What You **Need to Know.**



The Self-Reg View on: Adolescence & Self-Regulation

Keynote Presentation Summary (Self-regulation Summer Symposium 2015) from Dr. Jean Clinton, Associate Clinical Professor, Department of Psychiatry & Neurosciences at McMaster University, Written by John Hoffman, TMC Writer.

Dr. Clinton is a physician (child psychiatrist), but she is increasingly interested in working "upstream." That is, supporting and enhancing the social determinants of health to prevent mental health and health problems in children.

We need to create environments where kids experience "felt connections." That requires adults to ask themselves: "How do we regulate ourselves so our eyes can light up for our kids?"

Core Beliefs and Key Questions

As caregivers and practitioners, we need to consider whether we believe that children do well when they **want to**, or if they do well if they are **able to.** Moving our perspectives to the latter is a profound shift in the paradigm revolution, and aligns with Dr. Stuart Shanker's belief that there are no bad kids. If we take the position that children do well when they can, we then need to ask: "What is getting in the way of a child being able to do well?"

Three factors motivate human beings to do well: Mastery, autonomy, and purpose

New Understandings of the Adolescent Brain

We are in a revolution regarding our

understanding of the adolescent brain. We used to think adolescence was all about hormones, but now we know that the brain is still under construction into early adulthood.

Old view: The brain had a fixed structure and set number of brain cells that declined over the ageing process and with damage from trauma.

New view: The brain is capable of change throughout life—it's never too late. The brain is a dynamic, plastic social organ that is sculpted by experience, and which makes new cells and connections throughout life. Brain and body experience alters the structure and connections in the brain, strengthening growing connections, weakening them, or changing them.

What Builds the Brain?

Brain development is a process of genes interacting with development, influenced by both good and bad experience. At different times there are different impacts. If children have a good attachment and a sunny temperament, most will do just fine. But their development can be disrupted by various factors. Early experiences and relationships are a key factor in brain development. As much as possible, the environment in the first year of life should be reminescent of an external womb. Parents/caregivers need to provide a secure base, and young children need to experience the "serve and return" that takes place in responsive parent-infant relationships.

Stress is a huge derailer of positive healthy development and one source of early life stress is chronic lack of responsiveness from parents/caregivers. Edward Tronick's "still face experiment" shows how important social/ emotional cues are to babies and how stressful it is for them to experience a disruption in their parents' responsiveness.

The Impact of Stress

Humans experience three levels of stress: positive, tolerable, and toxic. Prolonged activation of the stress response system, in absence of protective relationships, can compromise optimal development and interfere with the development of selfregulation.

Brain Development in Adolescence

Concerns about teen behaviour/attitudes go back at least as far as Aristotle. In modern times we have pathologized aspects of normal adolescence. However, the restlessness of adolescence is normal and most likely has helped ensure survival of the human species.

However, times have changed. It is clear that the time required for a human to be fully functional as an adult has increased. Adolescence is now seen as lasting from age 12 through age 25 and it is now recognized that there is a whole new phase of development: emerging adulthood (ages 18-25). The brain actively changes during adolescence. It is remodelled, pruned, and refined. Brain maturation occurs from back to front, so the prefrontal cortex is last area to mature. This is the area of the brain that supports key aspects of emotional and cognitive self-regulation, regulating emotions, solving problems, and planning behaviour.

The ability to read and respond to emotions is still developing. Research shows that teens are more likely than adults to misinterpret the emotions of facial expressions. The amount of myelination (insulating sheath that wraps around neurons to make brain signals go faster) also increases as adolescents develop.

The dopamine system is different during adolescence than in adulthood. Among other things, novel stimuli trigger the release of dopamine. This is one way in which the teen brain is wired for a heightened reward experience. So we need to create safe risks and engaging classrooms for teens.

Stress in Adolescence

Adolescence is a time of huge stress. In the past five years the number of teens arriving at emergency rooms with self-harming injuries has doubled. Sonia Lupien, of the Centre for Studies on Human Stress, uses the acronym NUTS as a way to identify when the stress response system gets turned on, in patients and in ourselves: *Novelty, Unpredictability, Threat to ego, Sense of loss of control.*

All of the above aspects of adolescent brain development and stress affect self-regulation. For example, when the brain is in a stressed state there is no passage of information to the prefrontal cortex where executive functions are controlled. This interferes with various cognitive abilities, including planning and making judgements.

What do Adolescents Need From Adults?

New Zealand paediatrician Dr. Peter Gluckman says adults confuse physical maturation with psychosocial maturation. We need to remember that teens are still a work in progress. We also need to remember that today's adolescents are mismatched to the society where they live. Modern society is confusing to them. We also need to realize and accept that teens are becoming attached to their peer group. Their drive to hang out with their friends is another biological drive that contributed to the survival of the human species. However, adolescents still need adults. In fact, they need more of our time, not less. Our job is to help them as their brain continues to grow and make new connections. Eventually, with lots of support and repetition, they get it. Our mantra should be progress, not perfection.

Further Reading on Adolescent Development:

Stepping Stones, a publication of the Ontario government

