Questions for consideration

- Is ECD highly programmed and the timing of events highly predictable?
- Is development smooth and linear or marked by starts and stops?
- Are newborns and infants passive observers of the world around them or do they actively engage?
- Are children either vulnerable or resilient?
Child development is highly interactional—the organism and the world around him.

Source: Samaroff and Chandler. (1975).
Development is not a zero-sum game that pits early against later development.

Rather, the central question is how later development is informed by earlier events.
Early Child Development

- Early development establishes capacity, development orientation to the world, and expectations as to how things and people behave.
Children reared by adoptive parents with substance abuse or antisocial personalities are more likely to be aggressive and hostile than children born to similar parents but reared by non-substance abusing parents.

Source: Ge, Conger, Cadoret et al. (1996).
Nature and Nurture: The Interaction

- Genetic influences do not necessarily predetermine an outcome—genes often interact with environment
  - PKU and diet
  - Schizophrenia and family supports
  - Height and nutrition
Self-regulation is a central aspect of ECD

Management of physiological arousal, emotions, and attention

Self-quoting behavior

Managing impulses (e.g., Simon says, concentrating on a task, ignoring distractions)
Emotional Development

- Empathy
- Managing one’s feelings
- Management of strong emotions
Temperament

- Typical ways of reacting to events
- General mood
- Capabilities for self-regulation
- Activity level
Temperament

- By four months of age temperament is relatively stable
Emotional Responsiveness

- Newborns: cooing or crying in response to temperature, hunger, fatigue

- Preschoolers: interpretation of experience, what others think or are doing, responsiveness of others to them
Starting in infancy we take our cues from those around us
- Fear
- Excitement
- Depression
Effect of Parents on Emotional Development

- Parents socialize the emotional development of their children
- With parental discord, depression, or maltreatment, children are more likely to experience more difficulty in emotional regulation.
Effect of Parents on Emotional Development

- Children rely on their parents for understanding, experiencing, and managing their own feelings.

- Children who experience insecure attachments or coercive relationships are thus more vulnerable to emotional disorders.

Emotional Development

- Emotional development is closely linked to self-understanding
  - Two-year-old: “mine”
  - Three-year-old: I; “do it myself”

- Emotions develop such as pride, shame, embarrassment, guilt
Emotional Regulation

- Using emotions effectively in relationships
  - Emotional expression is heavily influenced by family and culture norms
    - Examples: dealing with frustration, delaying gratification, moderating, the response to stress, controlling anger
Emotional Regulation

- Effort control: the ability to inhibit a response one is all set to control
  - Red light/green light
  - Simon says
  - Saving money for something

- Parental influences interact with temperament—the more excitable a child, the more challenged is effort control
Emotional Regulation

- Self-regulation of attention and cognition are \textit{executive functions}
  - The ability to think, retrieve, and remember information, solve problems, ability to use symbols (e.g., writing, mathematics)
  - Controlling attention is the precursor to planfulness
Emotional Regulation

“Means-ends” behavior is a precursor of executive functioning
  - Infant (12 months): remove an obstacle to retrieve a toy
  - Persistence
Emotional Regulation

- Development of a second symbolic system
  - Language
  - Thought
  - Self-reflection
  - Code organization
School Failure and School Readiness

- School failure in adolescence and beyond is closely linked with academic skills at school entry

Source: Uster and McAdou. (1996)
Language

- Language acquisition is a resilient process: people learn to speak on their own

- Reading acquisition is fragile; it usually requires instruction
Language

- First spoken words between 10 and 15 months

- Language acquisition is the same whether you verbally or manually speak

- Word learning explosion starts at 18 months: nine new words a day, everyday, through pre-school years

Pre-school children whose parents talk with them a lot have a larger vocabulary on school entry

School-age children whose teachers talk with them a lot perform better on standardized tests

Vocabulary size and IQ are highly inter-correlated

Complex Reasoning

- At less than 1 month of age, infants can imitate another person’s gestures when that person is no longer in view (e.g., sticking out tongue)

- At 6 months they can match the number of pictures shown with the number of drum beats

- By 6 months they can understand physical properties (e.g., that unsupported objects fall)

- Between 9 and 12 months they can learn new behaviors by watching others (e.g., unlock a container) and retain that information
Social Development

- By 12 months infants develop the capacity to learn from others (e.g., to unlock a container)

- By 3 months they develop the capacity of perspective taking (e.g., that others’ preferences may differ from their own)

- By 5 years of age, children develop a “theory of the mind” (e.g., predict others’ intentions, deceive others, understand that beliefs and reality are not always the same)
Social Development

- Infants have an innate drive to master their environment
Achievement Motivation

- Mastery motivation
  - A child’s propensity to explore, persist, and derive pleasure from achievement

- Intensive motivation
  - Engage in activity without external pressure

- Cognitive aspects of motivation
  - Expectations for success, challenge seeking, self-perceptions of competence
Children enter kindergarten with high achievement motivation—for many, it declines from there
The rise of the importance of peers is proportionate to the decline in the number of siblings

<table>
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<th>Year</th>
<th>Average number of children in a U.S. family</th>
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<td>2.44</td>
</tr>
<tr>
<td>1998</td>
<td>1.85</td>
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Social Interactions

- By 2 months babies get excited when seeing other babies
- By 4 months babies stare at each other
- By 6 to 9 months babies actively try to get each other's attention
- By 9 to 12 months babies imitate each other
- By 12 to 24 months reciprocal play is initiated
- Between 2 and 3 years conflict resolution is explored