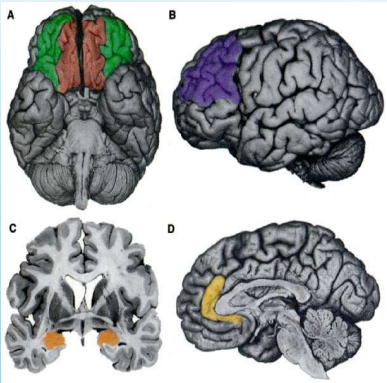
USF HEALTH

ORBITAL PREFRONTAL CORTEX

Cost-benefit analysis based on EXPECTED REWARDS or PUNISHMENTS. **A cognitive assessment.**

Orbital PFC regulates our response when we are angry.

Smaller left OFC in Borderline



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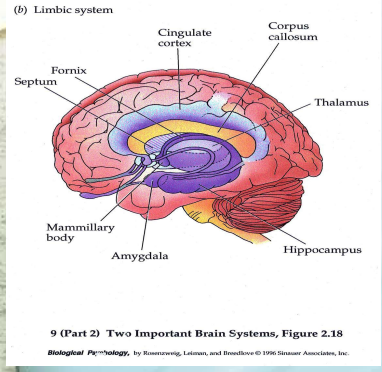
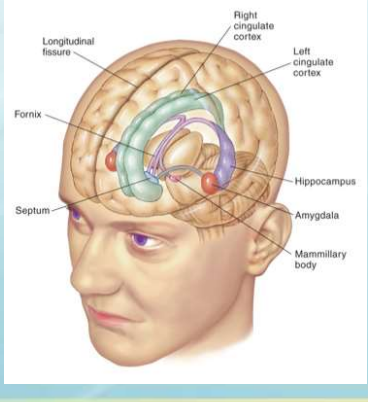
LIMBIC SYSTEM



- ANTERIOR CINGULATE
- AMYGDALA



INSULA

HIPPOCAMPUS

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USF HEALTH

CINGULATE CORTEX

The ability to alter behavior to match the social context

We behave differently in class than at the game

children with BPD have a smaller CC.

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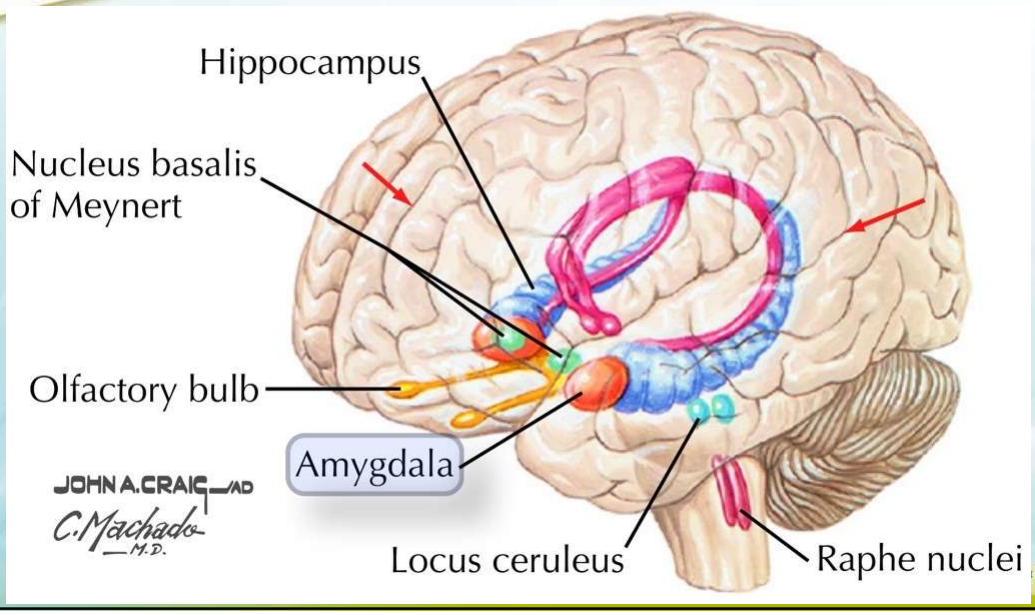
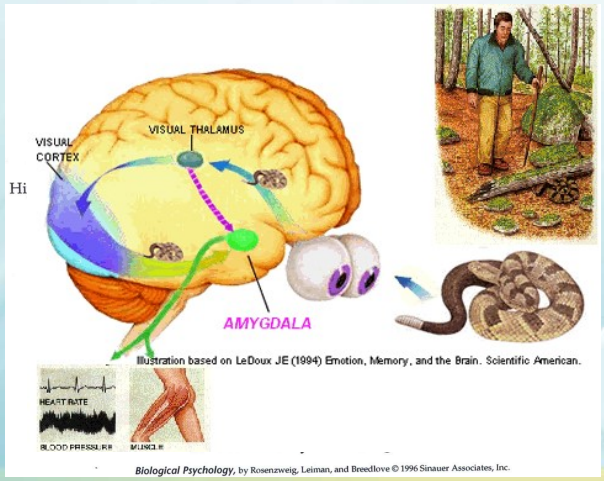
THE AMYGDALA



USF HEALTH

THE AMYGDALA AND DEFENSIVE AGGRESSION



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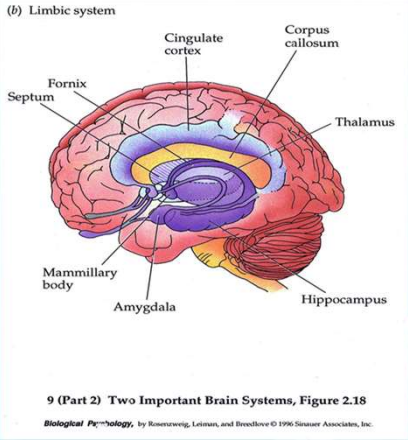
AMYGDALA and EOBPD

- Smaller volume
- BPD patients perceived greater hostility in neutral faces



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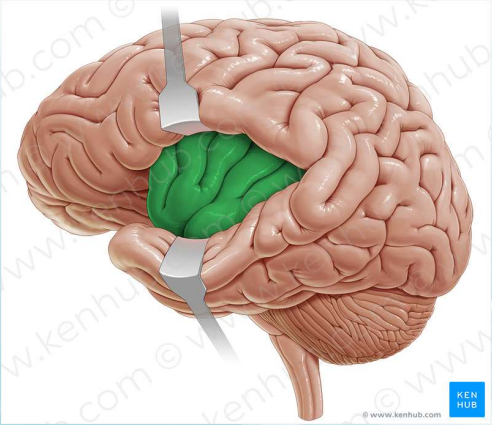
INSULA

Receives inputs from body's sense receptors.

Morality, Empathy & other Social Emotions (pride; disgust; guilt; lust)

Monitors appetites and seeks to satisfy them (addiction; eating disorders)



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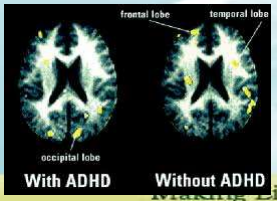
NEUROBIOLOGICAL CORRELATES (ADHD)

- Electrophysiological (QEEG; ERP)
  - reduced electrical activity in the right prefrontal regions (sustained attention)
- Structural (MRI)
  - lack of frontal asymmetry
  - smaller basal ganglia
  - not brain damage, just smaller

- Blood Flow (rCBF; fMRI)
  - reduced blood flow to the frontal lobes
  - increased with MPH (Vaidya, 1998)



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ODD

ANATOMICAL DIFFERENCES

- reduced glucose metabolism
- EEG reduced lower left frontal
- reduced volume in APD (Raine)

NEUROCHEMICAL DIFFERENCES

- lower dopamine (emotional expression)
- lower serotonin (emotional inhibition)*
- lower norepinephrine (inhibition)
- lower median cortisol levels (less fear)
- higher adrenal androgens/testosterone
-

AUTONOMIC NERVOUS SYSTEM

- lower baseline heart rates (Raine)
- lower skin conduction
- underaroused ANS - lower disinhibition & fearfulness

(We don't scare them)

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CONDUCT DISORDERS

STRUCTURAL DIFFERENCES

Smaller **amygdala** (perception of environmental cues; facial expression; recognizing distress in others)

Smaller **insula** (appetites; empathy);

Smaller **anterior cingulate cortex** (monitors performance and reward and adjusts behavior to environment)

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USF HEALTH

CONDUCT DISORDERS

CHEMICAL DIFFERENCES

LOWER CORTISOL (in aggressive males; in habitual violent offenders; CD girls)
- underarousal leads to stimulation-seeking behavior
- impedes learning from aversive events
- reduced fear response (they're not afraid of us).

LOWER CATECHOLAMINES

- lower DOPAMINE (emotional expression; stimulation seeking)
- lower SEROTONIN (reduced emotional inhibition)
- lower NOREPINEPHRINE (less inhibition)
  - in aggressive children (beginning at age 3)
  - in adult criminals & violent offenders

INCREASED TESTOSTERONE & ADRENAL ANDROGEN

LOWER GABA

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SHORTCOMINGS OF E/BD

20% of students meet criteria for a psychiatric diagnosis, but only 1% of students with ED/BD are served (Angold, 2000; Hoagwood & Erwin, 1997)

Majority of students are not identified as ED until 13 - 15; a new "waiting-to-fail" model????

Two year gap between diagnosis and when school services begin (Kutash et al., 2006)

Unclear diagnostic criteria; social maladjustment exclusion clause

5% of students account for 50% of 4D behavior problems and they absorb 60% a school's resources

USF HEALTH

PART 2
ASSESSMENT

FIRST WE HAVE TO KNOW **WHO**

THEN WE CAN MOVE TO **WHAT**

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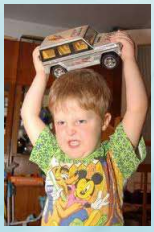
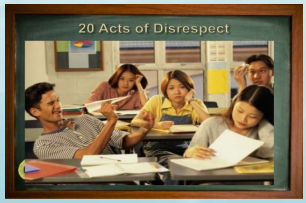
Those Who Emigrate from Tier 1

DISRUPTIVE



DISOBEDIENT

DISRESPECTFUL



DEFIANT

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DIFFERENTIATING THE EMIGRANTS

TRANSIENT

UNDERSOCIALIZED

MENTAL ILLNESS

ANTISOCIAL

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Transients
(Short-Term)

- Divorce
- Death
- Relocation
- Military Service
- Job Loss

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UNDERSOCIALIZED

- WE ASSUME ALL STUDENTS ARE PREPARED FOR SCHOOL

ARE THEY?

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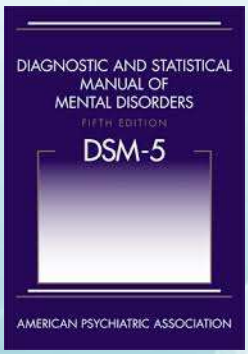
MENTAL ILLNESS



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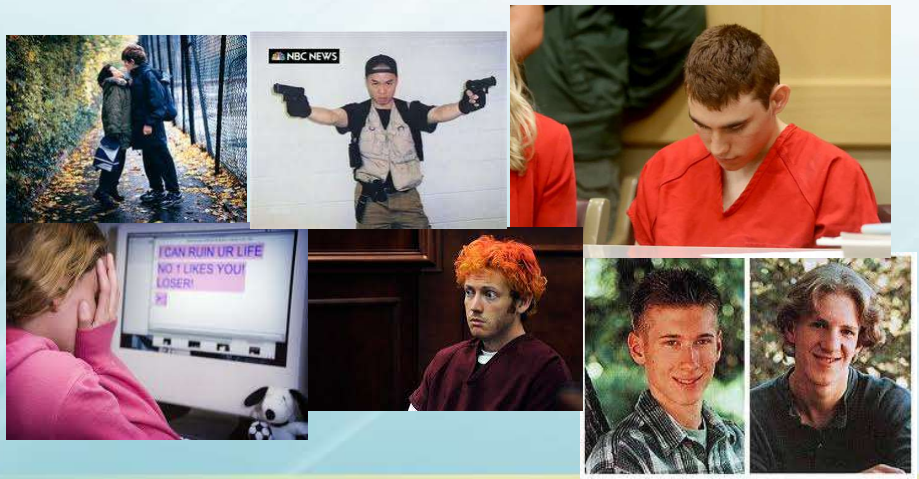
ANTISOCIAL



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After Tier 1, Effective Interventions Involve More Than Behavior & Misbehavior

1. Who is this student?
2. What need is being met?
3. What is impaired?

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DIFFERENTIAL ASSESSMENT

DIFFERENTIAL DIAGNOSIS

(OF PEOPLE, NOT BEHAVIOR)

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USF HEALTH

DIFFERENTIATING THE EMIGRANTS

TRANSIENT

UNDERSOCIALIZED

MENTAL ILLNESS

ANTISOCIAL

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REDUCE FOUR GROUPS TO TWO

TRANSIENT yes ___ no ___

UNDERSOCIALIZED wait until eight

****

MENTAL ILLNESS

ANTISOCIAL (PREDATORY)

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FOR MI AND ANTISOCIAL DIFFERENTIATE

IMPULSIVE → Disobed; Disruptive; Defiant; Disrespect

PREDATORY → Antisocial (5th D)

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A Comprehensive Functional Assessment

DIFFERENTIAL ASSESSMENT (OF STUDENT)
- Broad Band (BASC-3; CBCL; CAB; History)
- Narrow Band (depression, anxiety, bipolar)

DIFFERENTIAL ASSESSMENT (OF SKILLS)
- ALSUP
- Emotional/Behavioral Rating Skills Inventory
- EDDT

FUNCTIONAL BEHAVIORAL ASSESSMENT
- Form & Function
- Impulsive versus Instrumental

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ONCE WE KNOW WHO…

WE CAN MOVE TO WHAT

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IMPAIRMENTS

DX	ER	AGG	US	SS	LANG	EF	WM	ATT	ACAD
ADHD	×		×	×	×	×	×	×	×
CD	×	×	×	×	×	×			×
ODD	×	×	×	×	×	×			×
OCD	×			×	×	×			×
BPD	×	×		×	×	×	×	×	×
DEP	×			×	×	×	×	×	×
ANX	×			×	×	×	×	×	×
ASD	×	×	×	×	×	×	×		×

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ASSESSMENT OF LAGGING SKILLS AND UNSOLVED PROBLEMS (Rev. 12/5/08)

Child's Name _____ Date _____

LAGGING SKILLS

_____Difficulty handling transitions, shifting from one mindset or task to another
_____Difficulty doing things in a logical sequence or prescribed order
_____Difficulty persisting on challenging or tedious tasks
_____Poor sense of time
_____Difficulty reflecting on multiple thoughts or ideas simultaneously
_____Difficulty maintaining focus
_____Difficulty considering the likely outcomes or consequences of actions (impulsive)
_____Difficulty considering a range of solutions to a problem
_____Difficulty expressing concerns, needs, or thoughts in words
_____Difficulty understanding what is being said
_____Difficulty managing emotional response to frustration so as to think rationally
_____Chronic irritability and/or anxiety significantly impede capacity for problem-solving or heighten frustration
_____Difficulty seeing the "grays"/concrete, literal, black-and-white, thinking
_____Difficulty deviating from rules, routine
_____Difficulty handling unpredictability, ambiguity, uncertainty, novelty
_____Difficulty shifting from original idea, plan, or solution
_____Difficulty taking into account situational factors that would suggest the need to adjust a plan of action
_____Inflexible, inaccurate interpretations/cognitive distortions or biases (e.g., "Everyone's out to get me," "Nobody likes me," "You always blame me, "It's not fair," "I'm stupid")
_____Difficulty attending to or accurately interpreting social cues/poor perception of social nuances
_____Difficulty starting conversations, entering groups, connecting with people/lacks other basic social skills
_____Difficulty seeking attention in appropriate ways
_____Difficulty appreciating how his/her behavior is affecting other people
_____Difficulty empathizing with others, appreciating another person's perspective or point-of-view
_____Difficulty appreciating how s/he is coming across or being perceived by others

UNSOLVED PROBLEMS

HOME
_____Waking up/getting out of bed in the morning
_____Completing morning routine/getting ready for school
_____Sensory hypersensitivities
_____Starting or completing homework or a particular academic task
_____Food quantities/choices/preferences/timing
_____Time spent in front of a screen (TV, video games, computer)
_____Going to/getting ready for bed at night
_____Boredom
_____Sibling interactions
_____Cleaning room/completing household chores
_____Taking medicine
_____Riding in car/wearing seatbelt

SCHOOL
_____Shifting from one specific task to another (specify)
_____Getting started on/completing class assignment (specify)
_____Interactions with a particular classmate/teacher (specify)
_____Behavior in hallway/at recess/in cafeteria/on school bus/waiting in line (specify)
_____Talking at appropriate times
_____Specific academic tasks/demands, e.g., writing assignments (specify)
_____Handling disappointment/losing at a game/not coming in first/not being first in line (specify)

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EMOTIONAL/BEHAVIORAL READINESS SKILLS INVENTORY

Richard M. Marshall, Ed.D., Ph.D. & Berney J Wilkinson, Ph.D

	Compared to other students in the classroom, rate the student's relative skills as:	Never	Sometim	Often	Always
01	Seems capable of considering the likely outcomes of behaviors	N	S	O	A
02	Acts impulsively	N	S	O	A
03	Has difficulty handling transitions	N	S	O	A
04	Willingly accepts classroom/school rules and procedures	N	S	O	A
05	Seems unable to follow directions	N	S	O	A
06	Is disorganized (i.e., messy desk, cluttered backpack)	N	S	O	A
07	Can consider multiple solutions to problems	N	S	O	A
08	Cannot handle unpredictability & ambiguity	N	S	O	A
09	Does not anticipate events within the daily schedule	N	S	O	A
10	Is able to follow the daily schedule	N	S	O	A
11	Does not seem to understand what is said	N	S	O	A
12	Has limited receptive vocabulary	N	S	O	A
13	Pauses for long delays before responding	N	S	O	A
14	Makes bizarre statements	N	S	O	A
15	Inaccurately interprets statements	N	S	O	A

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16	Is able to tell a story in a logical sequence	N	S	O	A
17	Cannot express feelings accurately	N	S	O	A
18	Has word finding difficulties	N	S	O	A
19	Cannot elaborate verbally	N	S	O	A
20	Has poor regulation of vocal pitch and volume of speech	N	S	O	A
21	Cries easily	N	S	O	A
22	Is able to resolve conflicts	N	S	O	A
23	Has difficulty controlling temper	N	S	O	A
24	Is easily overwhelmed	N	S	O	A
25	Is irritable	N	S	O	A
26	Acts sad or depressed	N	S	O	A
27	Refuses to comply	N	S	O	A
28	Appears tired or fatigued	N	S	O	A
29	Has obsessive behaviors	N	S	O	A
30	Is physically aggressive	N	S	O	A
31	Is verbally aggressive	N	S	O	A
32	Appears anxious	N	S	O	A
33	Seems to have difficulty seeing another person's point of view.	N	S	O	A
34	Poorly perceives social cues	N	S	O	A
35	Voices cognitive distortions (i.e., "it's not fair")	N	S	O	A
36	Has problems with interpersonal relationships (peers and/or adults)	N	S	O	A
37	Fails to see positive attributes about self	N	S	O	A
38	Believes self to be better/superior to others despite difficulties	N	S	O	A
39	Seeks attention inappropriately (i.e., "class clown," interrupting, or	N	S	O	A

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EMOTIONAL/BEHAVIORAL READINESS SKILLS INVENTORY (EBRSI).

41	Criticizes others (makes negative comments about others)	N	S	O	A
42	Respects others' personal space	N	S	O	A
43	Welcomes supervision and guidance from adults	N	S	O	A
44	Is unable to focus on one task at a time	N	S	O	A
45	Is unable to maintain focus as needed for task	N	S	O	A
46	Completes assigned tasks	N	S	O	A
47	Makes careless mistakes	N	S	O	A
48	Has difficulty starting work immediately	N	S	O	A
49	Is easily distracted	N	S	O	A
50	Avoids tasks requiring attention	N	S	O	A

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