

## Questions and Answers Examples

1. *Comparing and contrasting the two methods used in the study of perceptual development in infancy.*

Habituation and conditioning methods of studying perpetual development in infancy are both ways of studying the behavioral changes in an infant. In these both methods, researchers expose infants to stimulus, a mode critical for studying perception of the infant. The extent of change of the infant's behavior quantifies the magnitude of development in both cases (Abel, 2004). Conditioning and habitual methods exhibit the infant's brain development through vision.

The conditioning method of study involves rewarding infants as they advance in their development, while the habituation method of study does not involve rewards. Habituation study normally entails the infant's preference of various stimuli over the others, while conditioning does not necessitate the study of preference (Fischer & Tadic, 2000). The habituation method ought to entail new stimuli, while conditioning study may require recurrence of the same stimuli. Conditioning method necessitates the utilization of images and sounds, whereas habituation does not include these factors.

2. *The description of the Gibson and Walk's (1960) visual cliff experiments and the major findings of the study.*

In the experiment, thirty-six infants are positioned on stage made for creeping and toddling. They are prone to falling from elevated grounds. In this case, the experiment is perfectly arranged in such a way that they are guarded by transparent side panels fixed in their cribs, and gates to prevent them from going over the brink (Foley & Matlin, 2010). The vigilance of their caregivers enhances the safety of the infants during the experiment. After the maturity of their muscular



coordination, they reach a point of managing themselves and circumventing the occurrence of accidents with minimum assistance (Foley & Matlin, 2010). Being attracted by the toys held by the caregivers, the infants began to crawl, thus making the examination possible.

The major findings that the researchers discovered displayed that twenty-seven infants managed to crawl to their caregivers on the shallow side without many incidents. Some of the infants tried to crawl, but with more caution than the rest (Foley & Matlin, 2010). A minor percentage of infants turned down the crawling process due to the uncertainty because of the gap between them and their caregivers. It was evident that all the infants used their eyes during their movement through the arranged apparatus (Foley & Matlin, 2010). Infants who healthy perceive depth during their crawling.

*3. Identification and description of some of the conditions that occur with vision during late adulthood and old age.*

In late adulthood, the condition of presbyopia develops, whereby the eye experiences progressive diminished capability to make clear focus on the close objects. It is characterized by the inability to read fine prints, especially in a condition of low light. Reading materials at far distance become uncomfortable to the old aged individuals. Another condition is the decline in the sensitivity of motion. The individual develops incapability to notice slight motions that occur abruptly. There is evidence of the condition of slow adaptation to darkness. The victims gradually become unable to see in the dark. Categorization of colors becomes a problem in old age (Abel, 2004). For instance, blue, green, and purple color distinction becomes a problem. The colors appear to be identical in some instances. Another condition is the decline in perception of



depth that encompasses difficulties with borders and steps. There is the emanation of various eye diseases such as development of glaucoma, cataracts, and muscular degeneration.

- 4. Studying perception in very old and very young individuals presents particular challenges to the researcher. Description of some of the problems researchers face and the methodological solutions they have adopted.*

Some of the problems are experienced in the process of research involving very old people and very young infants. They include infants' incapability of producing information without the aid of their caregivers. Some of the old people are unable to communicate, and it acts as a barrier in extracting information from the individuals (Abel, 2004). Since children act as tools vital for the study, their presence is critical. Some of the parents create obstacles for the researchers, because they hardly allow their infants to be utilized in the research activity.

The methodological solutions that have been adopted include taking the indispensable step of educating old individuals prior to the commencement of the research. This move has helped with the elimination of the problem of releasing information in the process of research (Fischer & Tadic, 2000). The engagement of dialogue between the researchers and parents of the infants involved in the research is a prime solution to the predicament of trusting children to the researchers. If the individuals are unable to communicate because of the old age, the researchers use their close relatives in order for them to provide information on their behalf. Parents provide essential data on behalf of their infants (Abel, 2004).

- 5. Description of the five basic taste qualities that humans perceive. How are the qualities encoded in the mouth and thereafter processed in the brain?*



There are five important tastes that include sweetness, sourness, umami, saltiness and bitterness. Sweetness is described as a sensation or a feeling that is pleasant and enjoyable that is generated where there are sugary materials and stuffs. In many cases it is linked and joined to ketones and aldehydes because they contain elements of carbonyl group. Sourness helps to detect and identify any traces of acidity in the mouth (Foley 2010). The taste is identified and registered by the help of subset cells spread and scattered all over the taste buds of the tongue. Saltiness taste is created and formed when there is introduction of sodium ions. Bitter taste occurs when the tongue senses or identifies toxic materials in the mouth. Umami is also known as appetitive taste and it is the aromatic or spicy meaty taste. Umami taste is generated where there is food product like, butter, cheese and tomatoes in the mouth (Laugurette 2005).

When a substance goes into the mouth, a sensation is formed by the receiving cells matching the type of the substance taken. Tongue chemically responds with receptor cells of flavor or taste positioned on the taste buds. The taste is identified by the help of G protein receptors situated on the taste buds (Laugurette 2005). Taste cell by the help of the afferent nerve, forwards or remits information that is stimulated and transmitted to the brain. The cells then register or indentifie the category or class of taste in the mouth and sends feedback to the mouth.

6. *What are pheromones? How do they affect the behavior of animals?*

Pheromones are the body secreted and unseen chemical features that activates social reactions to animals groups of similar species. These chemicals factors operate externally in the body of the animal being secreted in an order and a manner to impact a behavior of the animal receiving (Bear 2006).



Aggregation pheromone when released, it either influences the behavior of another in the event of selection of a mate, overpowering host resistance in a mass attack or during predator's defense. Alarm pheromone is released as a volatile substance in case of attack by a predator thus triggering flight and aggression impact to the same species members. Epideictic pheromone is primarily evident in insects laying of eggs in fruit deposits. They send signals to females of the same species in order for them to clutch in another location (Bear 2006). Releaser pheromone creates impact to animals of the identical or similar species by creating alteration behavior or conduct of the recipient animal. Signal pheromone initiates temporary changes and discharge or ejection of neurotransmitter that stimulates the reaction and response. Primer pheromone stimulates the change of developmental events and as a result activates behavior change. Territorial pheromone shows the boundary and personality or identity of the individual's territory. Tail pheromones are essential to social insects to indicate the direction using unstable hydrocarbons. Sex pheromones are released to show the readiness of the female organisms for breeding (Bear 2006).

*7. Identification and description of ways of controlling pain (pharmacological, physical, and psychological)*

The pharmacological way of controlling pain involves the administration of drugs. Drugs made to relief pain when taken; they alter the nerve transmission of pain into the brain thus making the patient not to feel the real pain (Rang 2007). It is endorsed that, if the sick person has no extreme pain, the administration of non-opioid drugs is recommended by stepping process according to the advancement of the pain. When the initial presentation is acute pain, the stepping process ought to be skipped, and a stronger opioid ought to be started directly in blend with the non-opioid analgesic (Schug 2008).



Physical way of controlling pain includes: engaging into exercise that helps in controlling pain in muscles since it involves flexibility. Passive exercise is done by physical therapist who applies stress on the affected area (Schug 2008). Active exercise is the done performance of one's power and the stressing of the particular painful muscles. It applies when the muscles being exercised in previous experience strain that upshot to injury.

The psychological methods of controlling pain include the engagement into therapy talk that offers the basic counseling and support of a psychologist. Relaxation training is habitually associated with pain reduction and healing (Rang 2007). Stress treatment management help in understanding the relationship between pain and stress and teaches the ways of reducing stress and easing pain. Training of pain coping skills through learning the way to accommodate pain helps in improving the quality of life of the patients.

8. *What is the difference between passive touch and active touch?*

Active touch primarily corresponds to the activity pattern that individuals colloquially refer to touching. It involves the movement of hands and fingers with the objective of discovering the properties of a particular object. Passive touch involves stimuli that are simply impressed on skin without the involvement of movement hands and fingers (Foley 2010). Active touch shows greater and extra distribution of brain activity as related to passive touch when examined in areas that are in external somatosensory region, due to the motor component. Active touch is characterized by movement as opposed to passive.



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