



MICHIGAN JUVENILE JUSTICE COLLABORATIVE

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Adolescent Development: Policy Implications

Juveniles are different from adults, psychologically as well as physically. The juvenile justice system was founded on this premise and decades of research now confirm that developmental considerations are critical to an effective and humane system.

While the majority of adolescents successfully transition into adulthood, ALL teens make mistakes during this transformational time in life – some more serious with more lasting consequences than others.



Physiological Development

Technological advances in Magnetic Resonance Imaging have made it possible to track the growth and development of the human brain, uncovering evidence that the brain is not fully developed until one's early twenties.

During adolescence, the brain undergoes intense overproduction and pruning of new synaptic connections, hardwiring the brain's circuitry. Neuronal cells that "fire together, wire together," making certain brain operations more precise and efficient, while those that do not make meaningful contacts with other cells do not survive.¹

The last part of the brain to fully mature is the frontal lobe, particularly the prefrontal cortex, responsible for advanced thought processes such as judgment, impulse, and understanding of long-term consequences. The developmental changes associated with this period establish the architecture that will eventually allow young adults to temper risk-taking behavior, evaluate costs and benefits, and fully grasp the consequences of their actions.

Psychosocial Development

Although adolescents generally have some adult-level cognitive abilities by age 16, reasoning is only one influence on how they make decisions. In high-pressure crime situations, judgments are made in the heat of the moment, often in the company of peers. In these situations, adolescents' other common traits –short-sightedness, impulsivity, susceptibility to peer influence – can quickly undermine their decision-making capacity.

A study of over 1000 adolescents concluded that psychosocial maturity, measured in terms of responsibility, perspective, and temperance, is not completely developed until age 19, meaning

¹ "Adolescence, Brain Development, and Culpability." American Bar Association, Juvenile Justice Center. Jan. 2004

that adolescents are not able to fully exercise logical judgment, foresee consequences, or inhibit impulses.

In general, adolescents over the age of 15 can be *as capable as adults* in focused decision-making situations (cold cognition.) However, the impulsive, short-sighted judgment associated with delinquency is influenced by the combination of cognitive and psychosocial factors (hot cognition.). They lack the level of cognitive integration necessary to sustain executive functions. When children find themselves in emotionally-charged situations, the parts of the brain that regulate emotion, rather than reasoning, are more likely to be engaged.



Trauma, mental illness, abuse and neglect, and substance abuse may further impair cognitive abilities, often leading to increased risk-taking, lower self control, and delinquency.

Policy Implications

In an historic decision on March 1, 2005, the United States Supreme Court ruled in *Roper v. Simmons*, to abolish the death penalty for crimes committed by adolescents under the age of eighteen, thus distinguishing between adolescence and adulthood. The Court reviewed the neurological and developmental research and Justice Kennedy cited three important ways in which youth are different than adults.

- Youth under 18 years “possess a lack of maturity and underdeveloped sense of responsibility...result[ing] in impetuous and ill-considered actions and decisions...”
- Adolescents are more susceptible to negative influences and peer pressure...
- And a juvenile’s “character... is not as well formed as that of an adult. The personality traits are more transient, less fixed.”

Based on this decision, several states have begun reassessing their policies and practices to incorporate developmental considerations for competency evaluations, age of jurisdiction, disposition and sentencing, and funding for rehabilitative programs.

Opportunity for Rehabilitation

Because development occurs throughout adolescence, youth are far more amenable to rehabilitative programs and behavior modification during these formative years. As children become more independent, the positive influences of community members outside the home become more important. Likewise, harsh treatment during adolescence can further solidify a child’s trajectory down the wrong path.