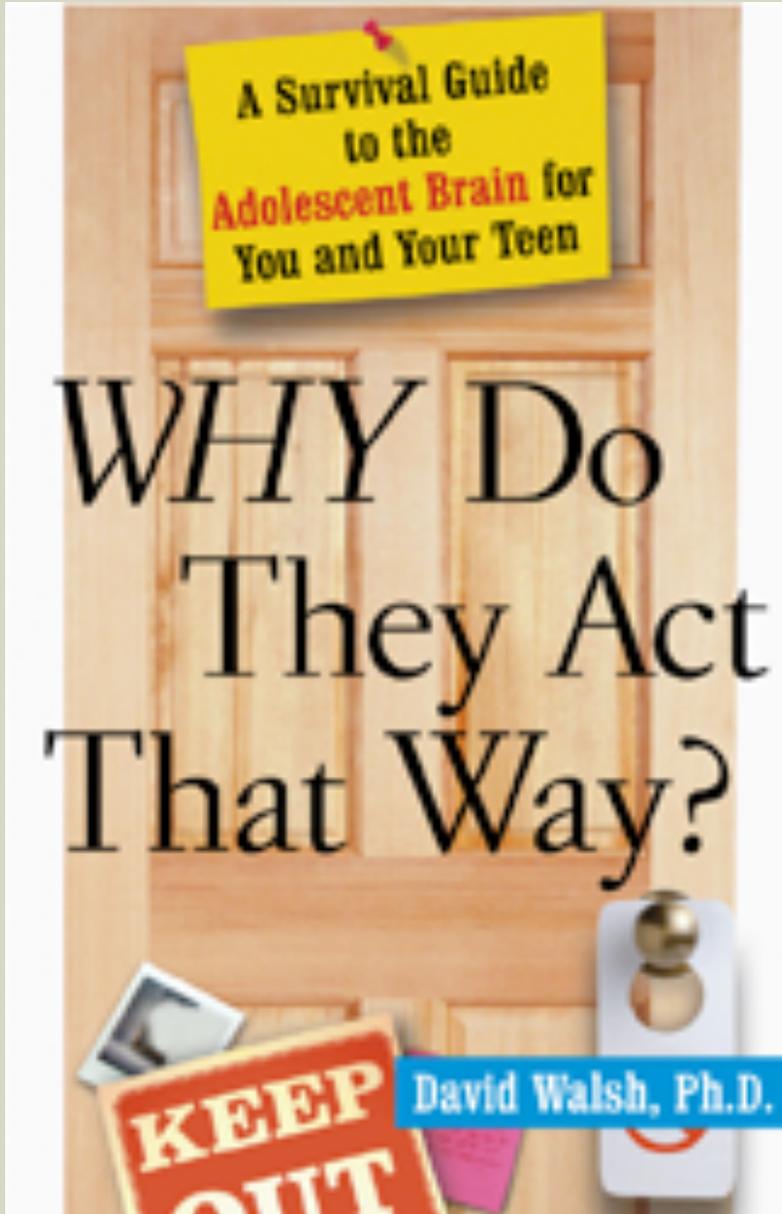


**JUVENILE REENTRY IN  
THE CONTEXT OF  
ADOLESCENT BRAIN  
DEVELOPMENT**

Jennifer  
Woolard, Ph.D.

Georgetown  
University

A wooden door with a yellow sign pinned to it, a 'KEEP OUT' sign, a 'David Walsh, Ph.D.' sign, and a door handle.

A Survival Guide  
to the  
**Adolescent Brain** for  
You and Your Teen

# WHY Do They Act That Way?

David Walsh, Ph.D.

# AGENDA

- Recognize key aspects of adolescent development
- Understand themes of research findings
- Identify implications for practice
  - Interactions with youth
  - Interpreting information about youth from others
  - Placing information in developmental context

# WHAT RESEARCH CAN TELL US

- Describe and identify behavior that is common and predictable
- Gives a reference range as backdrop
- Uses probabilities and likelihoods, not certainties
- Can help identify risks for negative outcomes, protective factors that buffer against risk

## CAUTIONS ABOUT RESEARCH

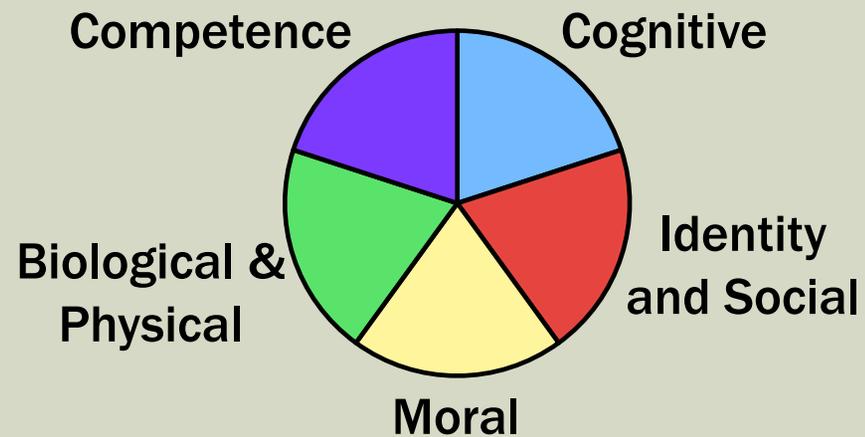
- Should not be used in a clinical sense to evaluate an individual child as “normal” or not
- Uses probabilities and likelihoods, not certainties
- Varies in quality and generalizability

# DEVELOPING ALONG DIFFERENT DIMENSIONS AT DIFFERENT RATES

- Development is gradual, uneven, with stops and starts
- The same age doesn't mean the same developmental progress between individuals
  - Rate of change
  - Patterns of change



# MAJOR AREAS OF DEVELOPMENT



# COGNITIVE DEVELOPMENT



- How do adolescents think?
- How does adolescent thinking differ from that of children or adults?
- How does adolescent thinking increase the likelihood of taking unacceptable risks and engaging in undesirable behavior?

# COGNITIVE DEVELOPMENT

## Major Cognitive Changes in Adolescence

1. Possibilities
2. Abstraction
3. Thinking about thinking (metacognition)
4. Thinking in multiple dimensions
5. Relativity

# COGNITIVE DEVELOPMENT

- **Psychosocial influences on Cognition**
  - Risk-taking
  - Sensation-seeking
  - Present-oriented thinking
  - Egocentrism
  - Perceived invulnerability
  - Magical thinking

# ADOLESCENT RISK TAKING

- Peaks during adolescence
- Perceive themselves as less vulnerable to risk
- **Sensation Seeking** (the need/desire for varied and novel sensations + experiences) is more present during adolescence than during adulthood

# ADOLESCENTS' TEMPORAL ORIENTATION

- Difficulty thinking about the future and delaying gratification
- Value more heavily short term benefits, + discount risks



# PSYCHOSOCIAL DEVELOPMENT AND DECISION-MAKING

- Ability to appraise risks and consequences
- Ability to act with prudence and after consideration
- Ability to resist peer pressure
- Ability to experience victim empathy

# DECISION-MAKING

*Various factors can undermine adolescent decision making:*

- Stress and Fear
- Learning Difficulties
- Previous Victimization



# IS RESEARCH ON BRAIN DEVELOPMENT IMPORTANT FOR JUVENILE JUSTICE POLICY?

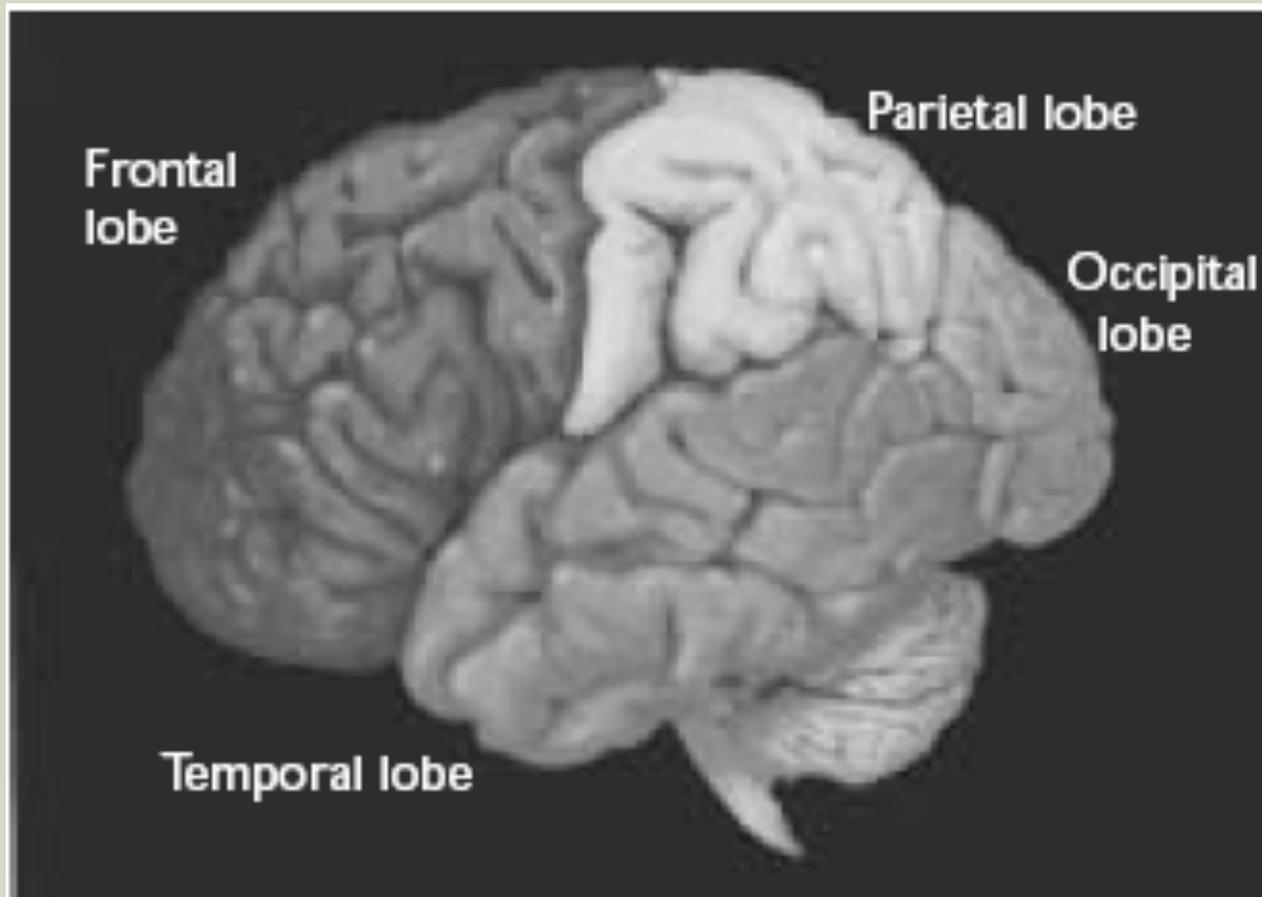
## ■ Yes

- Helps understand biological bases of differences between adolescents and adults
- Helps persuade laypersons that these differences are “real”

## ■ No

- Under the law, behavior, not anatomy, matters
- The idea that biological evidence is more “real” than psychological evidence is naïve
- We know a lot less than the public thinks we do

# LOBES OF THE BRAIN



# WHAT DOES RESEARCH SAY ABOUT ADOLESCENT BRAIN DEVELOPMENT

- Helpful to think of two distinct sets of brain systems relevant to adolescent behavior
- Systems involve different regions of the brain and mature along different timetables
- **Socio-emotional system** mainly involves the limbic system and the ventromedial (lower inside) and orbitofrontal (lower front) areas of the frontal lobe
- **Cognitive control system** mainly involves the dorsolateral (upper outside) area of the frontal lobe and the parietal lobe

# THE SOCIO-EMOTIONAL SYSTEM

- Responsible for processing emotions, social information, reward and punishment
- Undergoes major changes in early adolescence that are related to hormonal changes of puberty
- Changes result in
  - Increased **sensation-seeking**
  - Increased/easier **emotional arousal**
  - Increased **attentiveness to social information**

# THE COGNITIVE CONTROL SYSTEM

- Responsible for deliberative thinking – weighing costs and benefits, thinking ahead, regulating impulses
- Develops gradually from preadolescence on, well into the mid-20s
- Changes result in
  - More impulse control
  - Better emotion regulation
  - More foresight
  - More planning ahead
  - Better reasoning

# WHAT DOES IT ALL MEAN?

- Adolescence is a time characterized by a socio-emotional system that is easily aroused and highly sensitive to social feedback
- Adolescence is a time characterized by a still-immature cognitive control system
- As a result, adolescents are
  - Less able to control impulses
  - Less able to resist pressure from peers
  - Less likely to think ahead
  - More driven by the thrill of rewards
- We have a good understanding of the neurobiological underpinnings of these qualities

## WHAT DOES IT *NOT* MEAN

- That adolescents do not know right from wrong
- That adolescents are the same as young children
- That adolescents should not be held responsible for their actions
- That all juvenile offenders are the same

# WHAT BRAIN RESEARCH CAN NOT DO

- It *can not* tell us where to draw an age boundary between adolescence and adulthood
- It *can not* distinguish individuals who are psychologically immature from those who are mature
- It *can not* distinguish between individuals who are “really” guilty and those whose behavior should be excused
- It *can not* identify individuals who have “bad” brains or who are at greater risk to re-offend
- It *can not* substitute for an assessment of an individual’s actual behavior
- It *can not* tell us when individuals are still able to change, or are still amenable to treatment
- It *does not* change anything we already knew about differences between the behavior of adolescents and adults

# IMPLICATIONS FOR WORKING WITH YOUTH

- Understand the youth in the context of his or her environment or experience
- Make a concerted effort to assess cognitive, emotional, and personality development during contacts with youth
- Communicate in a way that the youth will understand

# IMPLICATIONS FOR WORKING WITH YOUTH

- Do not make assumptions about ability or development based on physical appearance
- Do not assume capacity in one area based on capacity in another
- Remain cognizant of the power of peer groups and family, and craft dispositions accordingly

# CHILDREN NEED TO BE GOOD AT SOMETHING



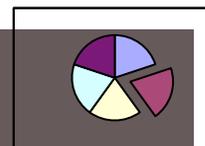
- Having success teaches about self-regulation, responsibility, pride, humility
- Large number of juveniles come into court without having competence in a discrete area
  - Have talents, but not developed
  - For some, delinquency is their avenue of competence



- **Being successful requires**
  - Opportunities for success
  - Coaching to reduce failure
  - Recognition of small steps
  
- **Less clear how to generate motivation**
  - Especially for teens with low aspirations
    - Family members may not have achieved success
- **Identify and strengthen existing talent**
  - Adults usually impose school as the way to succeed
  - Usually overlook other fruitful areas for talent development

## **EXAMPLES: HOW IMMATURITY SOMETIMES INFLUENCES YOUTHS' DECISIONAL CAPACITIES**

- Effects of immaturity on perceptions of authority
  - E.g., role of attorney (deciding what to tell)
  - E.g., acquiescent or oppositional “sets”
- Effects of immaturity on weighing gains and losses
  - E.g., involvement of peers
  - E.g., judgment about short-term vs. long-term effects of decision



# IMPLICATIONS

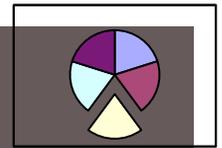
Because identities are forming, adolescents can view innocent questions about friends, self as criticism

- Consider their interpretation may be different than your intent
- Teens assume adults don't understand, expect to be judgmental. Some are unresponsive, others overly eager to please
  - Rapport building: Direct eye contact usually conveys interest among adults, but can be seen as aggressive by teens.
  - “Ganging up”: 2 adults with 1 teen can be threatening



# INTERVIEWING TEENS

- Implications of cognitive development
  - Gauge the adolescent's language competence and ability to process information
  - Avoid long questions with a lot of information loaded in them
  - Avoid giving more than one option in a question
  - Avoid asking for abstract thinking



- Avoid analogies
- Ask open-ended questions
- Ask questions when you don't understand

# TALKING WITH YOUNGER TEENS

- Young adolescents are
  - more shy than older teens
  - More aware of adult power
  - Not as advanced cognitively
    - Memories not as reliable
    - Embellish stories more often
    - Provide less detail
  - May be more suggestible

