Quadrant II- Transcript and Related Materials

Programme: FYBA (Psychology)

Subject: Psychology

Paper Code: PSG 101

Paper Title: Child Psychology

Unit: 02

Module Name: Cognitive Development (Sensory Motor Development)
Module No: 11

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Notes:-

Cognitive Development: Sensory Motor Development

Arnold Gesell (1934) discovered that the infants and children develop rolling, sitting, standing and other motor skills in a fixed order and within a specific time frame. According to this observation, said Gesell, that the motor development comes about through the unfolding of a genetic plan, or maturation.

- **Infants**
- Baby a very young child that can neither walk nor talk.
- In an early stage of development: just the beginning.
- **Toddlers**

- Young child who is learning to walk.

Brain Development

The most dramatic changes in the brain in first 2 years of life are the spreading connections of dendrites to each other. (Neurons, Dendrites, Axon, Synapses).

- **Myelination or Myelinization**
- The process by which the axons are covered and insulated by layers of fat cells, begins prenatally and continues after birth.
- These process increases the speed at which the information travels through the nervous system.

Motor Development

❖ Infants and toddlers begin from reflexes, to gross motor skills and fine motor skills.

- **REFLEXES**
  - The new born has some basic reflexes for e.g. the newborn automatically holds its breath and contracts its throat to keep water out.
  - Reflexes are built in-reaction to stimuli; they govern the newborn's movements, which are automatic and beyond their controls.
  - Reflexes are genetically carried survival mechanisms.
  - They allow infants to respond adaptively to their environment before they have had an opportunity to learn.

- Many reflexes which are present at birth generally wane within a few months as the baby grows and matures.

❖ **Common Reflexes**

❑ **Sucking Reflex:**

- Is reflected when something touches the roof of an infant's mouth. Infants have a strong sucking reflex which helps to ensure they can latch unto bottle or breast.

❑ **Rooting Reflex:**

- The rooting reflex is most evident when an infant's cheek is stroked. The baby responds by turns his or her head in apparent effort to find something to suck.

❑ **Moro Reflex:**

- A neonatal startle response that occurs in reaction to a sudden, intense noise or movement.
- When startled, the newborn arches its back, throws its head back, and flings out its arms and legs.
- Then the newborn rapidly closes its arms and legs to the center of the body.

❑ **Grasping reflex:**

- A neonatal reflex that occurs when something touches the infants palms. The infant responds by grasping tightly.

❑ **Galant Reflex:**

- Is shown when an infants middle or lower back is stroked next to the spinal cord.
- The baby will respond by curving his or her body toward the side which is being stroked.

❑ **Curling Reflex:**

- When the inner sole of a baby's foot is stroked the infant respond by curling his or her toes. When the outer sole of a baby's foot is stroked, the infant will respond by spreading out their toes.

❑ **Tonic Neck Reflex:**

- The tonic neck reflex is demonstrated in infants who are placed on their abdomens. Whenever side the child's head is facing, the limb on that side will straighten, while the opposite limb will curl.

Gross Motors Skills:

- Skills that involve large-muscle activities, such as moving one's arms and walking.
- E.g. of gross motor skills are:
- standing, walking, controlling movements of legs and arms.
- As a foundation, these skills require postural control, for e.g., to track moving objects, one must be able to control one's head in order to stabilize gaze, before walking, must be able to balance on one leg.

Examples of Gross Motor:

- Jumping
- Standing
- Walking
- Running

- Pick up toy without falling over
- Sit up on its own
- Infant rolls over
- Catch small objects using only hands
- Motor activity levels will peak off about 7-9 years old.

Fine Motor Skills:

- Whereas gross motor skills involve large muscle activity. Fine motor skills, involve finely tuned movements.
- Grasping a toy
- Using a spoon
- Buttoning a shirt
- Or doing anything that requires finger dexterity demonstrates fine motor skills.