Theory of Perceptual Development

Eleanor Gibson: Infant Perception
Birth- 2 Years
Newborn Perception

- When we are born, our sensory systems are not developed.

- We are born with the 'Tabula Rasa', or blank state; meaning that over time, we are able to develop our perceptions on the world through many different aspects of experience and maturation through life.

- This stage is one of the most sensitive periods of development in the human life and so it is vital that we are able to develop our senses so that we can learn more about the world around us.
Infant Perception Development

• An infant is born with all of the necessary brain cells

• The brain must make connections and grow

• Infants can respond to environmental stimuli to a degree after birth

• Depth perception is developed at around six months

• Perceptual and cognitive development help the child to develop their senses and perceptions on the world
Sensory Development

• Everything humans do involves one or more senses and it is through senses that infants explore and discover the world.

• Humans experience sensations through their surrounding environments.

• When a child uses their senses to discover a new object, the more that their senses are stimulated and neural pathways are strengthened.
Experience and Maturation

• Maturation is a developmental process which is internally programmed.

• It refers to the orderly and sequential developmental changes which occur in the nervous system and other bodily structures controlled by our genes.

• This suggests that we all would've gone through predetermined maturationally dependent stages.

• A lot of our developmental stages are affected and can only happen with maturation. Such as children, they must first be able to sit before they can walk and they must be able to count before they can do maths, etc.

• Without maturation, we would not further develop.

• So this all goes with the statement of 'Tabula Rasa', meaning that we must fill in the blanks through experience.

• You will only continue to develop if your body's maturationally ready.
Eleanor Gibson's Theory

• Gibson's theory is considered a differentiation view of development. In contrast to the view which states that the senses are separate at birth, the differentiation view, articulated by Eleanor J. Gibson, proposes that the senses are all unified at birth and that perceptual development is characterised as a gradual process of differentiating increasingly finer levels of sensory stimulation.

• From this view, now widely accepted among most developmental psychologists, infants detect many general features of unified multimodal events from birth and gradually learn to perceive increasingly more subtle differences and more complex objects and events through their senses and interacting with their surroundings and environment.
Affordance

• The relationship shared between a person; or animal, and an object or environment

• The way in which we perceive and recognise these things; or place a meaning towards them

• A relationship between the person and their surroundings or objects within can differ from another person's relationship, depending on the ways in which they have been exposed to relevant past experiences
Example

• Affordance may be affected by a child's past experience:

• A child may have had a bad past experience with water when they were younger where they were close to drowning

• The child who had the bad past experience may not want to go near water, whereas another child may be always wanting to be in the water and wants to learn to water ski at a very young age because he had never experienced a near drowning incident.
Differentiation

• The way in which we can differentiate or make observations between different objects

• Recognition of distinct features of an object so that we are able to make decisions on what it is that we are observing
Example

- Infants are tested with two animals of similar size, shape and features:

- It is found that the infants recognise the animals as the same object because they fail to make sense of the differences possessed by the animals

- They are tested again at age 2, and it is seen that they are able to notice the differing features and looks of the two animals

- They have developed their recognition because they have been exposed to experiences and have been able to mature their perceptual systems
The 'Visual Cliff' experiment was developed by Eleanor J Gibson and Robert D Walk in 1960.

It was used to determine how infants developed their depth perception and is able to support the theory of the infant as an active explorer.

This experiment acts as a perceptual illusion, creating what seems to the infant as a cliff to see if we are born with depth perception, or whether, through experience, we are able to develop this.
You Tube Video

- The Visual Cliff

  - http://m.youtube.com/watch?v=Szr8PBo2Fqw
Multiple Choice

• What does 'Tabula Rasa' mean?
  - Blank State
  - An Israeli dish
  - Born with information
Multiple Choice

• Whose Infant theory of perception did we use?
  - Isaac Clarke
  - Eleanor Whittaker
  - Eleanor Gibson
  - Eleanor Robertson
Multiple Choice

• What is the purpose of the 'Visual Cliff'?
  - To see whether they would fall
  - To see whether the baby would cry
  - To see whether the babies would crawl to the parents
  - To see whether they would use trial and error
Multiple Choice

- What is Maturation?
  - When your body grows
  - When you hit puberty
  - When past experiences help a person develop emotionally
  - When past experiences help a person develop their mind and help them develop further into a new life stage
Multiple Choice

- How are Infants perceived in Eleanor Gibson's theory?
  - Infants are active explorers of the world
  - Infants are born, having perceived the world through the mother's womb
  - Infants perceive the world the exact same way their parents do
  - Infants
Infant Perception Theory

• A child is born with a blank state

• An infant is seen as an active explorer

• Through experience and maturation, the infant is able to build on their perception

• Infancy is one of the most sensitive periods of psychological (perceptual and sensory) development

• Perceptions between different people may differ because of experience
References

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