

Psychology and Human Development

Lecture 6.

Physical , Cognitive/language and Moral development in Pre-school years

1. Health and illness in pre-school children.
2. Piaget theory-cognitive development -Pre-operational thought .
3. Five stages of language development
4. Kolberg theory – moral development in pre-school children



PHYSICAL DEVELOPMENT IN THE PRESCHOOL YEARS

■ **Growing Body**

By age 2, 25 to 30 pounds and close to 36 inches tall

By 6 years old, about 46 pounds and 46 inches tall

Changes in Body Shape and Structure

- Bodies vary in height, weight, and shape
- Toddler fat burns off
- Internal physical changes occur

Nutrition: Eating the Right Foods

- Slower growth = less caloric requirements
- Children can maintain appropriate intake of food, if provided with nutritious meals
- Inappropriate encouragement to increase food intake beyond an appropriate level may cause obesity

Health and Illness *and Good nutrition*

- Providing a variety of foods, low in fat and high in nutritional and iron content. Allowing development of natural preferences
- 7 to 10 colds and other minor respiratory illnesses in each of years from age three to five
- Runny nose due to common cold is most frequent

Injury During the Preschool Years

- Accidents are greatest risk
- Danger of injuries— High levels of physical activity— Curiosity
- Falls
- Burns
- Drowning
- Suffocation
- Auto accidents
- Poisons

Cognitive development in pre-school years

Summary of the stages.

STAGE

CHARACTERIZATION

1. Sensorimotor
(birth–2 years)

Differentiates self from objects
Recognizes self as agent of action and begins to act intentionally: for example, pulls a string to set a mobile in motion or shakes a rattle to make a noise
Achieves object permanence: realizes that things continue to exist even when no longer present to the senses

2. Preoperational
(2–7 years)

Learns to use language and to represent objects by images and words
Thinking is still egocentric: has difficulty taking the viewpoint of others
Classifies objects by a single feature: for example, groups together all the red blocks regardless of shape or all the square blocks regardless of color

Preoperational Thought Period (2-7)

The main goals are to learn

- 1) Language and use symbols and mental representations of the world. (play with stuffed animals and dolls – friends, real – animism).

Is the sun sleeping?

Barbie wants to eat.



- 2) **See themselves as center of universe – egocentric – see the world from one perspective. (focus on their pleasures, pains, and desires)**

- 3) **Can group objects into classes according to similarities (showing good intuition but can't think back)**

Language development in pre-school years

A small number of individually meaningless symbols (sounds, letters, gestures) that can be combined according to agreed – on rules to produce an infinite number of messages (Shaffer, 1999)



4 key components of verbal language:

Phonology – study of HOW we produce meaningful SOUNDS

Semantics – our knowledge of word meanings and HOW we acquire VOCABULARY.

Syntax – grammar of our language and HOW we learn the RULES for combining words into meaningful sentences.

Pragmatics – the term to describe HOW we use language to achieve COMMUNICATIVE GOALS (to be polite, sarcastic, humorous)

5 stages of Language Development

- Preverbal communication
- Phonological development
- Semantic development
- Syntax and grammar development
- Pragmatics development

First, you develop an ability to create sounds (phonology).

Next, start to understand that the sounds have meanings (semantic development). Following on, start to put sounds together to form small sentences (syntax/grammar). Finally, much later you begin to understand that words can be used to different effect, (pragmatics)

Preverbal Component

- The infant begins to make movements when people draw near and starts to form different facial expressions (joy, sadness, surprise)

- **By 12 months**, he responds to others by making most of the sounds and movements and begins to control the length of interaction.

- He learns to communicate with others but is not ready to engage in verbal behavior.

- The main outlet for communication is the use of facial expressions to reveal emotions and reaching the objects.



Phonological development

(occurs alongside the preverbal stage and extends up to the 4th year of life)

- The child has to separate out the sounds he hears and learn to recite them and to allocate them meaning.
- When you speak to a child, he first hears a babble of sound. Then he acquires the ability to locate certain words within that babble – usually meaningful (mummy, daddy, lunch, sleep)

Semantic development (language acquisition)

- The child is learning to identify words from strings of sounds and is starting to make their own sounds
- He needs to learn the meaning of these sounds
- **First words at 10-13 months**: important people, familiar actions/objects;
- **By 18 months**, infants know app 22 words and then a 'naming explosion' occurs and they acquire 10-20 words per week;
- **By 6 years old** their vocabulary is app 10,000 words and learning rate is app 5 new words a day.

Whole-object constraint: (overextension)

When an adult points to something and names it, the child assumes the word applies to the whole object, not just part of it ('look at his tail!' / tail \square the whole animal)

Taxonomic constraint (under extension): the new word applies for the whole range of things, e.g. 'dog' applies to all things hairy with four legs.



Mutual-exclusivity constraint strategy.

Children are good at inferring the meaning of a word.

Ask them for the 'microscope' and they will always identify the object that they have no name for.

Syntactic boot-strapping:

This refers to the notion that children gain information about a word by how it is used in a sentence.

Children learn the meaning of verbs by being observers of the use of language and being encouraged to see the link between the words and an action.



Syntax and grammatical development.

- First sentences are spoken when we are **between 18 and 27 months**.
- The sentences convey meaning but have sparse grammatical structure. (telegraphic speech: Daddy read; me; you)
- **By 27-36 months** – rapid expansion in the use of grammar in speech. (3 words long) Then use modal verbs, not, grammar morphemes.
- **By 30-48 months** – free-flowing speech. They learn that sentences can be constructed in different ways to offer the same meaning.

Pragmatics development.

- Refers to the ability to identify a social situation and to use the language style considered appropriate in that situation.
- The child learns that some words sound the same but have different meanings and can use this humorous effect.
- Learns to use active and passive voice
- Reads a social situation.



Moral development in pre-school years

1. Development of reasoning and problem solving.
2. Kohlberg theory of Moral Development
 - a. Pre-conventional morality
(1-10)
 - b. Conventional morality
(10-16)
 - a. Post-conventional morality
(from 16)



Reasoning and Problem-solving

Reasoning – capacity for cognitively combining or reorganizing information to produce additional information: a conclusion or solution.

Problem-solving – when reasoning is used to reach a particular desired output.

Can children reason?

Yes

- Babies' exploration of their environment
- Using past knowledge in analogical ways to solve problems
- Can solve a problem:
 - a. There is a link to past knowledge
 - b. The problem is clearly understood
 - c. Does not overload working memory

No

- It's often weaker than that of adults: the younger the child, the poorer the knowledge about the problem.
- It's clear that knowledge has benefits for reasoning
- Increased knowledge is a key factor in the development of problem solving
- Can be improved by making children think more strategically and methodically

Moral Reasoning

The way a child reasons about right and wrong, his awareness of ethical behavior.

Cognitive processes by which individuals make decisions about moral issues and justify these decisions



Kohlberg's theory of Moral Development

Level I Preconventional

Morality

(children under 10)

Stage 1. Children are afraid of punishment and obey the rules.

Stage 2. Children want rewards and conform to rules.



LEVEL I: Preconventional
Morality

Stage 1 Punishment orientation
(Obeys rules to avoid
punishment)

Stage 2 Reward orientation
(Conforms to obtain re-
wards, to have favors re-
turned)

Seminar questions

1. Which are important things to know about health in pre-school years?
2. What are the main goals in pre-operational period of cognitive development?
3. What is the main outlet for communication at 12 months?
4. What is the major task for a child in phonological development?
5. How does a child learn the meaning of the sounds?
6. How many words can a child use at 12 / 18 months old and 6 years old?
7. How does a child learn syntax and grammar?
8. When can a child read a social situation?
9. Can children reason? Why?
10. How do children learn to behave according to social norms of a society during the first 10 years of life?