

'All children deserve the right of full participation in community life'
—Dr. Dan Offord



Jean M Clinton B.Mus MD FRCP(C)
McMaster University and Children's Hospital
Offord Centre for Child Studies

Southern Network of Specialized Care
November 2010

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Kids Today

"The children now love luxury; they have bad manners, contempt for authority; they show disrespect for elders and love chatter in place of exercise. Children are now tyrants, not the servants of their households. They no longer rise when elders enter the room. They contradict their parents, chatter before company, gobble up dainties at the table, cross their legs, and tyrannize their teachers."

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Adolescents: Why DO they do the things they do?



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Defining Adolescence-

- The period between the onset of sexual maturation & the attainment of adult roles & responsibilities
- Involves psychological, social, legal, and biological changes
- The transition from:
 - "child" status (requires adult monitoring) to
 - "adult" status (self-responsibility for behavior)

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Mismatch- Dr Peter Gluckman

- As a society we confuse physical maturation with psychosocial maturation
- Youngsters are biologically mismatched to the society they live,
- The time needed to be fully functional as an adult has increased markedly
- Our PSYCHOSOCIAL maturation occurs AFTER our physical maturation.

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Emerging Adulthood

- 18-25
 - A time of self focused exploration
 - Facilitated by a socially sanctioned moratorium from adult responsibilities
 - Larger number of demographic transitions
 - More autonomy
 - Fewer responsibilities
- Arnett, Cote and others

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Key Messages

'UNDER CONSTRUCTION'

- Teens need MORE of our time, not less.
- What we THINK, affects how we FEEL, affects how we ACT (TAFY)
- The majority of adolescents do well YET

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The Paradox

- Measures of most abilities indicate that adolescence is the healthiest and most resilient period of the lifespan.
- Yet overall morbidity and mortality increases 200-300 times from childhood to late adolescence.
- Primary causes of death and disability related to

Problems with control of behaviour and emotions

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Why do we care about brain?

YOU ARE YOUR BRAIN.

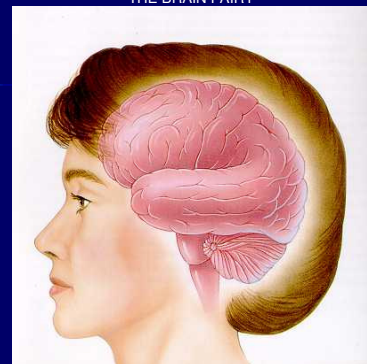
- BUT- Your brain is not just produced by your genes
- Your brain is sculpted by a lifetime of experiences.
- The most important time in brain development is the first few years of life.

Dr Bryan Kolb

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03-013

THE BRAIN FAIRY

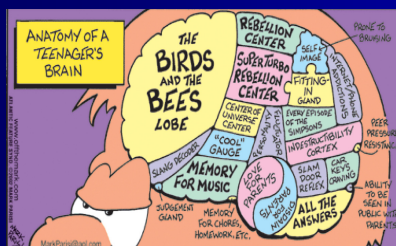


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The McGraw-Hill Companies, Inc. © 2004

Anatomy of a teenager's brain



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Key Messages

'UNDER CONSTRUCTION'

(MUC to some)

which explains much of the challenge!!

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Neurodevelopment Findings

Keep in mind.....

- The research on neuro- development is in the early stages.
- Many key human studies on youth can not be conducted because of ethical considerations.

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BRAIN PLASTICITY

Connections are formed and altered by experience

But, not done until at least age 24+ years...

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“The nerve cell, or neuron resembles a miniature tree...” (p. 21)

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Diamond & Hopson, 1998

(A) Before experience

Single synapse on dendritic spine

Axon 1
Axon 2
Axon 3

(B) After experience

New axon
Axon 1
Axon 2
New axon collateral
Axon 3

Formation of new synapses from new axon terminals

Formation of new synapses from original terminals

(C) Various observed shapes of new dendritic spines

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Dr Robin Gibb U of Lethbridge

Two Neurons

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AXON

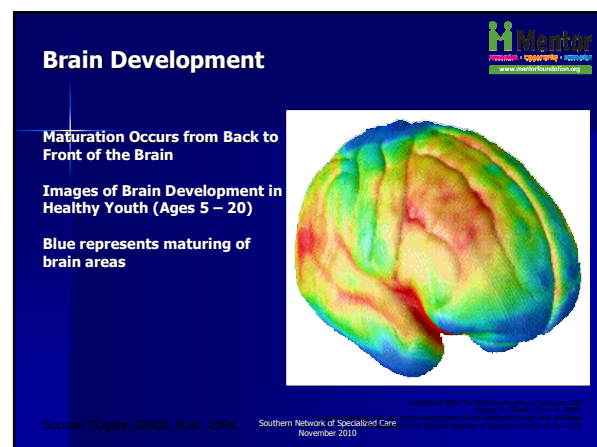
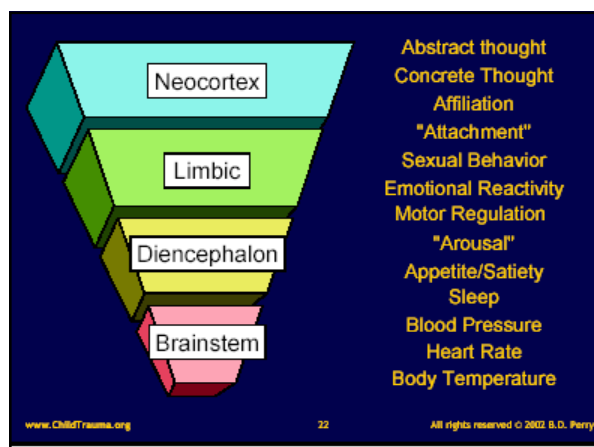
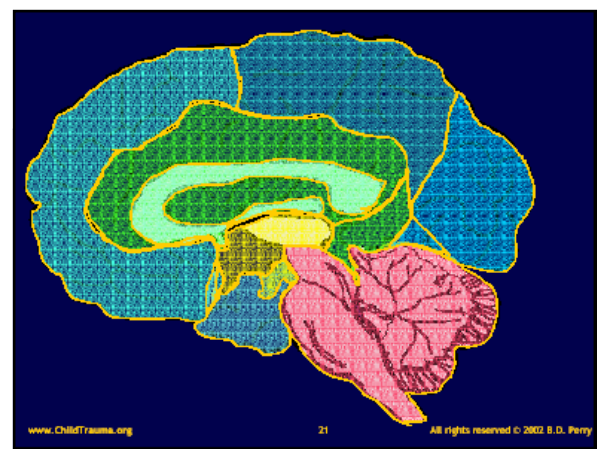
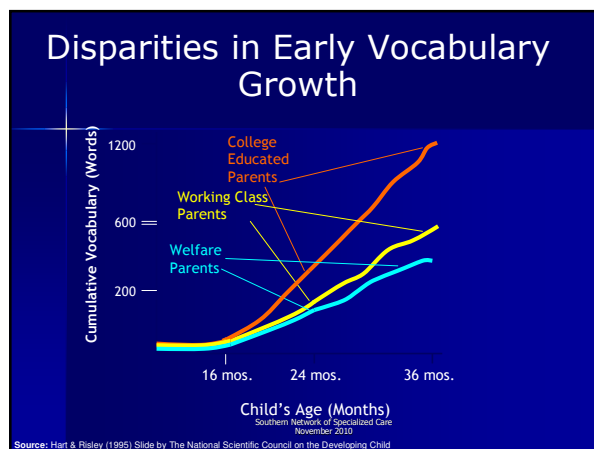
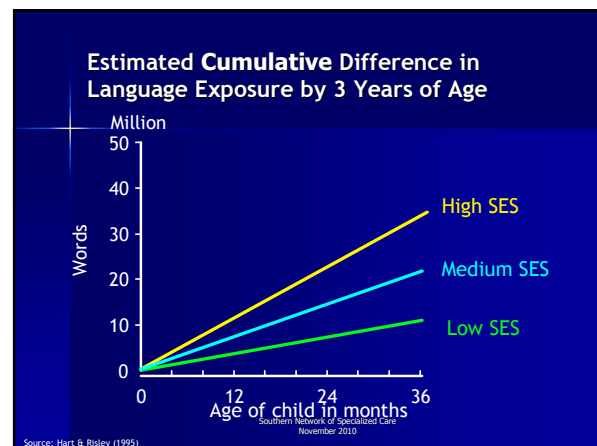
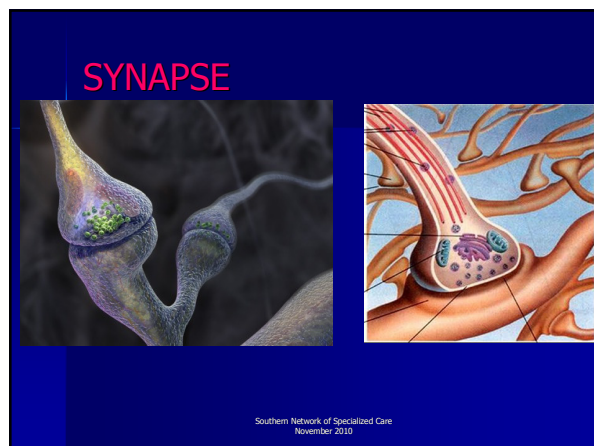
RECIPIENT NEURON

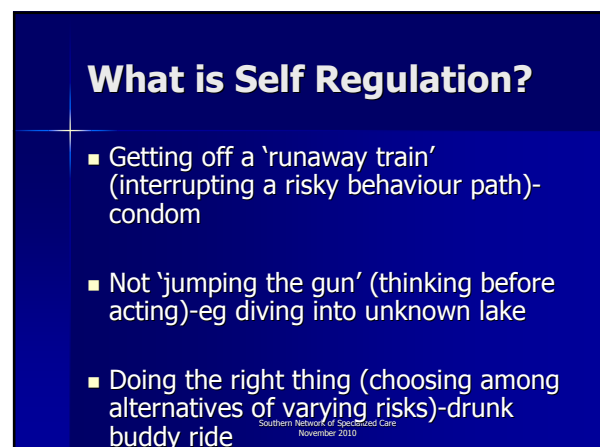
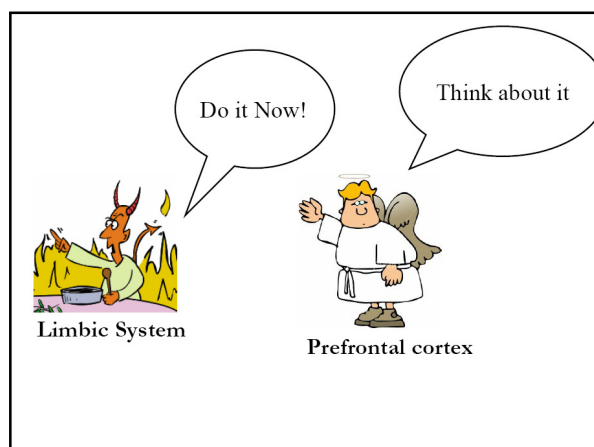
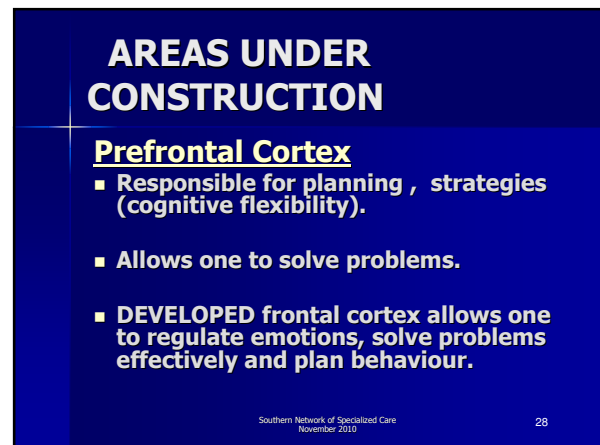
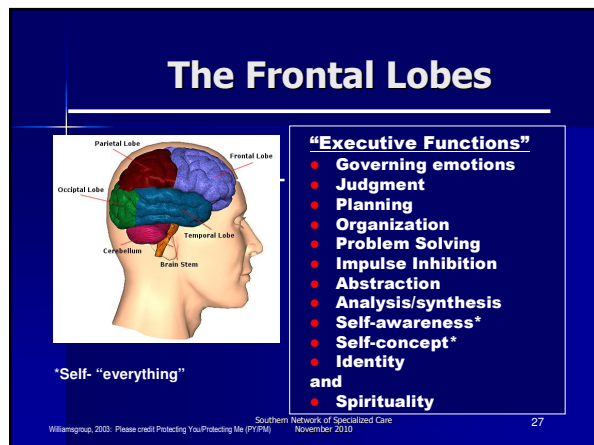
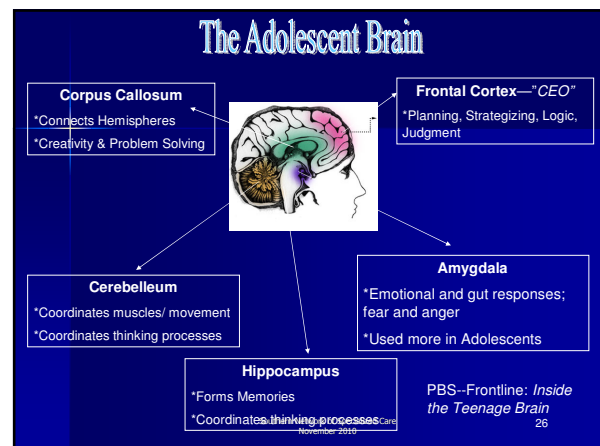
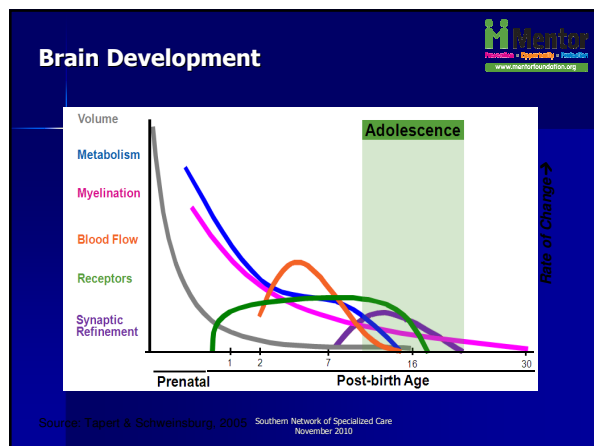
DENDRITE


SIGNAL-SENDING NEURON

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Founders Network








ADHD as heightened risk

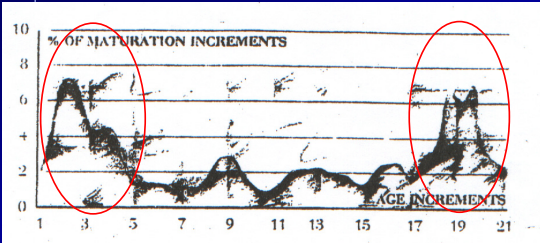
- Growing evidence that ADHD
 - is a dysfunction in the brain's regulatory systems that manifests as a deficit in behavioral dysregulation,
 - this dysregulation is mediated by deficits in the pre-frontal cortex, and
 - these deficits in pre-frontal cortex contribute to a disorder likely related to self-regulation - drug abuse

(Barkley, 1997; Martin, Earlywine, Blackson et al., 1994)

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Frontal Lobes for Behavioral Control, Birth - 21



Zero to three is not the whole story

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Dr Jay Giedd Inside the Teenage Brain Video

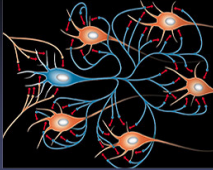
Teen brain - Google Visuals 3D

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The Brain Bonsai

Nerve Proliferation...

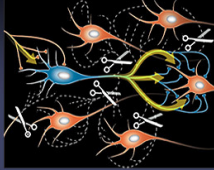
- By age 11 for girls and 12 for boys, the neurons in the front of the brain have formed thousands of new connections. Over the next few years most of these links will be pruned.



Overproduction and Exuberance

...and Pruning

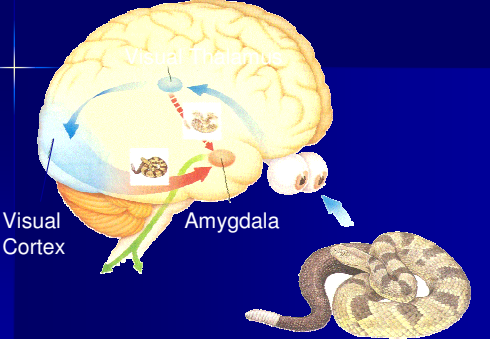
- Those that are used and reinforced — the pathways involved in language, for example — will be strengthened, while the ones that aren't used will die out



Pruning

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The Fear Response: Fight or Flight and Stress



Southern Network of **Scientific American**
November 2010
The Hidden Mind, 2002, Volume 12, Number 1

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Three Levels of Stress

Positive

Brief increases in heart rate, mild elevations in stress hormone levels.

Tolerable

Serious, temporary stress responses, buffered by supportive relationships.

Toxic

Prolonged activation of stress response systems in the absence of protective relationships.

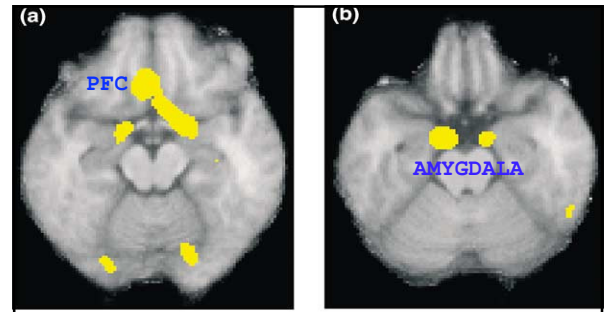
Center on the Developing Child
HARVARD UNIVERSITY

Stress is NUTS

- Novelty,
- Unpredictability
- Threat to the ego,
- Sense of loss of control

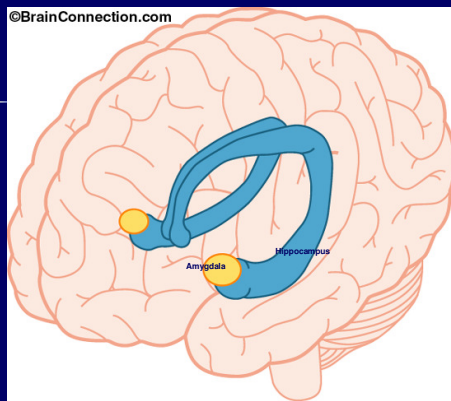


■ Dr Sonia Lupien Centre for Studies on Human Stress
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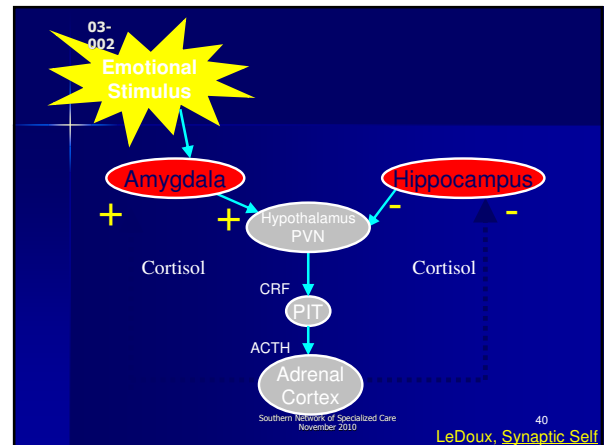


A: Positive emotional state, flow through amygdala to PFC and better memory test results.
B: Stressed state: No passage of information to PFC & lower memory testing short and long-term.
(Hamman, et al. *Cognitive Neuroscience*.)

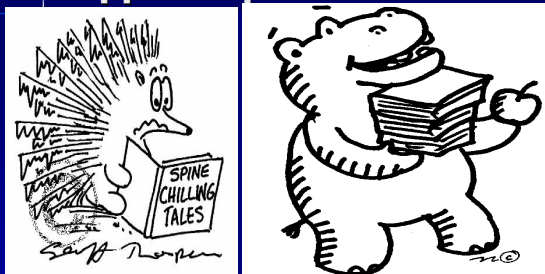
©BrainConnection.com



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Amygdala and Hippocampus



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Cortisol can be bad for the brain

Hippocampus

- ➔ high sterol levels cause loss of dendrites and cell death

Frontal brain

- ➔ attention deficits

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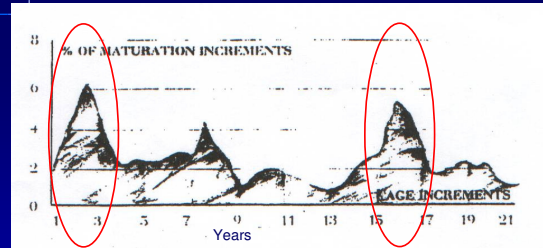
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Bullying and the Brain

- Dr Clinton on youtube speaking about the impact of bullying
- <http://www.youtube.com/watch?v=qI0YHOz5dyk>

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Limbic System for Birth - 21



Zero to three is not the whole story

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What emotion do you see?



D Yurgelun-Todd

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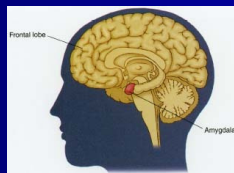
WHAT YOU SEE IS WHAT YOU GET!



Dr Yurgelun-Todd

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Adolescents use the **Amygdala** (fight or flight response) rather than the **Frontal Cortex** (used by older adults) to read emotions

Deborah Yurgelun Todd McLean Hospital/The Movie/44 Sept 2004 Care
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Communication Gap

- Teens are more likely to misinterpret facial expressions of emotion
- See anger when there isn't anger
- Process in the amygdala
- May react quickly



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"Emotional Brain" Development

- Emotional brain dominates
- Prefrontal cortex is not ready to take charge
- Emotional brain seeks pleasure, in the form of novelty, excitement, and risk

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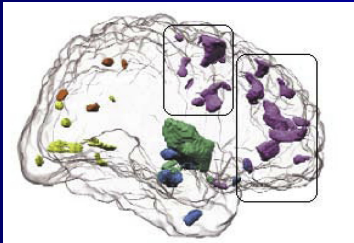
What Does This Mean in terms of Behavior?

- Impulsiveness
- Mood changes
- Inadequate emotional control
- Seeks out risks

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Putting the brakes on, planning and regulating emotion develops with the final development of the frontal lobe at Around 20 -24



A fully pruned and sculpted frontal lobe HELPS (no guarantees) to resist the need to buy the first cloths you see or impulsively blow your anger at your parent

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Adolescent Risk Taking: Neural Basis for "What in heavens name were you thinking?"

N. Eshel et al. / *Neuropsychologia* 45 (2007) 1270-1279

1275

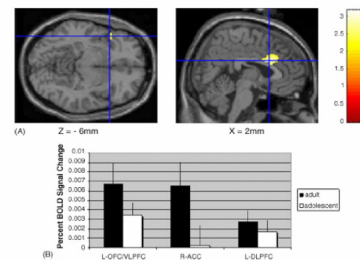


Fig. 3. Greater regional activations in adults than in adolescents for the contrast (select 10/30 minus select 70/90) in the lateral orbitofrontal/ventrolateral prefrontal cortex (LOFC/VLPFC) and anterior cingulate cortex (ACC) regions of interest. The top panel A represents regional activation in the left OFC/VLPFC (MNI x, y, z: -44, 14, -6 mm) and right ACC (MNI x, y, z: 2, 26, 30 mm), rendered on a single-subject T1 image provided by SPM99. The bottom panel B represents the group mean fraction of BOLD signal changes in adults and adolescents at the peak voxels identified on panel A. The left dorsolateral prefrontal cortex (DLPFC; MNI x, y, z: -26, 24, 40) was also included as a control region to inform the regional specificity of group differences.



- "Being an adolescent is like starting an engine without yet having a skilled driver behind the wheel"

R.E. Dahl

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Made worse as group adolescent brains amp-up the levels

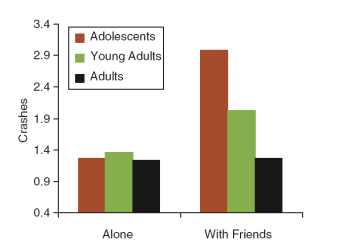
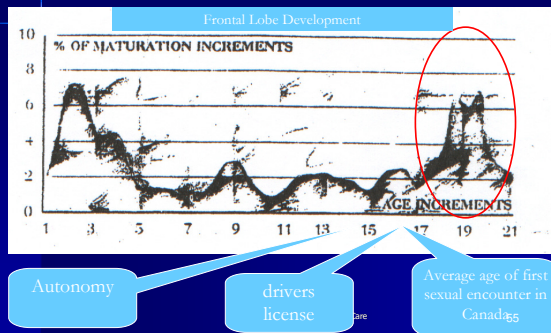


Fig. 2. Risk taking of adolescents, young adults, and adults during a video driving game, when playing alone and when playing with friends. Adapted from Gardner & Steinberg (2004).

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The Problem



Remember:
the emotional brain
is often in charge
in teens.

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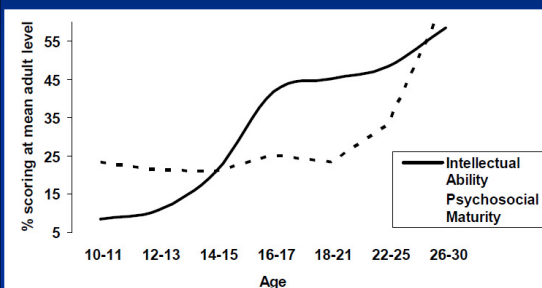
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Judgment Gets Better with Age

- By age 18, the adolescent's judgement for structured challenges is roughly equal to that of adults.
- But judgement that involves resisting impulses or delaying gratification is still under construction during late adolescence and early adulthood.

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Individuals Mature Intellectually Before They Mature Socially and Emotionally



Dr L Steinberg

SCENARIOS

- What we THINK...
- Affects what we FEEL...
- Affects how we ACT...

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GREATEST OPPORTUNITY...GREATEST VULNERABILITY

As the adolescent brain is reconfigured it is more susceptible to long lasting damage of drugs, alcohol, and negative experiences. Unfortunately, the brain is most vulnerable at a time when they are most inclined to take risks and to act impulsively..."

(Jay Giedd, NIH 2004)

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Alcohol & Other Drugs

- Increase in dopamine which further encourages risk taking
- Increase in depression and anxiety
- Can wound or damage brain (more than in adults)
- Hinder brain storage of new information

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Adolescents and Sleep

- Shift in Circadian (Biological Clock) to *preferring* later bedtimes and rise-times
- Need for sleep increases at puberty
- Societal influences push teens toward sleep delay
- Sleep deprivation common

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Provide Guidance and Opportunities

- Teens need to use their “thinking brains” for planning, analyzing, organizing, problem solving, and making decisions

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Keep Communicating

- Listen
- Encourage
- Support

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Recap:

Brain development continues throughout life.
The “emotional” brain shows earlier development than the “thinking” brain
The “emotional” brain seeks novelty and stimulation, sometimes met by risky behavior
Risks can be healthy and unhealthy
Adults can and should provide guidance, opportunities, and environments that promote development of the “thinking” brain

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Key Messages

‘UNDER CONSTRUCTION’

- Teens need MORE of our time, not less.
- What we THINK, affects how we FEEL, affects how we ACT (TAFFY)
- The majority of adolescents do well YET

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What struck you about first part of presentation?

Brain not finished- behavior linked to brain
Visual help
Education for families
Laughter engaged- make things accessible even not too much technotalk
Relationship
Give explanation
Its about relationships-social aspect optimal personal
Gabor mate- attachment what parents need to know

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What might it mean for working together?

- Need for overlap between sectors
- Age still underconstruction- system gives them- not prepared for world
- Communicating complex themes in simple language
- Implication for education system- how much understanding for curriculum

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- Be youth friendly- remember the face!
- Time is a challenge- be flexible
- Work together..dont give different messages
- Use humour
- Bring in their friends.family
- Remember they are going to need more help eg lost healthcard etc!!

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What are opportunities for change?

Following slides from
Dr Wayne Hammond- Resiliency Canada

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Critical Components of Change

An analysis of 40 years of research found the best predictor of successful change are **two** factors:

- 1) engagement in meaningful relationships
- 2) engagement in meaningful activities

83% of change involves these two factors
17% is a result of technique

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- **Change** does not come from special powers from professionals
- **Change** happens when a person uses their inherent strengths and resources and are supported by relationships that take your innate goodness as a given
- **Change** happens when you create a plan that is tailored to the person's ideas and therefore inspires the hope necessary for action

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What are the Barriers to Change? Why is it so difficult?

Don't give rationale- human nature to resist change, habit fear of unknown, failure, loss of control
Increase in stress

Parents telling they don't want them
Mixed media- harm reduction doesn't work- zero tolerance- work within

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Prochaska & DiClemente: Stages of Readiness to Change

Stage	Description	Objectives
Pre-contemplation	Not considering change	<ul style="list-style-type: none"> Identify patient's goals Provide information Bolster self-efficacy
Contemplation	Ambivalent about change	<ul style="list-style-type: none"> Develop discrepancy between goal & behavior Elicit self-motivational statements

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Prochaska & DiClemente: Stages of Readiness to Change (continued)

Stage	Description	Objectives
Determination	Committed to change	<ul style="list-style-type: none"> Strengthen commitment to change Plan strategies for change
Action	Involved in change	<ul style="list-style-type: none"> Identify and manage new barriers Recognize relapse or impending relapse

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Prochaska & DiClemente: Stages of Readiness to Change (continued)

Stage	Description	Objectives
Maintenance	Behavior change	<ul style="list-style-type: none"> Assure stability of change Foster personal development
Relapse	Undesired behaviors	<ul style="list-style-type: none"> Identify relapse when it occurs Reestablish self-efficacy and commitment Behavioral strategies
Termination	Change is very stable	<ul style="list-style-type: none"> Assure stability of change

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"If we want to change the situation, we first have to change ourselves."

Stephen Covey

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Embracing Change

- Most youth **want to be successful**, but just do not have the experiential templates to meet their needs constructively
- Youth will **accept our invitations** to change when what we offer replaces their current conventional pursuits in a meaningful way
- **Alternative invitations must be chosen**, not required – no evidence that interventions that try to force youth to stop behaviours work
- Values and behaviour of youth **always change in the context of relationships** – not programs

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? Why is Change so Difficult

- Lack of confidence in ability to make change
 - Do I have the skills?
 - Can I really do this?
- Lack of understanding of what is needed to change
- Lack of involvement with meaningful relationships
- Cannot see personal benefits of the change
- What's wrong with the way things are?
- Who will support me? - Expectations of others

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Assumptions About Change

- **People can change** – they have the resources to alter their life circumstances and resolve problems
- **People change when they are ready** and change always occurs within a system of perceptions and relationships
- We are more likely to help people change their behaviour when we focus on **what is strong** in them and not what is wrong with them
- We are more likely to help people change their behaviour when our conversations focus on **what people would like for themselves** – their preferences, hopes, and intentions

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A New Approach

- Focus on what is **strong** in people and not what is **wrong** with them
- Focus on people **as resources** and less on them as absorbing resources
- Focus on **what people would like for themselves** (their preferences, hopes, and intentions) – not what we think they need
- Focus on **what is important** and less on what we think is urgent

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“What we want to achieve in our work with young people is to find and strengthen the positive and healthy elements, no matter how deeply they are hidden. We enthusiastically believe in the existence of those elements even in the seemingly worst of our adolescents”.

Karl Wilker

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A Resilience Approach

- Needs to be **process and relationship oriented** with less dependency on techniques and professionals.
- Strength-based practice **is about partnering** in order to help youth identify and use their own strengths and resources to overcome obstacles and live empowered lives.

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Characteristics of Resiliency-Based Practice

1. A focus on **language** – "Language is not innocent" (Anderson, 1996)
2. A focus on **story** – Stories of self guide how people act, think, feel, and make sense of their past and present lives
3. A focus on **strengths, abilities, and resources** – a firm and committed belief that all people of all ages, and all families possess ability, competence, and other special qualities regardless of their life experience or current situation

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Characteristics of Resiliency-Based Practice

4. A focus on **collaboration** – acknowledging that people have a view of their current situation, its potential solutions and ideas about how the change process should unfold
5. A focus on **relationship** – walking with as opposed to dictating

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What do we hope for our clients?
AND
What do they hope for themselves?

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What words are used to describe our clientele?

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Labels given to High-Risk Youth:

Community	Professionals	Youth
<ul style="list-style-type: none"> • Loser • Ungrateful • Brat • Dangerous • Victim • Drop-Out • Delinquent • Thief 	<ul style="list-style-type: none"> • Conduct Disordered • Reactive Disorder • A.D.H.D. • Depressed • Suicidal • Borderline • Antisocial • Emotionally Disturbed • Resistant • Lacking Impulse Control 	<ul style="list-style-type: none"> • Leader • Tough • Gang member • Reliable • Faithful • Committed • Sexy • Survivor • Stud • Street Smart • Helper • Fighter

Deficit Thinking

Specialty	Diagnosis	Reaction
Education	Disruptive	Reprimand, suspend, expel
Social Work	Dysfunctional	Intake, manage, discharge
Corrections	Delinquent	Adjudicate, punish, incarcerate
Behaviourism	Disordered	Assess, conditioning, time out
Medicine	Diseased	Diagnose, drug, hospitalize
Psychopathology	Disturbed	Test, treat, restrain

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Wayne Hammond Resiliency Canada 2006

What are some of the outcomes of deficit thinking?

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Challenges of Deficit/At-Risk Model

- Tends to label youth
- Focused on reducing risk
- Labels limit options and exploring of innate resources
- Ignores potential resulting from adversity
- Leads to prescribed programming
- May or may not include a focus on relationship building and earning of trust by care provider
- Intervention tends to be linear – not ecological
- Does not clearly show cause versus effect
- No common philosophy of service provision

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To see all individuals as “at promise” rather than “at risk” is a fundamental shift that means facilitating rather than fixing, pointing to health rather than dysfunction, turning away from limiting labels and diagnosis to wholeness and well-being.

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Principles of Resilience

- **Belonging** – need to engage and build trust
- **Building Capacity** – recognize strengths and passion
- **Independence** – promote ability to creatively draw upon internal and external resources
- **Purpose** – nurture belief that “my life” has meaning

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"If we think we are fragile and broken, we will live a fragile, broken life. If we believe we are strong and wise, we will live with enthusiasm and courage. The way we name ourselves colors the way we live. Who we are is in our own eyes. We must be careful how we name ourselves."

Wayne Muller

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Attributes of Positive Youth Development:

"THE FIVE Cs"

- Competence
- Confidence
- Connection
- Character
- Caring



Contribution

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The Asset-Building Difference

From

To

Young people's problems
Professionals' work
Young people absorbing resources
Programs
Troubled young people
Accountable only for own behavior
Incidental asset building
Blaming others

Young people's strengths
Everyone's work
Young people as resources
Relationships
All young people
Accountable as well for other adults' behavior
Intentional asset building
Claiming responsibility

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3 General Strategies for Promoting Asset Building

- ❖ Build **RELATIONSHIPS** with children and youth
- ❖ Create positive and supportive **ENVIRONMENTS**
- ❖ Connect asset building with **programs and practices**

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Thank you

Thrive!
The Canadian Centre for
Positive Youth Development

800-265-2680
www.thrivecanada.ca

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