3-6

DEVELOPMENT

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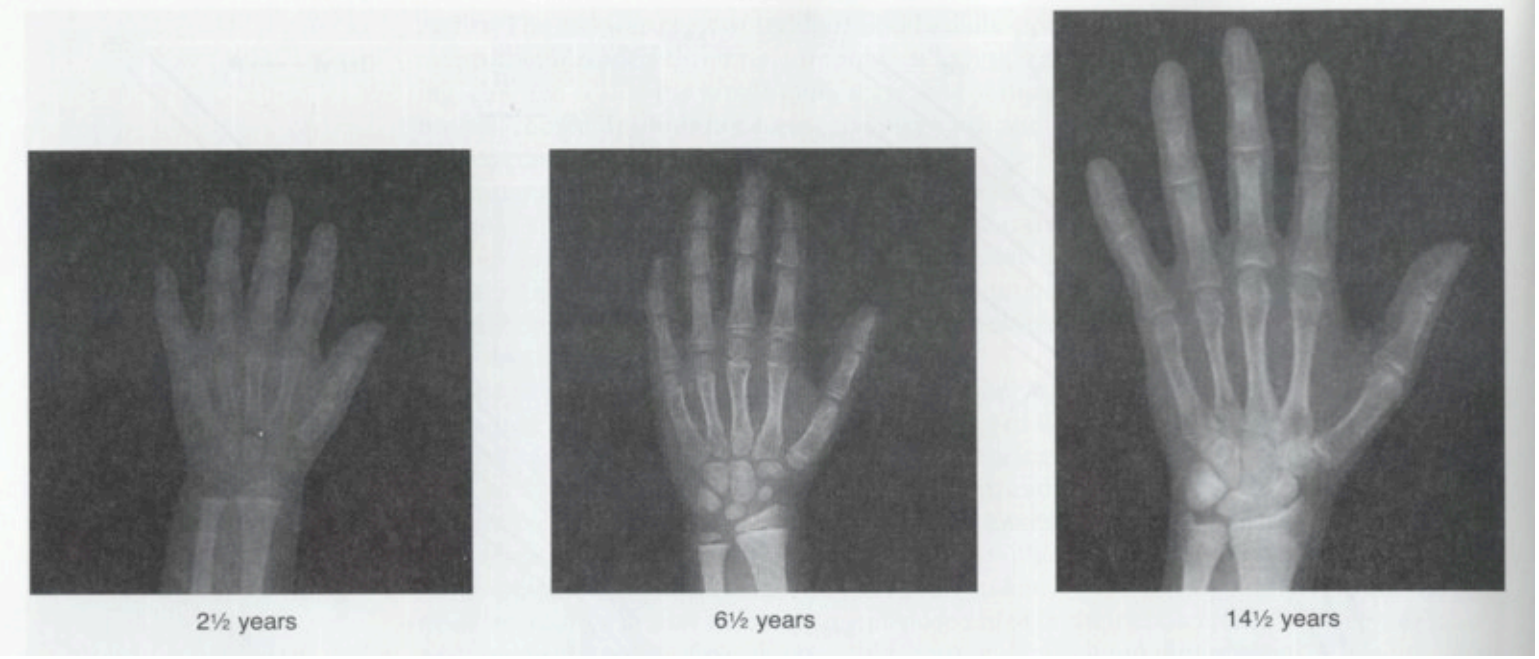
Body Growth

- Compared to infancy, gains in body size taper off
- Body fat declines – leaner and longer

Body Growth

- Cartilage hardens into bone



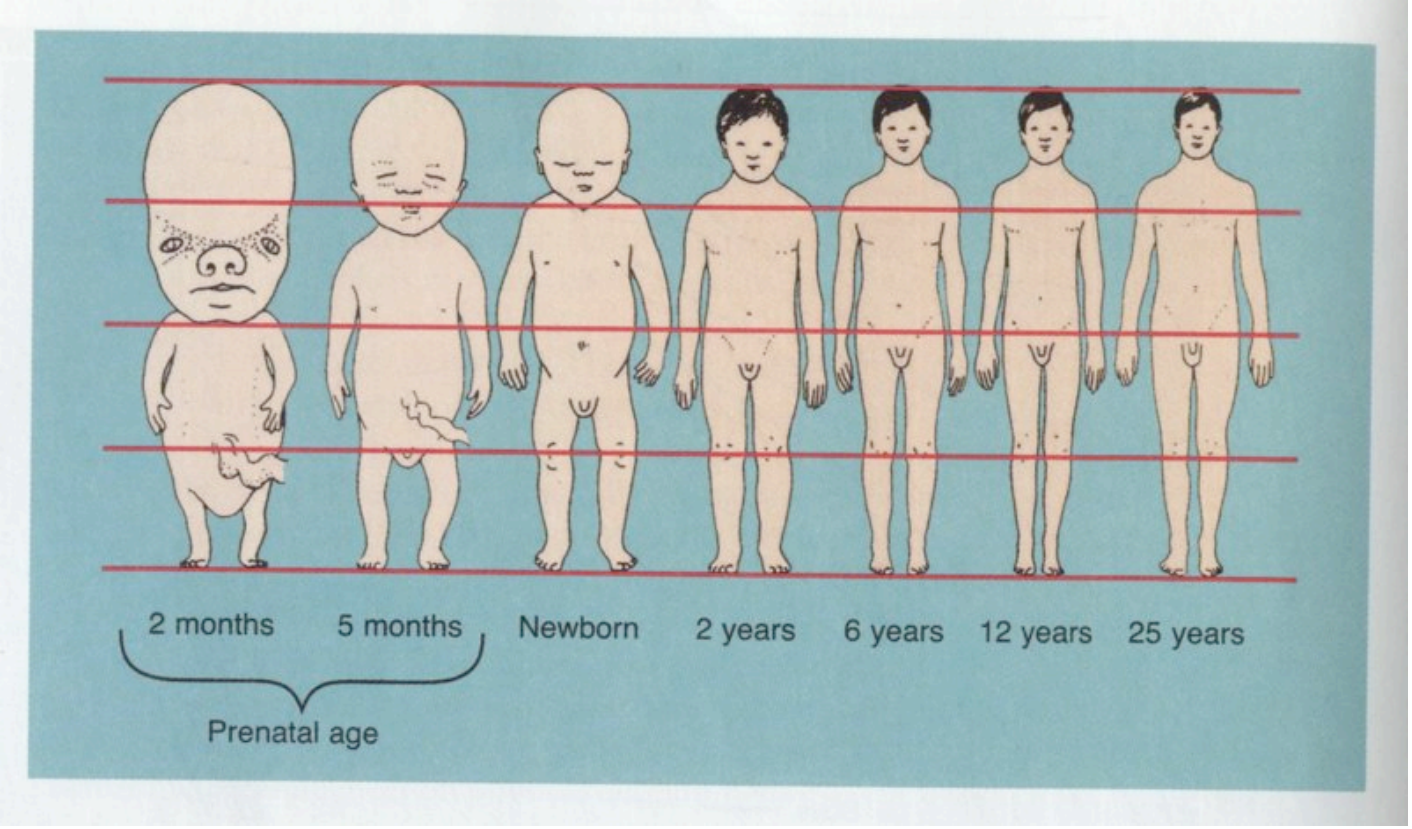
Body Growth

- By end, begin to lose primary teeth
- Tooth care remains important

Body Growth

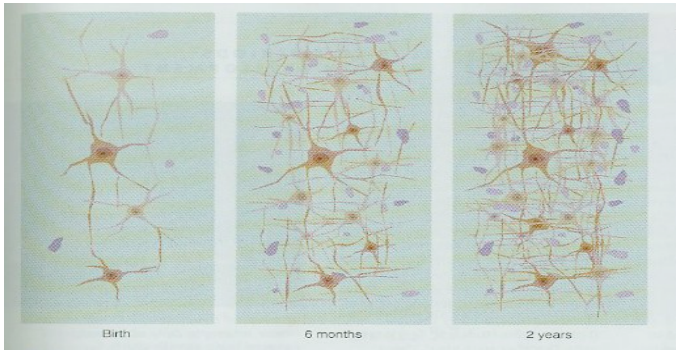
- Different parts of the body grow at different rates
- General growth curve
  - Rapid during infancy
  - Slower during early and middle childhood
  - Rapid in adolescence

Body Growth


2 months
5 months
Newborn
2 years
6 years
12 years
25 years
Prenatal age

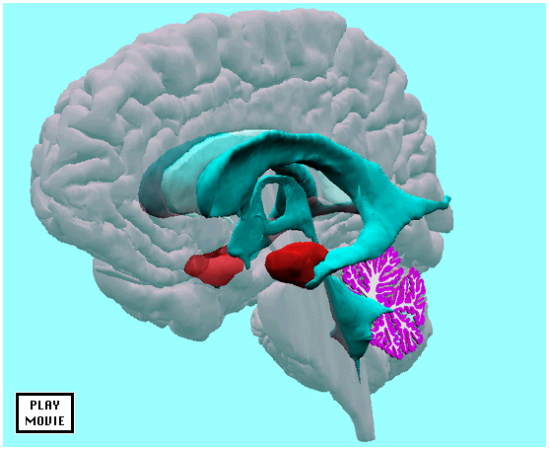
Brain Development

- Neural fibers continue to form synapses and myelinate
- Over-produced synapses are pruned
- Plasticity of the brain is reduced



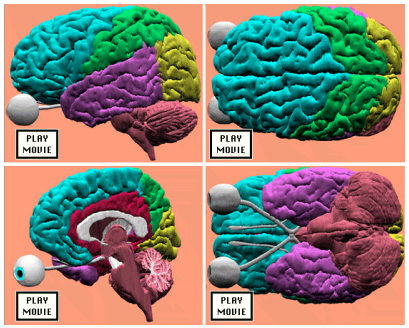
Brain Development

- Left hemisphere grows more rapidly than right due to language development
- Hand preference is fairly stable by 2
- Handedness indicates dominant hemisphere

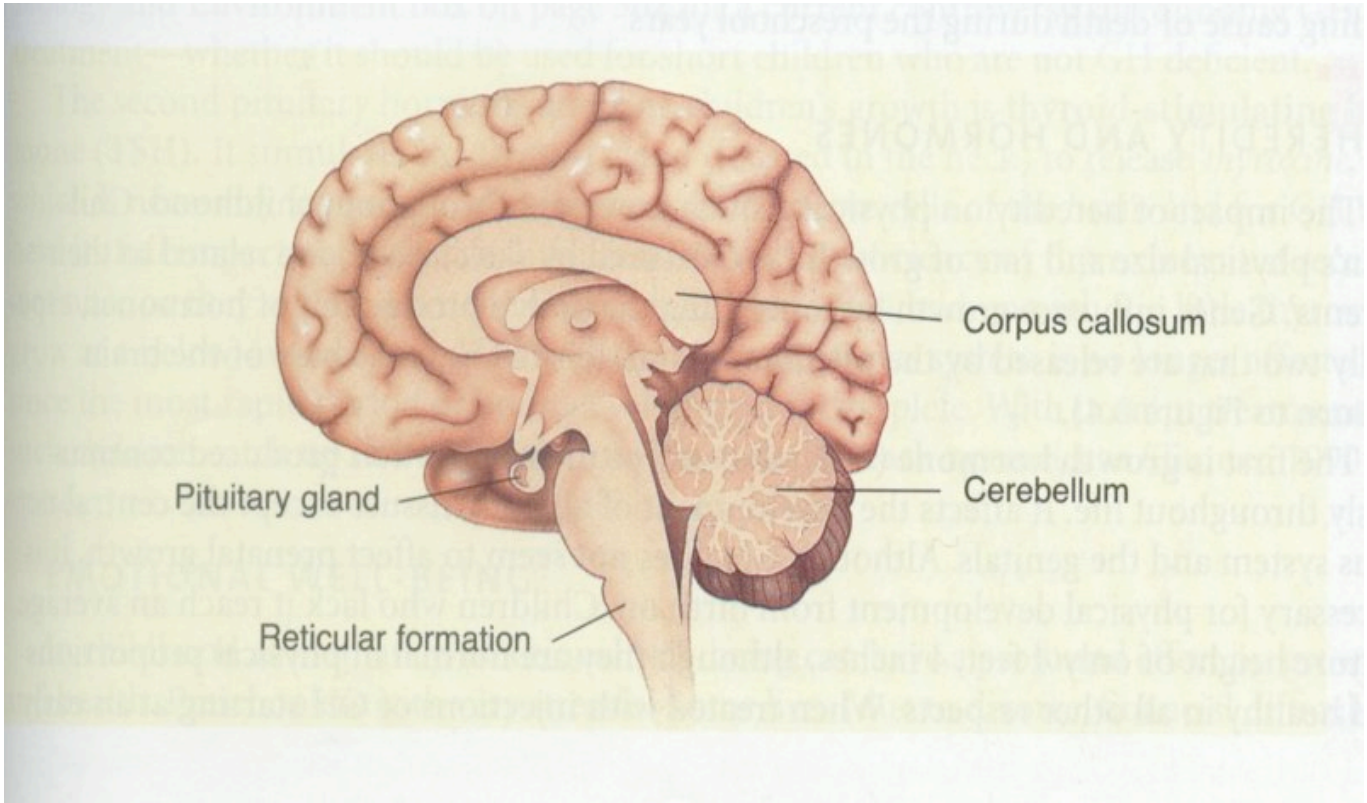


Brain Development

- Fibers linking the cerebellum and cerebral cortex myelinate
- Reticular formation – responsible for alertness and consciousness
  - and
- Corpus callosum connecting two hemispheres myelinate rapidly

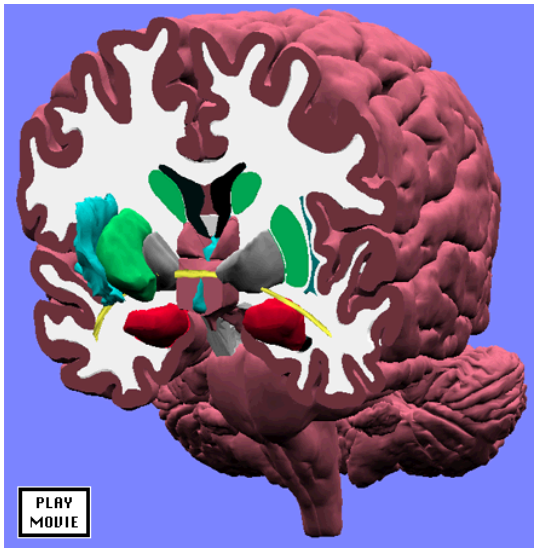


Brain Development



Factors affecting growth

- Hereditary control over pituitary growth hormones
- Emotional well-being continues to influence body growth



Factors affecting growth

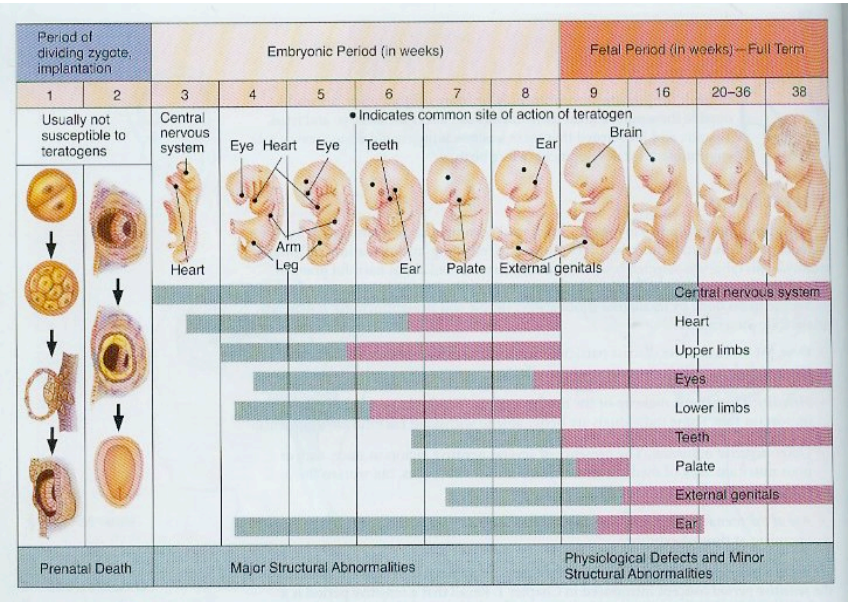
- Restful sleep
  - Body growth
  - Positive family functioning
- Bedtime routines are helpful
- Persistent sleep problems are often due to illness or family stress

Factors affecting growth

- Appetite declines due to slower growth rate
- Social environments have strong impact on food preferences

Factors affecting growth

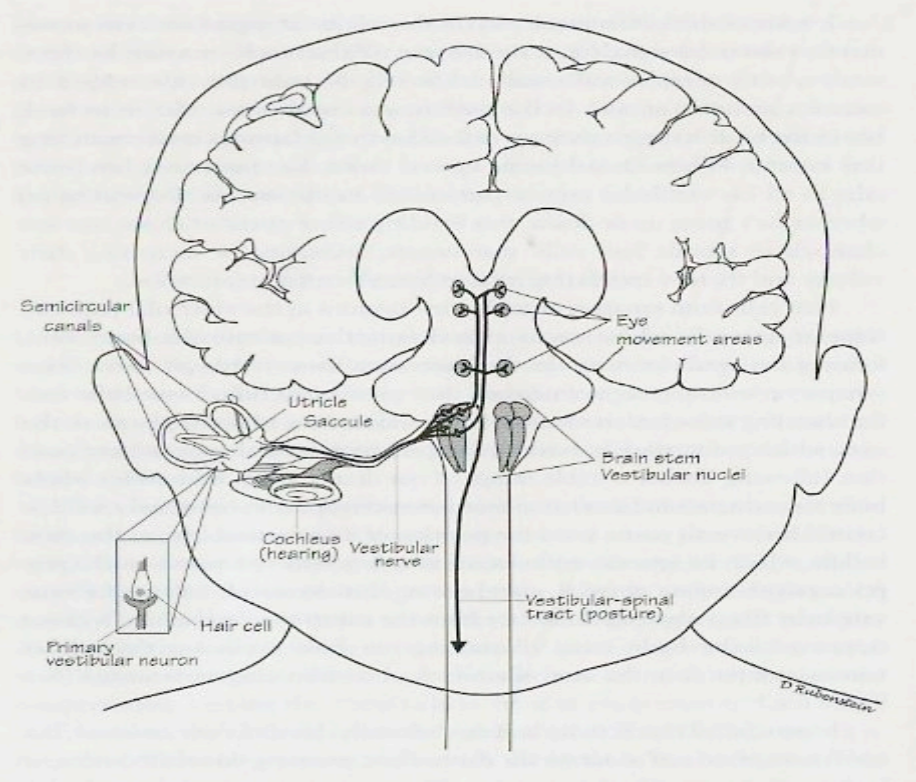
Malnutrition can combine with infectious diseases to undermine healthy growth



Factors affecting growth

- Childhood illness rises with day-care attendance.
- Middle ear infection (otitis media)
  - Delays language process
  - Interferes with socialization
  - Academic performance is less strong

Factors Affecting Growth



Factors affecting growth

- Childhood injuries should be prevented as much as possible
  - Family stress
  - Poverty
  - Teenage childbearing
  - Creating safer environments at home, travel, and play
  - Education parents

Motor Development

- Previously acquired skills are integrated into more complex actions
- Gait becomes smooth and rhythmic
- Running, jumping, hopping, and skipping appear

Motor Development

- Gains in control of hands and fingers lead to dramatic changes in fine motor skills
- Dressing and eating become more independent

Motor Development

- Scribbles change to pictures
- Drawings become more complex and realistic
- Begin printing letters and numbers followed by words

Motor Development

- Body build, ethnicity and sex influence motor skills
- Environment plays a role in girl/boy differences
- Play experiences are essential for skill mastery

Perceptual Development

- Brain maturation increases visual + motor skill
- Exposure to reading materials increases perceptual development

COGNITIVE DEVELOPMENT

- Piaget - thought
  - Egocentric and animistic thinking
    - Unaware of viewpoints other than their own
    - Inanimate objects have thoughts,feelings and intentions like they do

COGNITIVE DEVELOPMENT

- Now – we know
  - When we use objects they are familiar with – not egocentric
  - Adapt their speech to their listeners
  - Adjust their descriptions to take context into account
  - **Do** think rocks, clouds, etc are alive – due to incomplete information not animistic thinking
  - Believe in magic as a way to explain things they don't understand

COGNITIVE DEVELOPMENT

- Piaget thought
  - Unable to conserve

- Now we know – it's true
  - Their understanding is centered on one aspect of a situation while neglecting others
  - Easily distracted by appearances
  - Cannot connect the beginning and end results

COGNITIVE DEVELOPMENT

- Piaget thought
  - They use transductive reasoning- particular to particular – often incorrectly linking occurrences and drawing wrong conclusions
- Now we know
  - They do better if we give examples from their real world. They can
    - Notice changes
    - Reverse their thinking
    - Understand cause and effect in familiar situations

COGNITIVE DEVELOPMENT

- **Piaget thought**
  - Lack of hierarchical classification
    - They tended to center on the over-all feature of one group and couldn't generalize

- **Now we know**
  - Their everyday knowledge is nested into categories
  - By age 2, they have strong awareness of daily categories
  - Over preschool years can do complex categorizing aided by their language

COGNITIVE DEVELOPMENT

- Piaget thought
  - They had trouble with appearance versus reality

- Now we know
  - They need familiar situations

    with simple vocabulary to maximize more complex connections

COGNITIVE DEVELOPMENT

- Vygotsky – now we know
  - Scaffolding (Zone of Proxymal Development) stretches children's cognition and language

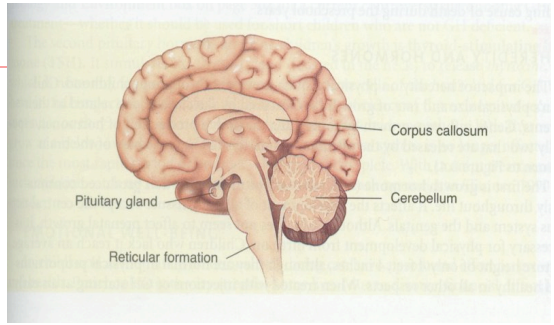
  - Not egocentric but private speech

COGNITIVE DEVELOPMENT

- Vygotsky – now we know
  - Private speech - Helps them talk their way through situations
  - It increases their attention and reasoning
  - Make-believe play fosters cognitive development – social rules and internal ideas
  - Preschoolers who think about pretend world are more flexible

COGNITIVE DEVELOPMENT

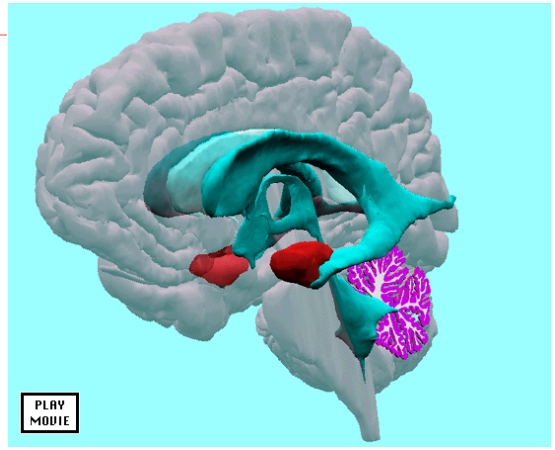
- Information processing



  - Attention gradually becomes more sustained and planful during early childhood
  - Recognition memory is remarkably good
  - Memory strategies are weak so have trouble remembering lists

COGNITIVE DEVELOPMENT

- Information processing



  - Memory for everyday experiences is well developed
  - Remember familiar experiences in terms of scripts that become more elaborate with age
  - Begin thinking about thought (metacognition)

COGNITIVE DEVELOPMENT

- Information processing
  - They understand a great deal about written language long before they can read and write

- Experience and scaffolding helps them to refine their awareness of written language

COGNITIVE DEVELOPMENT

- Information processing
  - Toddlers know *ordinal* numbers

    3 > 2 and 2 > 1

  - Preschoolers grasp *cardinal* numbers – the last number in a counting sequence indicates the amount of items in a set

COGNITIVE DEVELOPMENT

- Language development
  - Children's vocabulary grows rapidly during preschool years
  - Figure out meaning of new words by contrasting them with words they know

COGNITIVE DEVELOPMENT

- Language Development
  - Look to adults behavior to figure out meanings of new words
  - With sufficient vocabulary, begin coining new words and creating metaphors

COGNITIVE DEVELOPMENT

- Language Development
  - 2-3 Basic word order of their language is developed
  - 5-6 Grammar rules have been acquired

COGNITIVE DEVELOPMENT

- Language Development
  - Children appear to have a language capacity that supports the discovery of grammatical regularities
  - Practical language (pragmatics) emerge by age 4 with child adjusting speech to audience

COGNITIVE DEVELOPMENT

- Language Development
  - Conversational give and take with more skilled speaker fosters preschool language skills
  - Need a language rich environment

EMOTIONAL/SOCIAL DEVELOPMENT

- Erickson
  - Initiative versus Guilt
  - Need opportunities for successful choices

EMOTIONAL/SOCIAL DEVELOPMENT

- Self Development
  - Self-concept
    - Observable characteristics
    - Typical beliefs, emotions and attitudes

EMOTIONAL/SOCIAL DEVELOPMENT

- Emotional
  - 2-3 Have an understanding of causes, consequences and behavioral signs of basic emotional reactions
  - 3-4 Aware of strategies that assist with emotional regulation

EMOTIONAL/SOCIAL DEVELOPMENT

- Handling negative emotions
  - Temperament
  - Adult modeling
  - Conversations about feelings

EMOTIONAL/SOCIAL DEVELOPMENT

- Peer Relations
  - Interactive play increases
    - Nonsocial activity
    - Parallel play
    - Associative
    - Cooperative
  - Solitary and parallel remain throughout preschool for many children

EMOTIONAL/SOCIAL DEVELOPMENT

- Peer Relations
  - Friendship is seen on concrete, activity-based terms
  - Interactions with friends are positive and cooperative
  - Adults offer informal play activities and offer advice, guidance and examples

EMOTIONAL/SOCIAL DEVELOPMENT

- Foundations of Morality
  - Discipline based on fear of punishment DOES NOT foster conscience development

  - Reinforcement and modeling are basis for moral action

EMOTIONAL/SOCIAL DEVELOPMENT

- Foundations of Morality
  - Age 4 – Distinguish between truthfulness and lying

  - Peer interaction allows opportunity to work out ideas about justice and fairness

EMOTIONAL/SOCIAL DEVELOPMENT

- Foundations of Morality
  - All children will demonstrate aggression at some time
    - Overt – more common on boys
    - Relational – more common in girls

  - Ineffective discipline and conflict-ridden atmosphere promote and sustain aggression

EMOTIONAL/SOCIAL DEVELOPMENT

- Foundations of Morality
  - Televised violence promotes aggression
  - Young children's limited understanding of TV increases their acceptance and imitation of what they see

EMOTIONAL/SOCIAL DEVELOPMENT

- Gender Typing
  - Gender types are more like over=riding rules than flexible guidelines

  - Higher activity and overt aggression in boys is linked to gender typing

EMOTIONAL/SOCIAL DEVELOPMENT

- Child Rearing
  - Authoritative
    - Demanding and responsive
    - Promotes cognitive, emotional and social competence
    - Caring concern, explanations and reasonable demands account for its effectiveness

EMOTIONAL/SOCIAL DEVELOPMENT

- Child Rearing
  - Authoritarian – high demands, low responsiveness = anxious, withdrawn behavior
  - Permissive – responsive but undemanding = poor self control and achievement
  - Uninvolved – low demands and low responsiveness = disrupts all aspects of development