

## Chapter 9, 10

Middle Childhood: 6-11 years old

### PIAGET'S THEORY: CONCRETE OPERATIONAL STAGE

- ✱ 7 to 11 years
  - Thought is more logical, flexible, and organized.
- ✱ Conservation
  - ✱ Clear evidence of operations
    - ✱ Mental actions that obey logical rules
- ✱ Hierarchical classification
  - ✱ Group objects into hierarchies
  - ✱ Collections common
- ✱ Seriation
  - ✱ Order items by dimension
  - ✱ Sorting smallest to largest

#### **Research on Concrete Operational Thought**

- ✱ To master conservation etc., must take part in activities that promote thinking.
- ✱ School promotes practice and mastery of these tasks.
- ✱ Stage is not consistent across cultures.

#### **Memory Strategies**

Deliberate mental activities to store and retain information

- ✱ Rehearsal
  - ✱ Repeating information over and over again
- ✱ Organization
  - ✱ Grouping together related items
- ✱ Elaboration
  - ✱ Creating a relation between two or more items

#### **Culture and Memory Strategies**

- ✱ Non-Western cultures with no formal schooling do not use same type of memory strategies.
- ✱ Western children use specific memory strategies, but do not refine other techniques
- ✱ Memory strategies are a product of demands and culture.

#### **Learning Styles**

- ✱ Auditory-Sequential Learner
  - ✱ Step-by-Step
  - ✱ Trail and Error

- Attends well to detail
- Excels at rote memorization
- Excellent short-term memory
- Comfortable with one right answer
- Visual-Spatial Learner
  - Whole-part learner
  - Concepts all at once
  - Sees big picture, may miss detail
  - Learns by seeing relationship
  - Excellent long-term memory
  - Generates unusual solutions to problems

### **Learning Styles and Piaget**

- Research, Jane Williams, 1992
- Published in “Journal of Genetic Psychology”
- 3 groups of children
  - Normal achieving children
  - Auditory-linguistic learning disabled
  - Visual-spatial learning disabled
- Piagetian tasks
  - Conservation
  - Seriation
  - Classification

### **Research Results**

- Auditory-linguistic LD group
  - Significantly below normal on operativity
  - Fewer were at a concrete operational level on conservation of length tasks
- Visual-Spatial LD group
  - Did not differ from norm
- Conclusion:
  - Auditory-linguistic disability may be more detrimental than visual-spatial disability to development.

### **Application to Academic Learning**

#### Reading

- Basic-skills approach
  - Phonics
    - Rules for translating written symbols into sounds.
    - Better for an Auditory-Sequential Learner
  - Whole-language approach
    - Parallels children's natural language
    - Better for a Visual-Spatial Learner

- \* Phonics is the most often used approach
- \* Neither approach has been proven superior; some believe a mixture is best.

## Mathematics

- \* Rote memorization
  - Better for an Auditory-Sequential Learner
  - Not good for a Visual-Spatial Learner
- \* Understand multiplication as repeated addition
- \* School may not make use of children's grasp of number concepts.
- \* Blend of drill and conceptual understanding works best.

## Learning Disabilities

- \* Developmental speech and language disorders
- \* Academic skills disorders

## Developmental speech and language disorders

- \* Articulation disorder
- \* Expressive language disorder
- \* Receptive language disorder

## Speech and Language Disorders

- \* Articulation disorder
  - \* Trouble controlling rate of speech.
  - \* "wabbit" for "rabbit", "thwim" for "swim"
  - \* 10% of children younger than age 8.
  - \* Outgrown/Speech therapy.
- \* Expressive language disorder
  - \* Problems expressing themselves.
  - \* Calls objects by wrong names OR
  - \* Can not answer simple questions OR
  - \* May use only few-word phrases.
- \* Receptive Language Disorder
  - \* Trouble understanding certain aspects of speech. (Brain is on a different frequency or reception is poor.)
  - \* Child may hand you a ball when you ask for a bell.
  - \* Can not follow simple directions.
  - \* Hearing is fine, but can't make sense of certain sounds, words or sentences.
  - \* Seem inattentive.
  - \* Often, also have expressive language disability.

## Academic skills disorders

- \* Dyslexia
- \* Dyscalculia
- \* Dysgraphia

### **Reading a Sentence**

- ✱ Focus attention on the printed marks and control eye movements across the page
- ✱ Recognize the sounds associated with letters
- ✱ Understand words and grammar
- ✱ Build ideas and images
- ✱ Compare new ideas to what you already know
- ✱ Store ideas in memory

### **Dyslexia – Language Based**

- ✱ Child may have problems understanding words, sentences or paragraphs.
- ✱ Both written and oral language may be affected.
- ✱ For school age-children
  - ✱ Auditory-linguistic
    - Inability learn the relationships between visual appearances and sounds of letters and words.
  - ✱ Visual-Spatial
    - Unable to learn the spatial and visual requirements necessary for acquiring reading skills.
- ✱ Males and Females Equally

### **Dyscalculia – Math Based**

- ✱ Normal or accelerated language acquisition
- ✱ Difficulty with abstract concepts of time and direction.
- ✱ Inability to grasp and remember
  - ✱ Math concepts
  - ✱ Rules
  - ✱ Formulas
  - ✱ Sequence
  - ✱ Basic math
- ✱ Poor long-term memory
- ✱ Poor memory for formal music education
- ✱ Difficulty keeping score during games

### **Dysgraphia**

- ✱ Causes writing to be distorted or incorrect.
- ✱ Children, even after instruction and and practice produce inappropriately sized and spaced letters
- ✱ Write wrong or misspelled words, such as writing “boy” when they mean “child”

### **Potential Causes**

- ✱ Genetic – Family history
- ✱ Brain damage during development, prior to birth

- ✱ Low Birth Weight /Premature
  - ✱ 61 percent of pre-term children experience either low achievement or special needs in school as compared to 23% of full-term children.
  - ✱ Elevated risk of language and cognitive delays.
  - ✱ Brain hemorrhage
- ✱ Illness after birth (chronic ear infections)

### **Living with a learning disorder**

- ✱ Experience Social & Emotion Problems
  - ✱ Teased by peers
  - ✱ Considered “dumb” by classmates and teachers
  - ✱ May be punished for being “lazy” by parents.
- ✱ Low Self-Esteem

### **Behavior Disorders**

#### **Attention**

- ✱ Attention more selective, adaptable, and planned
- ✱ Flexibly adjust attention
- ✱ Scan details for similarities and differences more thoroughly
- ✱ Make decisions in an orderly fashion
- ✱ Learning and behavior problems can be ADHD.

#### **Attention Deficit Hyperactivity Disorder**

- ✱ Unable to sit still
- ✱ Unable to plan ahead
- ✱ Unable to finish tasks
- ✱ Not fully aware of what’s going on around them
- ✱ 3-5% of all children
- ✱ More boys than girls 3:1 ratio

#### **Attention Deficit Hyperactivity Disorder**

- ✱ Closer look at symptom
- ✱ Who diagnoses?
- ✱ An American Disorder?
- ✱ What about Drugs?

#### **Oppositional Defiant Disorder (ODD)**

- ✱ often loses temper;
- ✱ often argues with adults;
- ✱ often actively defies or refuses to comply with adult requests or rules;
- ✱ often deliberately annoys people;
- ✱ often blames others for mistakes or misbehavior;
- ✱ is often touchy or easily annoyed by others;
- ✱ is often angry and resentful;
- ✱ is often spiteful and vindictive;
- ✱ Often co-occurs with ADHD (why?)

## **Conduct Disorder (CD)**

- ✱ Aggressive behavior that causes or threatens to cause harm;
- ✱ Non-aggressive conduct that causes property loss or damage;
- ✱ Deceitfulness or theft;
- ✱ Serious violation of rules;

## **SELF-DEVELOPMENT**

- ✱ Changes in Self-Concept
  - ✱ More refined self-concept
  - ✱ Social comparisons are made.
  - ✱ Cognitive development affects the structure of the self.
  - ✱ Well-organized self emerges.  
(Margaret Mead)
  - ✱ Children are better at reading others.
  - ✱ Peer influence increases.

## **Development of Self-Esteem**

- ✱ Hierarchically Structured
  - Contexts of evaluation
    - Classrooms, playgrounds, and peer groups
    - Age 6 to 7, three self-esteems—academic, social, and physical
- ✱ Changes in Level of Self-Esteem
  - ✱ Drops in first years of elementary school.
    - ✱ Why?
  - ✱ More realistic self-appraisal.
  - ✱ From fourth to sixth grade, self-esteem rises.

## **Influences on Self-Esteem**

- ✱ Children with high social self-esteem are better liked by peers.
- ✱ Academic self-esteem predicts school achievement.
- ✱ Culture
  - ✱ Japanese/Taiwanese children place more emphasis on social comparison.
- ✱ Child-Rearing Practices
  - ✱ Authoritative child-rearing style leads to self-esteem.
    - Warm, positive parenting
    - Firm but appropriate expectations

## **Making Achievement-Related Attributions**

- ✱ Attributions
  - ✱ Common explanations of behavior
- ✱ Mastery-oriented attributions
  - ✱ Success credited to ability
  - ✱ Failure to factors that can be changed
- ✱ Learned helplessness
  - ✱ Success credited to luck and failure to low ability.
  - ✱ Belief that ability is not changeable

- \* Giving up on difficult tasks

### **Influences on Achievement**

- \* Related Attributions
  - \* Learned-helpless have parents with high standards.
  - \* Positive teachers evoke more work.
  - \* Girls more than boys blame ability for failure.

### **EMOTIONAL DEVELOPMENT**

- \* Explain emotion by making reference to internal states.
- \* By age 8, realize they can experience more than one emotion at a time
  - \* Take more information into account in detecting emotions of others.
- \* Understanding is supported by cognitive development and social experiences.

#### Emotional Self-Regulation

- \* By age 10, strategies for managing emotions
- \* Emotionally well-regulated children are
  - \* Upbeat in mood
  - \* Empathic and prosocial
  - \* Liked by their peers.

### **GENDER STEREOTYPING**

- \* Gender-Stereotyped Beliefs
  - \* Girls
    - \* Reading, art, and music
  - \* Boys
    - \* Math, athletics, and mechanical skills
  - \* Tolerance for girls' violations of gender roles, but not boys'

### **Gender Roles and Behavior third to sixth grade**

- \* Boys identify more strongly with the masculine role.
- \* Girls' feminine identification declines.

#### Cultural Influences on Gender Typing

- \* Girls are less likely to engage in "masculine" activities where gap between male and female roles is strong.
  - \* WHY?

- \* Boys who care for a younger sibling become less stereotyped.
  - \* WHY?

### **FAMILY INFLUENCES**

- \* Parent-Child Relationships
  - \* Amount of time with parents drops.
  - \* Reasoning improves.

- ✱ Coregulation
  - Parents exercise general oversight, permitting children to be in charge moment-by-moment.
- ✱ Children press for more independence.
  - But know they need parents' support

### **Siblings**

- ✱ Provide mutual support
- ✱ Rivalry due to parental comparisons
- ✱ Quarrel more when same sex and close in age
- ✱ Try to be different to reduce rivalry
- ✱ Oldest has IQ and achievement advantage
  - WHY?
- ✱ Younger more popular
  - WHY?

### **Only Children**

- ✱ Siblings are not essential for normal development.
- ✱ As well adjusted as other children
- ✱ Score higher in self-esteem and achievement motivation
  - WHY?