

# PHYSICAL DEVELOPMENT

Chapter 3

# BODY GROWTH

## General Growth Curve

- Represents overall changes in body size
- Rapid (infancy/toddlerhood) slow (early childhood) slow (middle childhood) rapid (adolescence)

Each year 2-3 inches added per year

5-7 lbs added each year

Weight is increasing, but child looks thinner

# BRAIN DEVELOPMENT

Growth continues at slower pace

Corpus callosum – band of nerves that separate the two sides of the brain. Allows the two sides of the brain to communicate to each other.

Hippocampus (earliest memory around age 3)

- Autobiographical memory
- Infantile amnesia

Cerebellum – has to do with motor coordination/development

Cerebral cortex – When baby is born it is the least developed part of the brain.

- Left side grows dramatically from 3 to 6 yrs (preschool age) 1 area that is located in the left side of the brain is the language development area. We would expect to see big gains in language development at this time
- Right side growing slowly (growth spurt around elementary school age)

# MOTOR DEVELOPMENT (CEREBELLUM)

## Gross

- Less top heavy child = better balance
- Steady feet lead to arm dependent skills (i.e. throwing/catching a ball)
- Not ready for organized sports (3 year old physically not ready, they are getting a social gain)

## Fine

- Improvement seen in self-help skills (feeding themselves –using utensils not fingers, brushing their teeth, dressing themselves – buttons/snaps)
- Shoe tying around age 6 (Velcro)
  - Daughter got a hat and get to put a feather in cap if they know how to tie shoes
- Scribbles lead to shapes and pictures
- Able to draw a person by 3 or 4

# HANDEDNESS

Hand preference stable by 3 years

Handiness is shown in the womb

- Babies lay on one side or the other; most babies positioned in the womb lay on their left side; the side that gets to punch and kick is the right side. The side you get to use is the side you'll favor.
- 85% of people are right handed
- 12% of people left handed
  - More left handed presidents
  - More of the people on the fortune 500
  - Higher risk of schizophrenia/mental disorders

Dominant cerebral hemisphere

- Right handed = left dominant
- Left handed = right or mixed dominant (level of lateralization)

# HANDEDNESS

## Mix handed

- You have a set of activities you do with your right hand and a set of activities you do with your left hand
  - When you eat you eat with your right hand but bowl with your left hand
  - Divided fine motor vs gross motor

## Ambidextrous (<1% of people)

- Everything you can do with your left hand you can do just as well with your right hand.

# DIFFERENCES IN MOTOR SKILLS

## Body build

- Preschooler carrying a lot of extra weight will struggle more doing motor activities because they are carrying too much weight

## Ethnicity

- African American children tend to have longer extremities; better force and power in certain sports

## Gender

- Boys are better at things that require force and speed; Girls are better at things that require balance

## Opportunity for physical play

## Social expectations may exaggerate differences

- Tend to have ideas about what certain children should be doing particularly based on gender.

# HEALTH & WELLNESS

## Nutrition

- Under nutrition = 17% of children in US
  - Obesity – 12% of US preschoolers
    - Eat dinner as family
    - Adequate sleep
    - Less than 2 hours of TV/day
- } Lowers the risk of obesity



# INFLUENCES ON HEALTH

SES – Socioeconomic Status

Race/Ethnicity

- More minority children have more health issues

Homelessness

Environment

- Flint MI lead in the water
- Pollutants in the air

# SLEEP ISSUES

## Going to sleep

- Avoiding
- May need parent to stay with them to fall asleep

## Staying asleep

- Night terrors
  - The child doesn't wakeup; no plot – its not a dream
- Walking or talking in sleep
- Nightmares
  - Bad dreams; child wakes up
- Bed wetting (more common in boys)

# ACCIDENTS

Major cause of death for toddlers and preschoolers

Car accidents, fire and drownings – leading types of accidents

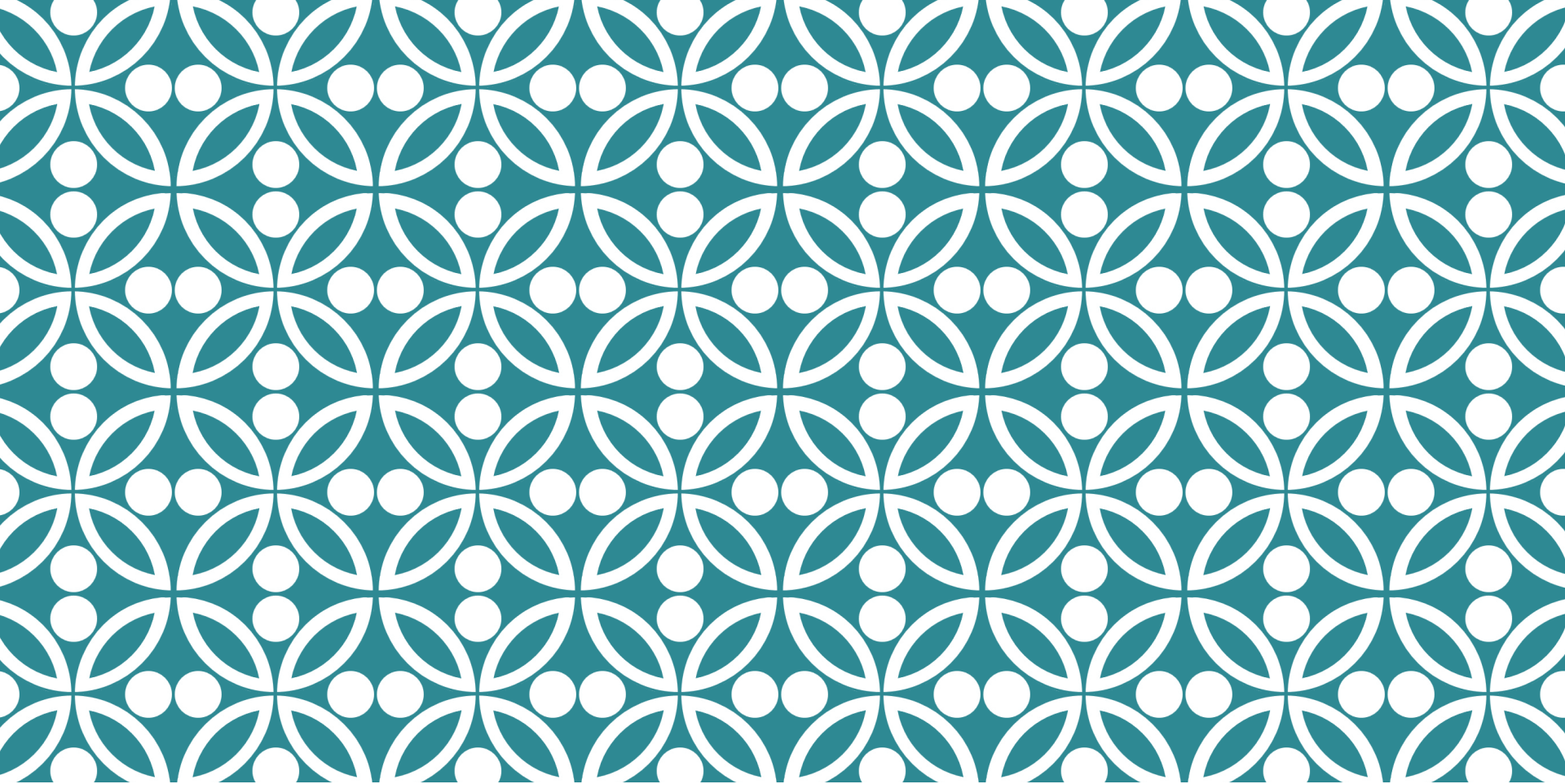
Most occur at home

- If its some other type of accident i.e. fall

Boys more likely to be injured

4'9" ~age 9 before no longer requiring a booster seat

Car seats expire after 7 years



# COGNITIVE DEVELOPMENT

Chapter 4

# PIAGET'S PREOPERATIONAL STAGE

Symbolic function = mental representations

- 1 object can stand for/represent another object
- Deferred imitation
- Pretend play
- Language skills

# CHARACTERISTICS OF PREOPERATIONAL THOUGHT

## Egocentrism

- Childs feels/thinks the whole rest of the world feels/thinks like they do.
  - If I have this experience and it make me sad it must make everyone sad. There are no other points of view. Their experience of it must be everyone else's
  - Teacher example: Baby sitting tennis coach – French fries

## Conservation

- Skill they don't have. You recognize you can change the appearance of something without changing its quantity
  - Piaget would set out 2 glasses of water and fill them equally ask the children which glass has more water? Children would answer they are the same. In front of the child he would take one of the glasses of water and pour it in a bowl and ask them now which one has more water? They would answer the glass because its taller.
  - Six pennies in a row evenly spaced out; which row has more? Children would respond they're the same. Take the row and push them together, and ask them which has more? The one that is spaced out more. Changing in appearance doesn't mean a change in quantity

## Centration

- Focused on 1 aspect of a situation they might neglect other aspect that are contradicting
  - Show them a picture of a boy standing with a grin on a face and next to him is a broken bicycle. Ask younger children about it, they'll focus on the bicycle and say he's sad.

## Animism

- Give life like characteristics to things that are not alive
  - Leaves are chasing them
  - Car is sick

# BENEFITS OF PRETEND PLAY

Graduate from parallel play (when 2 kids are playing next to each other but they're doing their own thing) to cooperative play (kids are playing together with a shared purpose)

## Pretend activities

- Last longer
- Show more involvement
- Draw larger crowd
- Move cooperation

## Advanced general intellect

- Smarter

## More socially competent

# LANGUAGE DEVELOPMENT

## Vocabulary

1000 words at 3; 2600 at 6

## Fast mapping

- Childs ability to learn a word its meaning and how to use it just by hearing it in conversation maybe once maybe twice
  - i.e. Mom ask Dad are you thirsty? Dad says yes get me a beer. Child: I've never heard that word before beer. Mom said are you thirsty, I know what thirsty is, so beer must be something you drink, see dad drinks it. Mom says at dinner what do you want to drink, and child says beer.



# GRAMMAR AND SYNTAX

Subject – verb – object word order

## Inflections

- Endings on words
- 1<sup>st</sup> one you'll hear is –ing then “s”

## Questions

### Over regularization

- Children have learned the rules of words
- i.e. flowers, if done in the past/yesterday add –ed to make it past tense. They haven't learned there are exceptions to the rule: mouse and a mouse is mice but for them its going to be mouses. Sit and you did it yesterday did you sitted?

### Complex sentences

- Connecting two different sentences with a conjunction
- i.e. We went to the store **but** we couldn't find the milk

# SPEECH STYLES

## Private speech

- Speech not intended to be responded to by somebody else

## Social speech

- Opposite of private speech

## Pragmatics – Practical

- How to carry on a conversation
- Children with autism have trouble with pragmatics
- Face to face interactions
  - Take turns
  - Respond appropriately to others' remarks
  - Maintain topic over time

# SPEECH AND LANGUAGE DELAYS

More common in boys

May be linked to cognitive delays

- Developmentally delayed

May be linked to physical condition

- Lingual frenulum too tight (tongue tied) child can't suck
- Ear infection; not hearing the sound correctly so they are not saying the sound correctly

Not a function of bilingualism

Speech – Sounds and being able to produce the sounds to make the word

Language – getting the words out in the right order and responding correctly

# EARLY CHILDHOOD LITERACY

Emergent literacy – pre-reading skills

Phonological awareness

- Understanding of sound patterns
  - In preschool years should be learning letters and that each letter has a sound
- Knowledge of system of representing sounds with letters

# NUMBER SKILLS

## Math is universal

- Should be easier to learn than things like reading because no matter what language you say 2 it's going to be 2

## By preschool age children know:

- One-to-one principle
  - If your counting stuff each one gets a name. Can't call this one 3 and 7 it gets 1 name.
- Stable order principle
  - Number names go in the same order 1 is always before 2; 2 is always before 7; they know numbers go in a order
- Cardinality principle
  - Knowing when they are counting a group of objects that the last number they say tells you how many there are. Counting fingers 1,2,3,4,5 last number is 5 there are 5 fingers.

# EDUCATION

## Preschool programs

- Child initiated (aka Montessori)
  - There are education goals that need to be met but the way the child reaches those goals is up to that child (lots of choices) i.e. We're going to learn our letters today but it's up to you how you want to learn: learn your letters by playing with this toy, or on the computer; or writing them on this paper
- Academically directed
  - We have academic goal but teacher sets out how we're going to learn those. No choice.
- Blend

## Child care programs

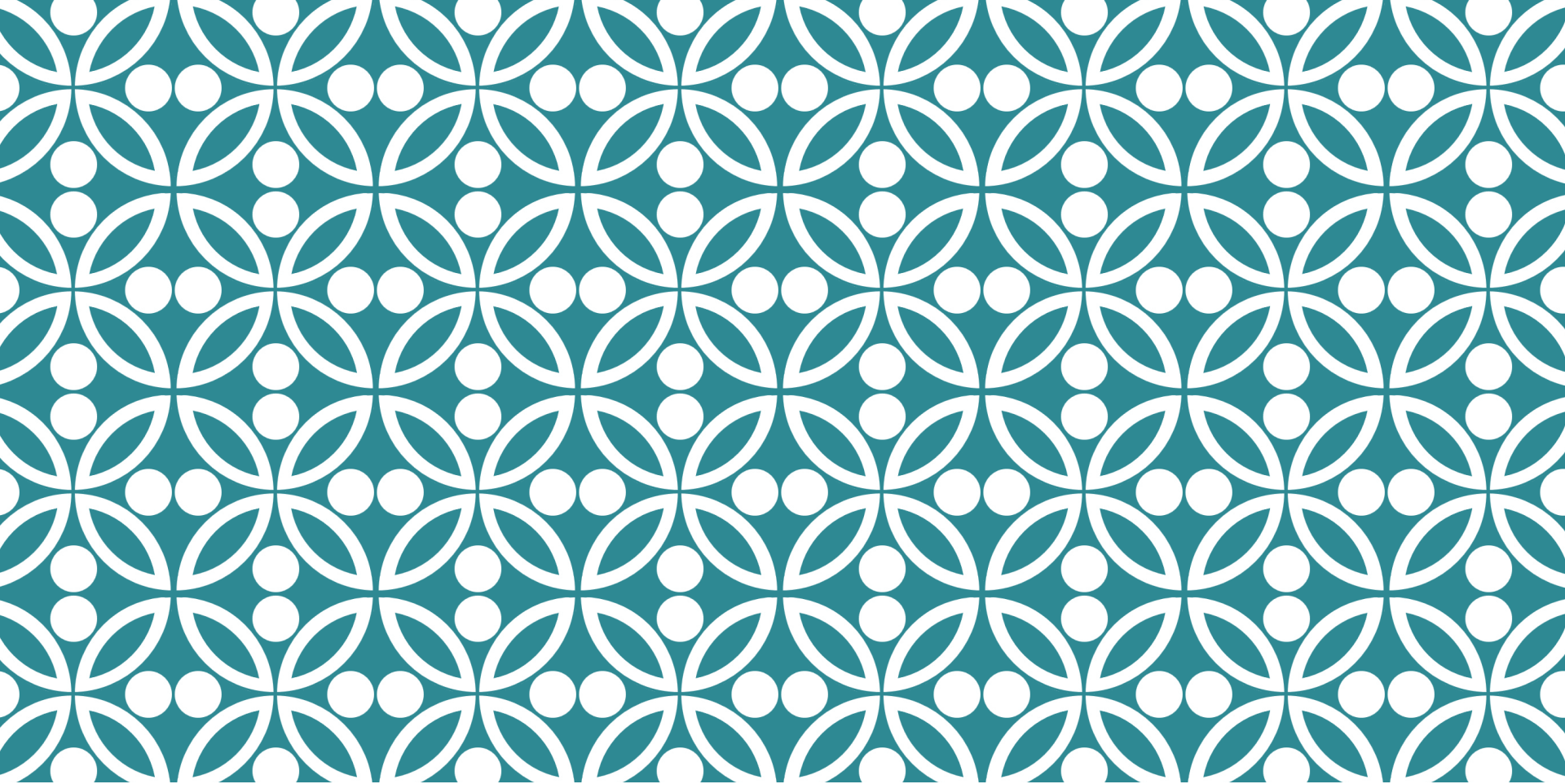
- Not necessarily academic based, like daycare.

## Project Head Start

- Government funded program for kids who are from lower SE backgrounds
- Early intervention program for at risk kids

## Educational Television

- We know most about Sesame Street
- Children who get to watch hour of Sesame Street per day that academically they keep up as well as if their parent hired a tutor for them



# SOCIAL DEVELOPMENT

Chapter 5

# DEVELOPMENT OF SELF

## Self-concept – sense of self; total package

- Attributes, abilities, attitudes, and values

## Self-definition – describing self

- Concrete terms (looks i.e I have brown hair, possessions i.e. I have blue shoes)
- Beliefs and emotions are added after 3 i.e. I like frogs

## Unrealistically positive

- They won't tell you things they do that are not so positive; they're not including any negatives
- They have very high regard for themselves



# SELF-ESTEEM

## Aspect of Self-concept

Self-Esteem is Judgments about own worth and feeling associated with judgments

## Erikson

- Initiative vs. Guilt
  - Initiative – Being able to start something, follow something through on their own
    - Important to give opportunities to be successful it will help grow their self esteem
  - If they have a bunch of unsuccessful opportunities or they can't figure things out on their own they may start to feel guilty
    - Example: Kid wants a toy always gets to preschool at a certain time and the 1<sup>st</sup> thing he goes to play with is the red fire truck. One day they get there late and he gets there and someone else has the red fire truck. He's standing there oh this is not going to make my day go well I need my red fire truck but somebody else is playing with it. Initiative – Erikson would say he's got to come up with a way that is going to be successful to get what he needs/wants that red fire truck.

# GENDER

## Gender Identity

- Recognition of yourself as Male or Female

## Gender Roles

- What is appropriate based on your gender
- Gender Stereotypes

## Gender Socialization

- Process by which kids learn about these gender roles and they learn this is associated with women this is associated with men
  - Freud his stage during this time is called phallic stage. According to Freud this stage is all about the penis and we only count the penis because according to Freud the vagina didn't matter all women want to be men. He said during this stage what kids are learning how to do is learn those roles that are appropriate for their gender.

## Gender Constancy

# EMOTIONAL SELF-REGULATION

Understanding own emotions can lead to:

- Fewer tantrums/outbursts
  - Understand triggers
- Identify the emotions of others
- Empathy
  - Feel what the other person is feeling
- Prosocial behavior
  - Helping behavior; Nice behavior
- Altruism
  - Higher form of prosocial behavior
  - When you help another person with no expectation of anything coming out of it for you

Social environment has a big influence

# RELATIONSHIPS — PARENTS

## Disciplinary Encounters

- Reinforcement
  - Rewarding
- Punishment
  - Taking something away or giving something aversive for behavior
- Inductive techniques (Reasoning)
- Power assertion
  - Parent throws their weight I AM THE PARENT
- Withdrawal of love
  - Excluding a child i.e I'm not going to give you a hug

# PARENTING STYLES

## Authoritarian (more favored)

- High on control low on nurturing
- Set out the rules and you don't deviate from them

## Permissive

- No expectation or control

## Authoritative (more favored)

- Blend there's expectation but lots of nurturing and negotiating and things are more decided together between parent and child

## Uninvolved

- Doesn't give a lot of love and doesn't have a lot of expectations

## Ethnic, cultural and SES differences exist

- Lower SES use Authoritarian

# PEER RELATIONSHIPS - AGGRESSION

Function of frustration

Related to development of language skills

- Not able to express themselves because they can't say I don't like what your doing

Instrumental vs. hostile aggression

- Instrumental aggression occurs because you want something that another person has. You have the toy that I want so I push you down.
- Hostile Aggression being mean just to be mean

Overt (boys) vs. relational (girls) aggression