for us to do so.

Here are examples of additional exercises that can begin to settle the nervous system and reshape neural pathways; these may seem simple but can have a profound effect, especially when practiced consistently over time. The "amygdala hijack" (Macnamara, 2022) offers these suggestions: name emotions, count or perform math exercises, cognitively remind yourself it takes six seconds for those neurotransmitters to dissipate after your brain reacts to a stressor, breathe deeply, change the setting if possible, practice mindfulness.

For some people, it feels soothing to find the body again such as with deep breathing; for others, it is terrifying. Because everyone is different, some exercises will work better for you (and your students) than others, which is why it's helpful to have a menu. Research shows that mindfulness activities can "[mediate] the relationship between cognitive reappraisal and resilience in higher education students" (Zarotti, Povah, & Simpson, 2020). Simply put, mindfulness can help immensely with the emotion regulation skills for which many of our students have need.

When I am teaching, I don't always tell students I am leading them through a "mindfulness" activity; usually, I say something like, "We all have many responsibilities which cause us to rush through our days, plus the world is *a lot* sometimes. So, I want to start class by inviting us into a brief *pause* together. In this *pause*, you are free to do what feels good to you — maybe notice your breathing, maybe look out the window and silently name what you see, maybe count the ceiling tiles" (sometimes the last example gets laughs, which is also a good way to settle nervous systems). I make sure students know it is not a moment to check phones/screens.

I find that if I pay attention to my nervous system in class — tracking my own microshifts in terms of eye blinks, breathing, temperature, heart rate, sensations associated with cortisol/oxytocin, etc. — it helps me pay attention to microshifts in my students and to respond accordingly. I might slow a discussion down, offer a moment of quiet reflection, or suggest the class take a brief break if it seems that could be helpful. One reason it is useful to track my own physiological responses has to do with mirror neurons — the ways in which our brains respond to one another socially (Acharya & Shukla, 2017). If I notice something happening in my own nervous system, I'm probably at least partially mirroring something the students are experiencing, which is important information.

Another reason it is useful to track my own physiology is because if my nervous system gets too activated, I will not be modeling the skill of navigating from my rational brain. While supervising a crisis hotline, one of our team's favorite taglines was: "calm is contagious." In other words, if we regulate our own nervous systems to the best of our ability even in high stress moments, many of our students will then naturally calm and co-regulate with us — perhaps without even realizing they are doing so. Tuning in to what's happening on a polyvagal level can be powerful (Dana, 2018).

Neurodiversity, #FTW

Of course, in my role and given my immediate community, when I think of the brain I naturally think next of neurodiversity — which we are all part of. Even if some brains more readily adapt to societal expectations that lead to categorization as "neurotypical," no two brains are exactly alike (Differing Minds, 2021). Some brains are more unusual or mad and, as Dr. Alicia Andrzejewski (2023) puts it in a recent article for *The Chronicle of Higher Education*, "to diverge is to differ, to deviate, to continually depart from a standard, a norm. It follows, then, that neurodivergent academics are trailblazers; they offer the academy something more than already exists." In academia, this looks like challenging rote learning, shifting towards greater flexibility and away from doing something a certain way simply because it has always been that way. An important part of community-level resilience exists in learning to appreciate the gifts of many types of brains (seibert, 2023). There, too, is a glimmer.

Conclusion

This month, I invite you to think about your brain a bit more, to practice one of the above activities, to consider incorporating a simple mindfulness exercise into your classes (if you haven't already), and to consider the ways in which the needs of various brains might lead to pedagogical changes which benefit even more people than originally intended. These ideas will help us turn our attention towards vicarious resilience and post-traumatic growth in the next article. Until then, keep calm (as is possible) and glimmer on. ❖

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BAD IDEAS ABOUT TEACHING

Keep it all: Don't Give Anything Away

Rebecca Weaver

A year ago, my student loans were forgiven through the Public Service Loan Forgiveness (PSLF) program. It was a long 10 years — checking every year that my work "counted," dealing with paperwork, phone waits, and fear the program would go away. I made a living wage for the first time ever, but had constant low anxiety, because I've lived with the loans for 25 years. The PSLF improved so much for me, which I struggle to fully grasp, partially because of the years of stress and poverty I lived through. I got lucky to have full-time jobs that allowed me to apply, to be listened to on the phone, to be white, to be married to a professor at a fancy college, to have grown up in a "good" zip code, and to be in a stable job.

When someone grows up poor, one of the lessons we learn is to hold on — hold on to the little amount of money we have, to things which should but can't be replaced, to anxiety about what the next paycheck will cover. A year after my loans were forgiven, I'm still working on not holding on anymore. I've begun to practice letting go and letting joy in, for example, buying a book on a whim, letting myself plan how we'll renovate our garage, and taking joy in giving more freely.

Jubilee and Generosity

The relief granted by this forgiveness created space for grace and opportunities to pay it forward. My experience this year has been one of joy and jubilee; I've thought often of the biblical version that inspired churches and governments over the centuries: "consecrate the fiftieth year and proclaim liberty throughout the land to all its inhabitants. It shall be a jubilee for you; each of you is to return to your family property and to your own clan. That fiftieth year shall be a jubilee to you. In it you shall not sow, neither reap that which grows of itself, nor gather from the undressed vines. For it is a jubilee; it shall be holy to you. You shall eat of its increase out of the field. In this Year of Jubilee each of you shall return to his property" (*Holy Bible, New International Online Version*, Leviticus 25:10, 2023). Slaves and prisoners are freed, debts are forgiven, and the mercies of God become particularly manifest.

I AM writing about teaching. Stay with me.

In a recent conversation about the idea of jubilee, a minister friend pointed out that what we talk about when we talk about jubilee is not just about generosity — it's deeper. It's not about sharing prosperity only, it's about shared humanity. It's not just about liberation, reconciliation, and debt release, it's also about land conservation and stewardship. Generosity can be superficial and cosmetic, but when it's a practice, it's not one bright thread in a fabric: it's the whole fabric. It's not an act, it's an orientation (like we say of hope) grounded in grace, forgiveness, and reconciliation.

What does that mean for teaching? Why connect my personal