

TRAUMA
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Understanding & Transcending the Transmission of Historical Trauma in Indigenous Families



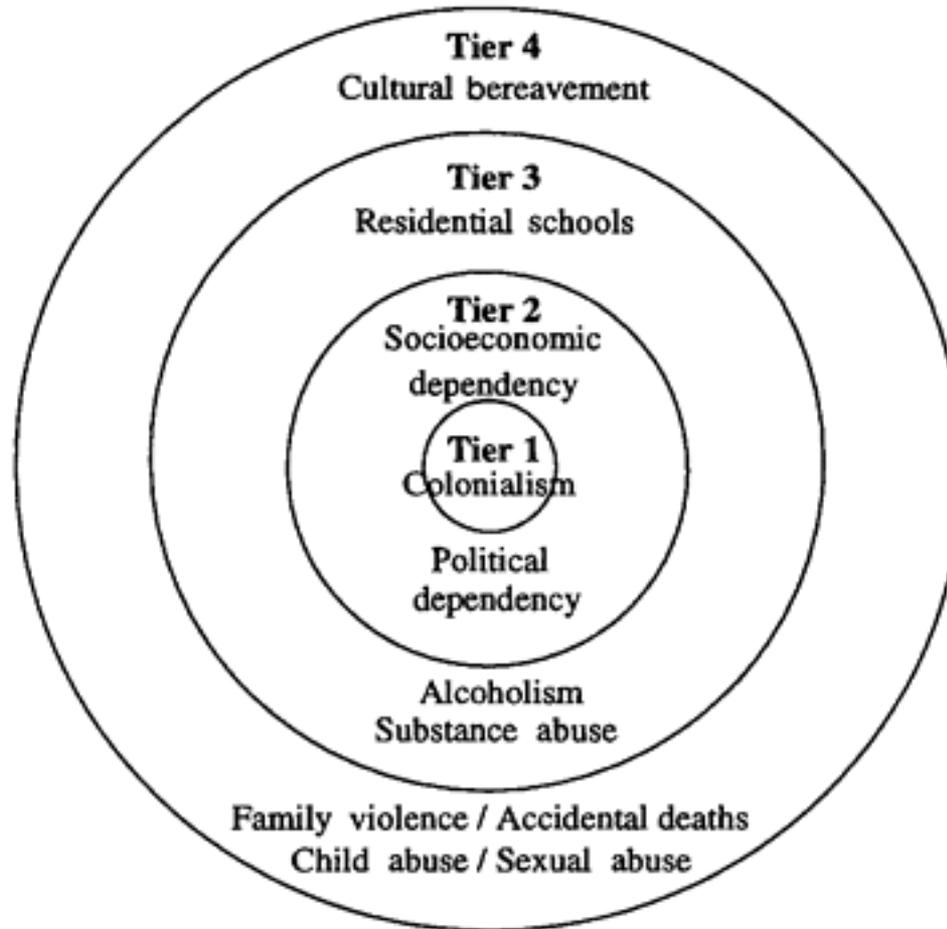
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Defining Historical Trauma

“A collective complex trauma inflicted on a group of people who share a specific group identity or affiliation-ethnicity, nationality, and religious affiliation. It is the legacy of numerous traumatic events a community experiences over generations and encompasses the psychological and social responses to such events.”

Cycle of Traumatic Events



A Fundamental Insight *(associated with unresolved trauma/loss)*

Trauma permeates the lives of Indigenous families on a daily basis due to ongoing traumatic events associated with:

- Loss of language, culture and identity related to forced assimilation policies
- Loss of land and traditional forms of governance
- Decades of incarceration of Indigenous children in state-run residential schools and its impact on subsequent generations
- High levels of child sexual abuse, sexual assault and domestic violence in many Indigenous communities
- Epidemics of alcohol and substance abuse prevalent in Indigenous communities

Warriors Against Violence
(a video)

<http://www.cbc.ca/news/thenational/warriors-against-violence-program-aims-to-help-abusive-aboriginal-men-1.3140392>

Problematic Parent-Child Attachment Patterns

Major contributing factor:

Pervasive Presence of Trauma

+

Systemic Racism

+

Unrelenting Stress

+

High Unemployment Rates

=

Problematic Parent-Child Attachment Patterns

Reflections of a Residential School Survivor

“The residential school experience messed up our minds and destroyed any sense of cultural identity because we grew up with a deep sense of shame. Worse of all, we were made to feel ashamed of our parents and grandparents because we were repeatedly told they worshipped false gods. So when you return home, instead of feeling love, you feel confusion. Worse still, because your parents have turned to alcohol to cope with the trauma of losing their children, your shame at them becomes reinforced and you grow up hating everything Indian.”



Alex Janvier

Photo Source: CTV Edmonton

8 Rules for Interaction

1. Being in control of all behaviours and interactions
2. Demanding perfection (always being right...)
3. Blaming others or self when problems arise
4. Denial of vulnerable feelings (sadness, fear, anxiety, grief, rejection...)
5. Unreliability and unpredictability in relationships
6. Absence of closure to transactions
7. Not talking about shameful, abusive, or compulsive behaviours
8. Disqualifying these behaviour when they occur

Effects of Interaction Patterns

Adults, exposed as children to these patterns, can develop a range of characteristics and behaviours including:

- Anxiety
- Depression
- Learned helplessness
- Traumatic bonding
- High risk behaviours
- Emotional numbness
- Desire to self-medicate
- Distorted reasoning
- Loss of trust and faith
- Rigid psychological defenses
- Emotional constriction
- Hyper vigilance
- Disorganized inner world
- Loss of ability to accept support
- Fused feelings
- Inability to modulate feelings
- Emotional triggering
- Loss of spontaneity
- Cycles of re-enactment
- Survivor guilt

Attachment Relationships

- “the foundation from which the mind develops”
- Attachment lays the foundation for how children approach the world.
- Four Types:
 1. Secure
 2. Avoidant
 3. Ambivalent
 4. Disorganized

Still Face Experiment (a video)



<https://www.youtube.com/watch?v=apzXGEbZht0>

Attachment

As relationship experiences are grounded in patterns of communication, the core message of attachment research is that an infant's mind uses an attachment figure's state of mind to help organize the functioning of its own states.

Disorganized Attachment

- Most traumatic attachment pattern
- Parents who repeatedly rage at their children or become intoxicated create an ongoing state of alarm/fear that leads to disorganized attachment in the parent-child dyad
- Adults, whose experience with parents produced states of terror, are internally disorganized

Defining Self-Regulation

“Traumatized children frequently are disconnected from their own emotional experience – that is, they may lack awareness of body states or the connection of those states to specific experiences and emotions.”

Attachment & Self-Regulation

- Abrupt shifts in mood and behaviour = inability to engage in self-regulation
- This seemingly perpetual state of dysregulation originates in their childhood experience of disorganized attachment: because their parents' overwhelming, terrifying and chaotic behaviours were a source of alarm and confusion, they were trapped in a biological paradox.

Attachment & Self-Regulation

- The brain's attachment circuit motivates a child to seek out a parent to be calmed and soothed in times of distress
- In this situation, the child is “stuck” because there is an impulse to turn toward the very source of terror from which he/she is attempting to escape – fright without solution. Hence, the only possible response of the attachment system is to become disorganized and chaotic.

Chronic Trauma & Abuse

Chronic trauma and abuse damages the areas of the child's growing brain that enable neural integration.

For children with disorganized attachment, impaired neural integration contributes to:

- difficulty with regulating emotions
- academic problems
- trouble in social communication
- tendency toward interpersonal violence
- predisposition to dissociation

Chronic Trauma & Abuse

When people are chronically traumatized, their narrative memories are connected to intense states of autonomic arousal. They, therefore, lack a baseline state of physical calm.

In attempts to calm themselves, these individuals rely on coping measures that are self-destructive, such as self-injury, drug use, high-risk behaviours...

Complex Post Traumatic Stress Disorder (CPTSD)

- Emerged as a framework for addressing the more complex effects arising from chronic exposure to trauma which PTSD failed to adequately capture.
- Prolonged repeated trauma can occur only where the victim is in a state of captivity, unable to flee and under the control of the perpetrator.
 - i.e., the legally “sanctioned kidnapping” of Indigenous children to be placed in residential schools

Effects Associated with CPTSD

- Alterations in affect regulation
 - (i.e., self-harm, rage)
- Alterations in consciousness
 - (i.e., amnesia, flashbacks)
- Alterations in self-perception
 - (i.e., self-blame, helplessness)*

Effects Associated with CPTSD

- Alterations in perception of the perpetrator
 - (i.e., rationalizing perpetrator's behaviour)
- Alteration in relationship with others
 - (i.e., isolation, repeated failures of self-protection, repeated search for a rescuer)
- Alterations in systems of meaning
 - (i.e., loss of faith)

How Brains Are Built

(a video)

<http://www.albertafamilywellness.org/resources/video/how-brains-are-built-core-story-of-brain-development>

Stress & Brain Development

- As the brain develops sequentially (brain stem, limbic brain, cortex), the healthy development of the frontal cortex is totally dependent on the healthy development of the brain stem and the mid-brain.
- As these lower parts of the brain take shape prior to the cortical brain during fetal development, chronic maternal stress during pregnancy compromises the healthy development of the lower brain thus having an adverse impact on all other regions of the brain.

Stress & Brain Development

“What happens from the fetal period until age two creates the blueprint that influences every system in the body from immunity to the expression and regulation of emotion, to nervous system resilience, communication, intelligence, and self-regulatory mechanisms for such basics as body temperature and human production.”

Historic Trauma, CPTSD & Brain Development

“Unborn children are constantly tuned in to their mother’s every action, thought and feeling. From the moment of conception, the experience in the womb shapes the brain and lays the groundwork for personality, emotional temperament, and the power of higher thought.”

Historic Trauma, CPTSD & Brain Development

- A stressed pregnant mother activates her stress response system (HPA axis) which release stress hormones and prepare the body to engage in a protection response. Once these maternal signals enter the blood stream, they affect the same target tissues and organs in the fetus as they did in the mother.
- During stress, fetal blood flows to the muscles and hindbrain, providing nutrition needed by the arms and legs, and by the region of the brain responsible for life saving reflex behaviour. In essence, blood flow is shunted from the viscera organs and stress hormones suppress forebrain function.

Historic Trauma, CPTSD & Brain Development

- The development of fetal tissue and organs is proportional to both the amount of blood they receive and the function they provide.
- When passing through the placenta, the hormones of a mother experiencing chronic stress will profoundly alter the distribution of blood flow in her fetus and change the character of her developing child's physiology.

Historic Trauma, CPTSD & Brain Development

- An additional effect of cortisol is that it simultaneously switches the mother's and fetus' system from a growth state to a protection posture.
- As a result, the growth inhibiting effect of excess cortisol in the womb causes the babies to be born smaller. Altered blood flow in a stressed brain is directly linked to decreased IQ in children.

Historic Trauma, CPTSD, Attachment, Addiction & the Brain

- Chronic fear/anxiety marinates the brain in toxic chemicals that in themselves are addictive (norepinephrine, cortisol, adrenaline) thus undermining the healthy chemicals that facilitate balance and good judgement.
- Result: An over-reactive brain has trouble managing impulses as the PFC (thinking brain) shuts down.

Historic Trauma, CPTSD, Attachment, Addiction & the Brain

- According to van der Kolk, growing up in a state of fear results in an *“addiction to the trauma as we seem driven to recreate the neurochemistry of fear and of being most alive.”* Thus as adults, we compulsively recreate the scenarios of trauma and fear.

Ibid

- Hippocampal volume, grey matter, the myelination of the brain (like the insulation on electric wires) and the size of the corpus callosum (which provides oxytocin which helps calm and focus the brain) are diminished by inordinate fear.

Carnes, 2009

Attachment and Self-Regulation

- Due to the infant's paramount need to survive in a world perceived as dangerous, the attachment bond connecting parent and child is severely compromised.

“Without the playful interactions of an unstressed, mentally attuned, and emotionally stable caregiver, healthy attachment simply does not occur.”

Attachment and Self-Regulation

- This disruption of the attachment bond severely undermines the infant's critical developmental stage of self-regulation which occurs between 6-8 months.
- Through eye contact and vocalization in relationship to responses from the caregiver, self-regulatory modulation is being mapped in the frontal lobes of the young brain.
- The successful establishment of effective self-soothing is dependent on the quality of the face-to-face responsiveness of an emotionally present adult.

Thematic Apperception Test



Attachment, Addiction & the Brain

- The “failure to bond”
- **The inability to establish secure attachment has been repeatedly demonstrated as a key factor in addictive disorders...The bottom line is addiction can start as an intimacy problem.**

Understanding Addiction

- Under normal developmental conditions, we are equipped with a robust reward system and a dormant stress response system. Addiction changes the brain dramatically thus reversing these states.
- Key neurobiological elements involved in the addiction process:
 1. Decreases in reward function
 2. Sensitization of the brain's stress systems
 3. Disruption of the pre-frontal executive function

Addiction & Oxytocin

- In this “dance of co-regulation,” during which the infant brain uses the adult’s brain to organize the functioning of its own state (Siegel, 1999, p.70), massive amounts of oxytocin – the commitment neuromodulator – are released in both the parent and child’s brain.

Siegel, 1999, p.70

- Oxytocin is released in both sexes during orgasm and when couples lovingly parent/nurture their children thus strengthening the attachment bond.

Doidge, 2007, p.119

Addiction & Oxytocin

- The neurons that control the secretion of oxytocin may have a critical period of their own. This may explain why children raised in orphanages have bonding problems when older, as their oxytocin levels remain low for several years despite being adopted by loving families.

Addiction & Dopamine

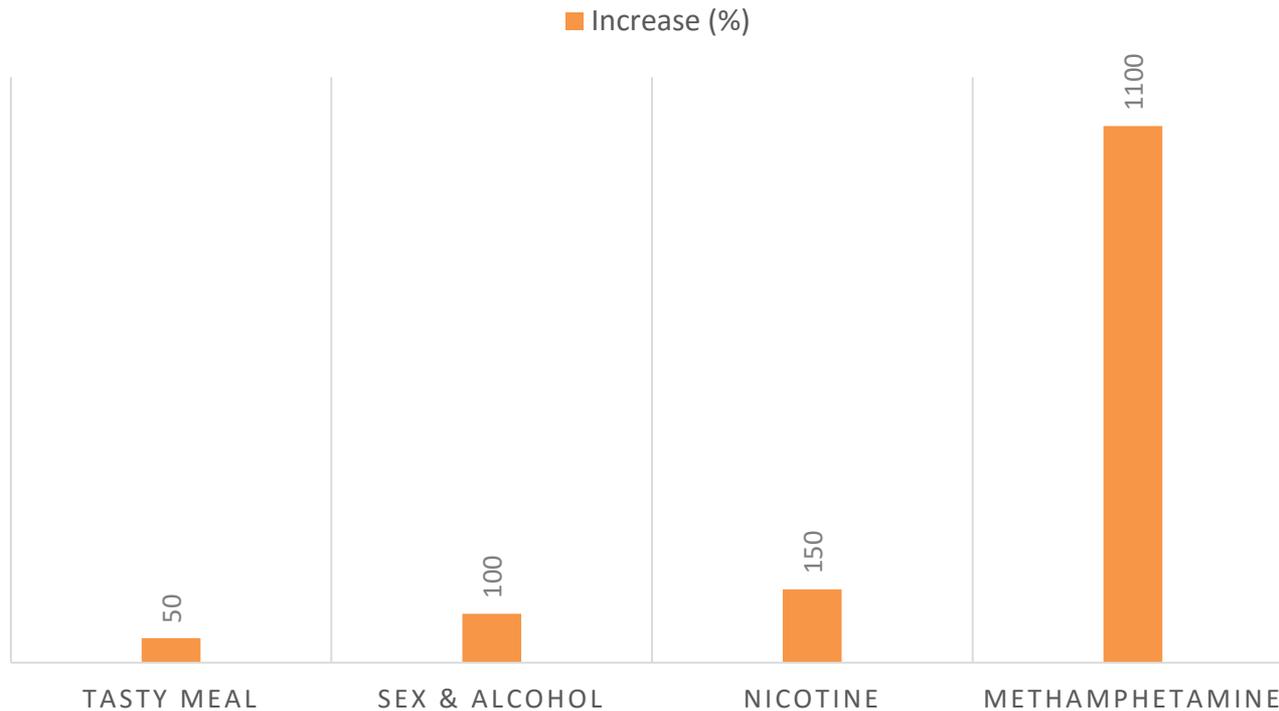
- Dopamine, our “feel good” chemical or source of our “joie de vivre”
- Dopamine is the body’s natural “upper” as it shifts us into high gear, triggers sexual arousal, and provides the passion and excitement to explore, discover, and do things.

Addiction & Dopamine

- The powerfully addictive nature of our body's own "upper" was illustrated by an experiment in which scientists inserted an electrode into the limbic system of rats to stimulate the release of dopamine every time a lever was pressed.
- The electrode triggered a flood of dopamine thus creating pleasurable sensations in the brain. In no time at all, the rats became so addicted to this induced state of pleasure, they gave up eating and starved to death.

Addiction & Dopamine

RELEASE OF DOPAMINE



Addiction & Dopamine

- The presence of stress/anxiety in the parent/child relationship reduces the number of nerve endings that release dopamine as well as the number of receptors to which dopamine needs to bind to have the desired effect thus ensuring vulnerability to addiction.

Mate, 2008

- Too much dopamine destroys the brain's dopamine receptors; hence the addict's craving for even more drugs to compensate for the reduced number of receptors.

Epigenetics & Brain Architecture

- According to Margaret McCarthy, Early stress causes changes in the brain that reset the immune system so that you either no longer respond to stress or you respond in an exacerbated way and can't shut off that stress response
- This change to our lifelong stress response happens through a process known as epigenetics.

Defining Epigenetics

- Epigenetics provides an understanding of how the interaction between our genes and the environment shapes the architecture of our brains.
- Epigenetic changes occur when early environmental influences both good (nurturing parents...) and bad (poverty, violence...) permanently alter which genes become active.
- Maria's story illustrates the powerful impact of environmental influences as a healing agent for a damaged brain.

Epigenetics & Brain Architecture

“When a child is young and his/her brain is still developing, if he/she is repeatedly thrust into a state of fight or flight, this chronic stress state causes these small, chemical markers to disable the genes that regulate the stress response thus preventing the brain from properly regulating its responses for the rest of his/her life.”

Chronic Childhood Adversity

- Transforms a gene that helps to manage stress; this gene's specific task is to signal the cortisol to quiet down so that the body can return to a calm state after a stressor.
- Because this gene is damaged, the body cannot reign in its heightened stress response. "A crucial set of brakes are off."
- This is only one of hundreds of genes that are altered in children coping with adversity on a daily basis.

Pre- & Peri-Natal Development

- Lipton (2002), a pioneer in the field of pre- and peri-natal development, argues that a child's future well-being begins in the womb when the pre-natal brain is stimulated by the mother's environmental experiences.
- Due to maternal stress, embryonic cells shift into a protective mode, thwarting healthy gene expression and undermining the healthy development of the fetus.

Pre- & Peri-Natal Development

- According to Dr. Gabor Mate (2016), cortisol interferes with serotonin receptors (this brain's mood stabilizer slows down the neural pathways when we are agitated) during pregnancy if the mother is under stress.
- Research confirms that abnormally low levels of serotonin are a major contributing factor in aggressive behaviour.

Pre- & Peri-Natal Development

- Early toxic stress impacts key biological systems, including reward and stress regulatory systems.
- As these systems are also central to capacities required to care for another – *such as self-control, emotional regulation, distress tolerance, decision-making, anticipation of consequences, and capacity to maintain executive-control functions under stress* – chronic childhood stress compromises their ability as adults to care for the next generation.

Parenting

- Parents experience an enhanced activation of the brain's reward circuits at the sight of their own happy infants.
- Insecurely attached or addicted parents experience decreased reward activation to their baby's positive emotions and more stress in response to their baby's cries. As a result of the addictive process, they habitually engage in substance abuse to relieve the stress, raising the potential for neglect or abuse of the child.

Parenting

- Depressed parents, in addition to feelings of guilt, resentment, and ambivalence, may perceive the child as bothersome.
- Their own childhood experience of neglect and deprivation heightens their reaction to stress thus increasing the risk of abuse to their children.
- Thus begins a new cycle of adversity for the next generation.

Stress Response System

- When the stress response system is continuously revved up, the body marinated in inflammatory chemicals for decades thus setting the stage for symptoms to be at full throttle years down the road – in the form of:
 - Irritable bowel syndrome
 - Autoimmune disease
 - Fibromyalgia
 - Chronic fatigue
 - Heart disease
 - Migraines
 - Cancer

Stress Response System

- It is this revved up stress response system – due to all the problems associated with historic trauma – that accounts for the chronic health problems facing Indigenous families.
- High levels of diabetes and end stage renal disease, cardiovascular disease, and some forms of cancer as well as injury and pneumonia have been identified as more common in Indigenous populations than the general Canadian population.

Epigenetic Experiments: Studies of Newborn Rat Pups & Their Mothers

- Pups that are intensively licked by their mothers are braver and produce lower levels of stress hormones under stress than pups whose mothers are less attentive.
- They also recover more quickly – a disposition that lasts throughout their lives. They develop thicker connections in the hippocampus, a key center for learning and memory, and they perform better in an important rodent skill – finding their way through mazes.

Conclusion

“The idea of ‘disrupted attachments’ speaks to both levels on which the historic and contemporary assaults on Aboriginal peoples in Canada have resonated. Not only have the policies of colonialism expressly aimed to sever the attachment of Canada’s First Nations to their land, customs, culture, modes of self-governance, languages, and way of life, but the traumatic impact of these disrupted attachments have reverberated through both the communities and individuals lives of Aboriginal peoples in this country. The relatively new and more expansive conceptualization of complex trauma in the mental health field, has as one of its core defining features, alterations (better expressed as harms) in relationships with one’s sense of self, as well as alterations (more aptly described as harms) to relationships with others. These harms to relationships can be usefully conceptualized as ‘disrupted attachments’ ... which speak to the fundamental ways in which the... Aboriginal people in Canada have been traumatized.”

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Afternoon Agenda

- Inner-child meditation (drumming & singing)
- Enhancing Your Ability to Self-Regulate
- Family Role Play
- Practicing Mindfulness
- Types of Connection Bids
- Types of Relational Messages (voice tone & body language)
- Practicing Relational Messages
- Small Groups: “I” Statements
- Empathy Skills
- The Language of the Soul/Restoring Harmony to the Family
- Forgiveness
- Open Family Systems