Learning Task #1b

Podcast Review and Summary

InBrief series

(select assigned segments)

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Notes from the podcast (one bullet point per segment)

1. **InBrief: The Science Of Neglect** provides an anthropological view of how we should view the rearing of children in our society. The serve-and-return process is crucial to brain architecture development in early life. Disrupting this process cascades down to impacting everything from inflammation and immunity response changes to cognitive development, and affecting synapse formation in critical brain regions as a result.

    - mini reflection #1itTakesAVillage: *an underlying message of this segment is that the time to act and intervene, due to the time-critical nature of child development, is yesterday, in every possible setting where child neglect is at risk of occurring.*

2. **The Impact of Early Adversity on Children's Development -** early childhood experiences alter how one responds over time, with adjustments for better or worse. Hence, the scaffolding experiences would be akin to an insurance policy that protects a child throughout life. Missing that early window to respond compounding the problem that delayed interventions produce are much more challenging, akin to "push[ing] a 1000 pound door" later on, as Nelson argues.
    - mini reflection #2systemicChallenges: *if we can do anything preventatively, at scale, it has to be at the policy level, lest we become complicit in a system that sets children up by bouncing them off a priority list, resulting in delayed interventions. Complicity is also not being responsive enough to our children's needs at various system levels in a timely manner.*

3. **InBrief: The Foundations of Lifelong Health** - Health and competence of society are the foundation of its success. The foundation of a house is a good analogy for the impact of early childhood experiences on a person's outcomes later in life; however, as Shonkoff explains, "where we live, work, and play" is more important to our health than regular visits to the doctor and should be factored in to intervention initiatives.

    - mini reflection #3whereYouLiveMatters: *comments by Shonkoff and Boyce were thought-provoking. The cumulative adverse experiences we are exposed to within our living environments embed themselves in our bodies in ways that can increase the susceptibility to disease and disorder by affecting the brain, neuroendocrine, and cardiovascular systems.*

4. **InBrief: Executive Function - Skills for Life and Learning** explores the nature/nurture debate on Executive Function by asking whether our minds are built or born. According to Raver, at the center of the brain architecture are the Executive Function and emotion regulation, the best predictors of lifetime performance such as maintaining employment, a relationship, the ability to parent effectively and get along with others. Failing to address the EF and emotion regulation needs of the children therefore affects the health of the society in the long run, the utilitarian argument goes.

    - mini reflection #4malleabilityOfExecutiveFunction: *I wonder about how one's worldview (i.e. leaning heavier towards the nature explanation), can impact intervention especially if we believe that brain based conditions are less responsive to treatment. Therefore, it is important to remember, in this context, that EF can be*

trained by early intervention (Bunge, Fisher and Lange), with less support needed as the child grows up.

5. **InBrief: The Science of Resilience** and 6. **InBrief: How Resilience is Built**

In the last two segments, Boyce and Fisher explain the concept of resilience and how it is also a product of a nature and nurture interaction. Whereas the *reservoir* or the vulnerability threshold can vary from child to child, the protective effects of a nurturing family and community environment will move the fulcrum towards greater resilience for the child. Beyond the microsystem of the family, it is the teachers, coaches and other adults that play a critical role in the supportive part of building resilience.

- mini reflection #5-6movingTheFulcrum: an *important takeaway of this segment is that fostering resilience is possible even under challenging circumstances. And while the best time to start would have been yesterday, the second-best time to act is now, starting with what Boyce considers to be the relationships that the children have with responsive adults in their life.*

Reflections

We, as practitioners, have a unique opportunity to drive the systemic change through our work as school psychologists when interacting with the children, teachers, parents and administrators at the district level. The expression, "What is bad for the bee is bad for the hive," and vice versa is very fitting for the material in all segments. Likewise, from a social justice standpoint, we ought to ask ourselves whether our actions are pushing the envelope through positive contribution within the system by challenging ourselves to the question: if every school psychologist did what I am doing, on any day, what difference would it make on the systems that impact the child?

From the first segment, it became clear that the impact of the disruption of serve-and-return is evident even in a matter of seconds, such as with Tronik's "still face experiment"; in my mind, the distress that the child exhibits is a physiological attempt to regulate amidst the flood of cortisol they experience in such uncertainty. It made me think about how inconsequential the sliding scale of neglect can appear to a parent at the time (#1). When a child's HPA axis reacts to the stress by flooding the system with cortisol, we may see tears when the child's system tries to reduce its amount in the system, as Shanker once mentioned during a seminar (Dr. Stuart Shanker - Self-Regulation, 2014). In other words, as Gunnar says in a segment (#2) and Shanker in another video, lingering cortisol that overstays its welcome may be considered a gray matter killer. The discussion by Shonkoff and others reminds me of some research I read on the effects that ongoing stressful crises have on a person's reasoning (#3). Pressures of poverty and financial hardship are particularly stressful for families and, in many cases, contribute to how people reason and cope with day-to-day living (Mani et al., 2013; Mullainathan & Shafir, 2014;

Shah et al., 2012). Sometimes the challenges are within the systems in place; Leong highlights that how we handle Executive Function difficulties in the classroom may exacerbate the children's situation due to mis-labelling, and such missed opportunities compound as the child lags behind their peers, giving rise to even more issues in a self-reinforcing cycle of behavioural issues (#4). The explanation of resilience by Fisher and Boyce aligns with the explanation of the diathesis-stress model and how the threshold is like a reservoir, determined by factors within the child as well as the protective supports in the community around them (#5).

In sum, the underlying theme of all the segments is a call to action and a sense of urgency to do so through practical solutions across systems, at both small and large scales. Fisher sums this up by echoing the need of many communities who say, "we want to take an active part in crafting a solution to understand what is necessary to produce the resilience" (#6). Lastly, to end with an inspiring example of work in this area, I thought of the *Brain Story* program provided by the Alberta Health and Wellness in association with the Palix Foundation, now offering their programs overseas as well (*brain story - The Palix Foundation and Alberta Wellness Initiative*, 2020). Through psychoeducation that bridges the gap between scientific research and everyday families by making otherwise challenging concepts around brain development accessible to all would be one way to help integrate this knowledge into our communities through the work with parents and educators.

References

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