Emerging Self-Regulation: Temperament, Emotions, and Biological Sensitivity to Content

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Lecture Objectives

- Define temperament and the current theoretical perspectives

- Understand the function of early emotions and the developmental phases of self-regulation

- Describe intrinsic and extrinsic influences on infant regulatory development
  - How does biological sensitivity to context impact the development of self-regulation?
Section A

Temperament
Historical Perspectives on Temperament

- **Hippocrates-Galen typology**
  - **Blood**
    - **Sanguine:** courageous, hopeful, amorous
  - **Yellow bile**
    - **Choleric:** easily angered, hot-tempered
  - **Black bile**
    - **Melancholic:** despondent, irritable
  - **Phlegm**
    - **Phlegmatic:** calm, unemotional
Historical Perspectives on Temperament

- **Shift to environmentalism**
  - By the 17th century, humorism begins to be discredited and individual differences in behavior are believed to be a product of the environment
    - The infant is believed to be a “blank slate”
  - Freud’s psychoanalytic theory for behavior maintains an emphasis on the role of environment in explaining temperament in the 19th century
  - Behaviorist theories that followed in the early 20th century also point to children’s behavior as learned through interactions with one’s environment, particularly experiences with conditioning and reinforcement
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NYLS study
- N=133, 3-month-old infants
- Parent interviews identified nine temperamental dimensions
  - Activity level, rhythmicity, distractibility, approach/withdrawal, adaptability, attention span, intensity of reaction, threshold of response, quality of mood
- From these dimensions, children were classified as easy (40%), difficult (10%), or slow to warm (15%)
Buss and Plomin define temperament as an inherited set of personality traits that appear early in life. The traits are genetic in origin and appear during the first year. Focus on dimensions of activity level, sociability, and emotionality.
Goldsmith and Campos define temperament as individual differences in the probability of experiencing and expressing basic emotions. To this end, temperament shows a degree of stability and cross-situational generality. Indexed through early expression of fear, anger, joy, and motor activity.
Rothbart defines temperament as biologically based individual differences in emotional reactivity and self-regulation.

- **Reactivity**: excitability or arousability of behavior and physiological systems, as assessed by response threshold, latency, and intensity.
- **Regulation**: behavioral processes (attention, approach, avoidance) that serve to modulate (enhance or inhibit) reactivity.

Focus on observation of reactivity and regulation behaviors in emotion-eliciting novel or limiting contexts.

- Lab-TAB tasks, e.g., presentation of masks, toy removal.
Theoretical Points of Convergence

- Temperamental dimensions reflect *behavioral tendencies* rather than discrete behavioral acts
- To some degree, temperament has *biological underpinnings*
- While core features of temperament are relatively *stable*, the expression of temperamental behavior is *modifiable by the environment*
The link between temperament and behavior becomes more complex as the child matures; thus measurement is typically focused on the infancy period.

Temperament is a reflection of individual differences, not species-general characteristics.