

Inside the tweener's brain - the middle schooler's brain. By Hank Pellisier

(Great Schools . Org)

The tweens and middle school grades are often hormone-addled, pimped, unpredictable, rudely defiant one second and emotionally clingy the next... You may be wondering if your precious child's body is inhabited by aliens. Honestly, close guess, those invading aliens are hormones.

During this time, we need to provide often-unwanted (but typically much-needed) love, advice, and support, which is why it's helpful to know what's occurring, anatomically, in their evolving noggins. Here's how you can better understand, and navigate, the cranial crisis of your adolescent child.

Judgment or lack thereof

- Middle school to maturity, the brain's primary growth is the "central decision maker" of the brain—responsible for functions like mediating conflicting emotions, making ethical decisions, inhibiting emotional and sexual urges, general intelligence and predicting future events.
- Your son/daughter may be seeking a private space or extremely disorganized.

Pleasure seekers

- Adolescents indulge in risk-taking behavior
- Warn your impulsive daredevil about the dangers of drugs, smoking, alcohol, unsafe sex, and out-of-control skateboarding without a helmet, emphasizing the catastrophic harm that can befall their most prized possession: the mind

Weird growth

- Yikes! What's growing? Tell your child immediately (if you haven't already) about the physical changes ahead, which are triggered by hormone releases.
- Middle schoolers are often self-conscious about their body's developments, with anxiety about how others view them.

Feed the brain

- Many sixth, seventh, and eighth graders want to slurp unhealthy junk food and soda pop into their gullets, because the "pleasure" centers of their brain develop sooner than their ability to calculate long-term consequences.
- They'll beg for it. But don't cave in: Junk food contains chemicals that can disrupt their hormonal secretions. Instead, help your child eat healthy food – and explain that it fosters their brain development.

No virtual violence

- Gamers played one of two types of video games while researchers at Indiana University School of Medicine used MRIs to watch which brain regions were stimulated.
- When kids played "Need for Speed: Underground" - a non-violent game – activity was observed in the frontal area, a zone associated with concentration and self-control.
- When kids played "Medal of Honor: Frontline" – a violent game – there was no frontal area activation; instead, the amygdala was excited. (That's the "reptilian" part of the brain.) The amygdala is affiliated with emotional arousal – especially anger – and is linked to aggressive, impulsive behaviors.

Gender gap

- Girls' and boys' brains are vastly different in middle school. The National Institute of Health discovered that the halfway mark in brain development (called the inflection point) occurs in females just before they turn eleven, but dawdling males don't get there until they're nearly 15.

Check mate

- Strengthened interconnectedness in middle school isn't just a social phenomenon – it's in their brain

architecture, too. You'll see it in your child's improved ability to plan, problem solve, process complex thought, do deductive reasoning, and process information.

- To multiply your middle schooler's mental powers, encourage them to play chess.
- Other strategic brain-builders are checkers & backgammon

Brain and brawn

- Research shows that exercise has a significant positive effect on kid's cognitive development.
- Students with higher fitness levels get higher grades and perform better on tests. One study found that strenuous aerobic exercise just before academically challenging classes help kids absorb and retain new material.
- To buff up both their brain and their body, encourage your middle schooler to be active, play sports, and exercise regularly.

Benevolent rule

- A middle-schooler's evolving brain requires firm guidance from diligent adults.
- Developmental psychologist Diana Baumrind, author of Prototypical Descriptions of 3 Parenting Styles, recommends "authoritative" parenting because it provides consistent, compassionate, goal-clarifying direction, and allows the child to build self-esteem by making intelligent choices.
- Over-controlling "authoritarian" parents who scold incessantly can instill a sense of inadequacy in their offspring, and over-indulgent "permissive" parents that heap silly praise without justification just give their kids a false sense of attainment.