1.4 Development of Human Behaviour

Syllabus: Growth & development; Principles of development, Role of genetic & environmental factors in determining human behaviour;Influence of cultural factors in socialization; Life span development - Characteristics, development tasks, promoting psychological well-being across major stages of the life span.

Previous Years' Questions

2016

Q. Identify the most important changes that occur during adolescence. 10 marks [2016]

Q. Critically evaluate Erikson's stages of Psychosocial development. 15 marks [2016]

Q. Describe the parenting styles that are used in raising a normal child. 15 marks [2016]

2015

Q. Discuss the role of socio-cultural factors in promotion of well-being across major stages of life-span. 10 marks [2015]

Q. Describe Piaget's stages of cognitive development. Critique his theory. 15 marks [2015]

2014

Q. Present an outline of the ecological perspective as an innovative approach to facilitate developmental outcomes. 10 marks [2014]

Q. Discuss the main aspects of cognitive & moral development during adolescence. 15 marks [2014]

2013

Q. How flow of genes affect development? 10 marks [2013]

Q. Discuss the importance of early relationship for developmental outcomes in the light of researches by Bowlby & Ainsworth. 20 marks [2013]

Q. Bring out the key developmental challenges faced by adolescents in the cognitive & social domains. 25 marks [2013]

Q. Every function in the child's development appears twice: first on social level & later on the individual level." Vygotsky. Discuss the above statement & indicate your own position on this proposition. 10 marks [2013]

2012

Q. Describe the role of epigenetic model in determining human behavior. 12 marks [2012]

Q. Examine the impact of cultural factors on socialising process among children 20 marks [2012]

2011

Q. What is social constructionism? How does it challenge the mainstream psychology? *(not sure whether to place here or in Ch-13 or Ch-6)* 20 marks [2011]

Q. How does the brain mediate between the genotype and the phenotype for psychological characteristics? 10 marks [2011]

Q. Critically evaluate the role of parenting style, peer group & media in identity formation during adolescence. 30 marks [2011]

2010

Q. What are the stages of cognitive development according to Piaget ? 10 marks [2010]

Q. Briefly suggest how well-being of the elderly can be promoted. 10 marks [2010]

Q. How can biological aging be modified with the help of environmental factors ? 30 marks [2010]

2009

Q. What is psychological well being? Discuss various methods in promoting psychological well being across major stages of the life span. 60 marks [2009]

2008

Q. Bring out the diffs in the concepts of growth, maturation & development in human behavior. Use suitable example in your answers. 20 marks [2008]

1.4.1 Growth & development

Growth : refers to an increase in the size of body parts or of the organism as a whole. It can be measured or quantified, for example, growth in height, weight, etc.

Development : a process influenced by an interplay of biological, cognitive, and socio-emotional processes which an individual grows and changes throughout the life cycle. The term development applies to the changes that

- have a direction
- hold definite relationship with what precedes it
- and in turn, will determine what will come after.

A temporary change for ex : caused by a brief illness, is not considered a part of development. Development however, includes growth as one of its aspects.

Development is influenced by an interplay of biological, cognitive, and socio-emotional processes.

Development due to genes inherited from parents, such as in height and weight, brain, heart, and lungs development, etc. all point towards the role of <u>biological processes</u>.

The role of <u>cognitive processes</u> in development relate to mental activities associated with the processes of knowing, and experiencing, such as thought, perception, attention, problem solving, etc.

<u>Socio-emotional processes</u> that influence development refer to changes in an individual's interactions with other people, changes in emotions, and in personality. A child's hug to her/his mother, a young girl's affectionate gesture to her/his sibling, or an adolescent's sorrow at losing a match are all reflections of socio-emotional processes deeply involved in human development.

Maturation refers to the changes that

- follow an orderly sequence
- are largely dictated by the genetic blueprint
- which produces commonalities in our growth and development.

e.g. most children can sit without support by 7 months of age, stand with support by 8 months and walk by 1 year. Once the underlying physical structure is sufficiently developed, proficiency in these behaviours requires adequate environment and little practice. However, special efforts to accelerate these behaviours do not help if the infant is maturationally not ready. These processes seem to "*unfold from within*": following an inner, genetically determined timetable that is characteristic of the species.

Evolution refers to species-specific changes. Natural selection is an evolutionary process that favours individuals or a species that are best adapted to survive and reproduce. Evolution passes from one generation to next and is very slow paced.

1.4.2 Principles of development (*I am guessing it's the same as* assumptions in life-span perspective of dev.)

1. Development is **lifelong**, i.e. it takes place across all age groups starting from conception to old age. It includes both gains and losses, which interact in dynamic (change in one aspect goes with changes in others) ways throughout the life-span.

2. The various processes of human development, i.e. biological, cognitive, and socio-emotional are **interwoven** in the development of a person throughout the life-span.

3. Development is **multi-directional**. Some dimensions or components of a given dimension of development may increase, while others show decrement. e.g. experiences of adults may make them wiser and guide their decisions. However, with an increase in age, one's performance is likely to decrease on tasks requiring speed, such as running.

4. Development is highly **plastic,** i.e. within person, modifiability is found in psychological development, though plasticity varies among individuals. This means skills and abilities can be improved or developed throughout the life-span

5. Development is **influenced by historical conditions**. e.g. the experiences of 20-year olds who lived through the freedom struggle in India would be very different from the experiences of 20 year olds of today. The career orientation of school students today is very different from those students who were in schools 50 years ago.

6. Development is the concern of a **number of disciplines**. Different disciplines like psychology, anthropology, sociology, and neuro-sciences study human development, each trying to provide answers to development throughout the life-span.

7. An individual responds and acts on contexts, which include what was inherited, the physical environment, social, historical, and cultural contexts. e.g. the life events in everyone's life are not the same, such as, death of a parent, accident, earthquake, etc., affect the course of one's life as also the positive influences such as winning an award or getting a good job. People keep on changing with changing contexts.

1.4.3 Role of genetic & environmental factors in determining human behaviour

Genes and Growth

Genotype : The actual genetic material or a person's genetic heritage.

Phenotype : Not all of the genetic material that is inherited is apparent or distinctly identifiable in our observable characteristics. The way an individual's genotype is expressed in <u>observable and measurable</u> characteristics e.g. physical traits, such as height, weight, eye and skin colour, and many of the psychological characteristics such as intelligence, creativity & personality is called a phenotype which is the result of the interaction between inherited traits and environment.

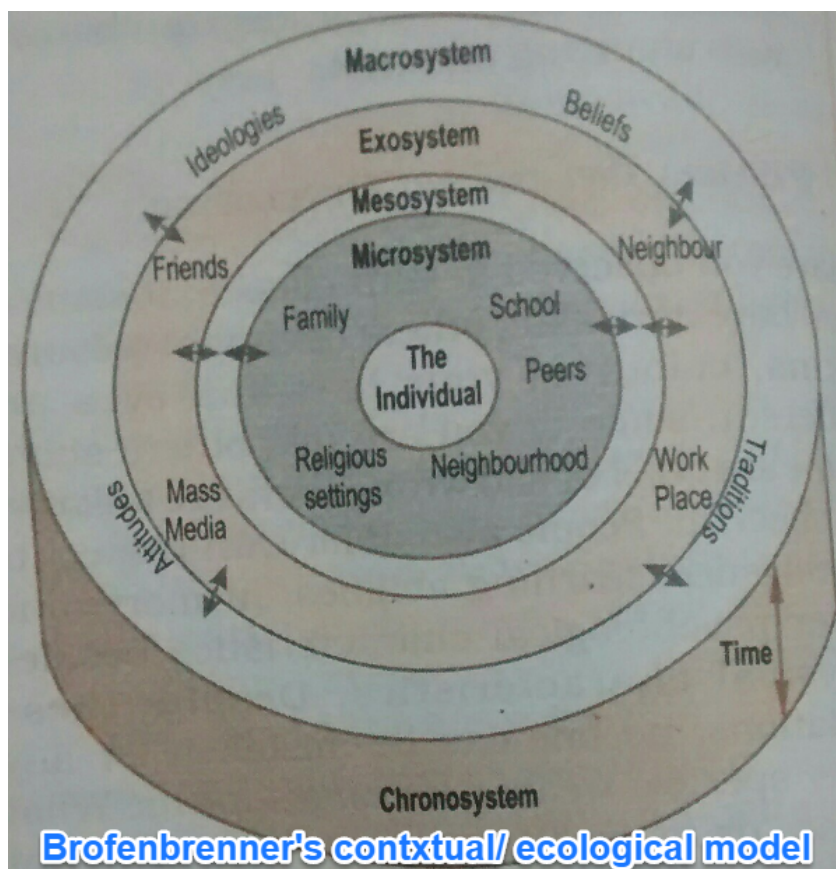<u>Role of Genetic factors in development: Nature</u>

- Genetic factors ensure that a specific species only reproduces one of its kind. Human genetic material is coded into each cell of the human embryo which grows into a human baby and then a human adult. (and not an elephant baby or a bird)
- Genetic transmission is very complex. Human characteristics are determined by combinations of large number of genes ~ 80,000. These huge possibilities of combinations account for a variety of characteristics and behaviours.
- Genes provide a distinct blueprint and timetable for the development of an individual.

- Genes are responsible for many of the physical traits such as height, weight, eye colour, hair colour, skin etc.
- The inherited genetic code predisposes a child to develop in a particular way. It is also responsible for predisposition to behave in a certain manner in different situations even in adulthood. For ex : personality traits such as extraversion, neuroticism etc.

Role of environmental factors in development: Nurture

- The limit for a trait, behavioral or physical, is set by the inherited genetic material. Within that limit, how much or how little the genes will express themselves, is determined by the environment. e.g. a child who has inherited "short height" genes from parents will not be able to grow taller beyond a certain limit. However, the nutrition she gets and physical activities she undertakes, will determine how tall she grows within that genetic limit.
- Role of environmental factor is also very complex.
    - The genetic inheritance of a person may predispose her to choose certain environments. e.g. because of their genotype, children may perform well in music or sports and they will seek and spend more time in environments, which will enable them to perform their musical skills; similarly an athlete would seek sports-related environment.
    - **Sandra Scarr (1992)** believes that parent's genetic make-up may influence the environment they provide for their children. e.g. if parents are intelligent and are good readers, they would provide their children with books to read, with the likely outcome that their children would become good readers who enjoy reading (AMJ :p).
    - A child's own genotype (what s/he has inherited) such as being cooperative, and attentive is likely to result in teachers and parents giving more pleasant response as compared to children who are not cooperative or not attentive

Urie **Bronfenbrenner's Contextual View of Development /Brofenbrenner's Ecological Systems Theory** : emphasises the role of environmental factors in the development of an individual.

Brofenbrenner's contxtual/ ecological model

Ecological System	Consists of	Example
Microsystem	settings in which a person directly interacts with people and objects	home, work, school, neighbourhood
Mesosystem	relation b/w settings in which individual participates	what happens at work might affect home events &vice versa
Exosystem	settings which aren't experienced directly but still influence life	spouse's company, mass media , child's school
Macrosystem	widely shared cultural values, beliefs and laws which affect all inner systems	majority religion, type of society (capitalist or communism)
Chronosystem	events in individual's life & socio-historical circumstances of the time	divorce of parents or parents' economic setback

Thus, Brofenbrenner suggested that development (specifically that of a child) is affected by a complex world that envelops her and hence cannot be easily explained by the simplistic stage models.

Durganand Sinha'sEcological Model for development of children in Indian context

Ecology of a child can be viewed in 2 concentric layers:

- the upper or the more visible layers : e.g. home, school, peers etc. most imp. visible upper layers constitute :
    - Home : its condition in terms of overcrowding, space available to each member, toys, technological devices used etc.
    - Schooling : its nature, quality and facilities in the school
    - Peer Groups : nature of interactions and activities undertaken with peer groups from childhood onwards.
- the surrounding layers : their influences are not clearly visible
    - General geographical environment : general congestion of locality, density of population, space and facilities outside the home to play
    - Institutional setting : provided by caste, class and other factors
    - Availability of general amenities : drinking water, electricity, means of entertainment etc.

The visible and the surrounding layers interact with one another and may have diff consequences for development in diff people. Also, the ecological environment can change or alter during anytime of the individual's life-span Thus to understand the development of an individual, it is imp.to see her in the context of her experience (applies to Brofenbrenner as well).

1.4.4 Influence of cultural factors in socialization

Socialisation is a process by which individuals acquire knowledge, skills and dispositions, which enable them to participate as effective members of groups and society. Therefore, the specific nature of how we are socialized is determined by our culture and its values.

Each culture is tries to pass its own values on to the next generation. Therefore, each culture socializes its young differently. For example, American society will socialize its young people to believe in individualism whereas Japanese society will put more of an emphasis on getting along with the group.

- The society and culture in which one grows up influence everything from developmental milestones and parenting styles to what kinds of hardship one is more likely to face.
- While biological milestones such as puberty tend to be universal across cultures, social milestones, such as the age at which children begin formal schooling or individuate from their parents, can differ greatly from one culture to the next.
- Effective parenting styles also vary as a function of culture. While the authoritative (giving into reasonable demands, setting consistent limits, expressing warmth and affection, and listening to the child's point of view) parenting style is the style that is most encouraged in modern American society, other cultures value more authoritarian styles (placing high value on conformity and obedience, tightly monitoring their children, and expressing less warmth).
- Racial, casteist and religious stereotypes can have detrimental effects on a child's development.
- What is considered "normal" varies greatly from one culture to the next.
- The concept of intersectionality *(interconnected nature of social categorizations such as race, class, and gender as they apply to a given individual or group, regarded as creating overlapping and interdependent systems of discrimination or disadvantage.)* is important to keep in mind when examining the cultural influences of various forms of discrimination on child development.
- Culture's important aspect is religion. Religious values and practices play an important role in socialization.
- **Chen, Lee, and Stevenson (1995)** : strongly agree–disagree study : (*see personality chapter notes*)
- **Bandura**'s social learning theory emphasises role of environmental and cultural factors in the observational learning. A child will vicariously learn things he sees around his culture.
- e.g. In the **Birhor** society of Jharkhand, children from an early age are allowed enormous freedom to move into forests and learn hunting and gathering skills. Their child socialisation practices are also aimed at making children independent (do many things without help from elders), autonomous (take several decisions for themselves), and achievement-oriented (accept risks and challenges such as those involved in hunting) from an early age of life. On the contrary, in agricultural societies, children are socialised to be obedient to elders, nurturant to youngsters, and responsible to their duties. Since these behavioural qualities make people more functional in agricultural societies, they become dominant features of people's personality in contrast to independence, autonomy and achievement, which are more functional (and thus highly valued) in hunting-gathering societies.

Due to the processes of **enculturation** and **socialisation** we find behavioural similarities and differences within societies and behavioural differences across societies. Both processes involve learning from other people. In the case of socialisation, the learning involves deliberate teaching. In the case of enculturation, teaching is not necessary for learning to take place. Enculturation means engagement of people in their culture. Since most of the learning takes place with our engagement in our culture, socialisation can be easily subsumed under the process of enculturation.

Socialisation Agents : Many people related to us possess power to socialise us. Such people are called "socialisation agents". Most imp. among them are : peer groups, mass media, parents and family members are the most significant socialisation agents. The conditions of life in which parents live (poverty, illness, job stress, nature of family) also influence the styles they adopt in socialising children. Grandparental proximity and network of social relationships play considerable role in child socialisation directly or through parental influences.

Acculturation : refers to cultural and psychological changes resulting from contact with other cultures. Contact may be direct (e.g., when one moves and settles in a new culture) or indirect (e.g., through media or other means). It may be voluntary (e.g., when one goes abroad for higher studies, training,job, or trade) or involuntary (e.g., through colonial experience, invasion, political refuge). In both cases, people often need to learn (and they do learn) something new to negotiate life with people of other cultural groups.

e.g. during the British rule in India many individuals and groups adopted several aspects of British lifestyle. They preferred to go to the English schools, take up salaried jobs, dress in English clothes, speak English language, and change their religion.

Re-socialisation : Acculturation requires re-learning of norms, values, dispositions, and patterns of behaviour. Such changes require **re-socialisation**. Sometimes people find it easy to learn these new things, and if their learning has been successful, shifts in their behaviour easily take place in the direction of the group that brings in acculturation. In this situation transition to a new life is relatively smooth and free from problems. On the other hand, if it becomes difficult to **re-socialise**, people are thrown into a state of conflict. This situation is relatively painful as it leads to experience of stress and other behavioural difficulties by acculturating individuals and groups.

Psychologists have widely studied how people psychologically change during acculturation. For any acculturation to take place, contact with another cultural group is essential. This often generates some sort of conflict. Since people cannot live in a state of conflict for a long time, they often resort to certain strategies to resolve their conflicts. For a long time it was felt that social or cultural change oriented towards modernity was unidirectional, which meant that all people confronting the problem of change would move from a traditional state to a state of modernity. However, studies carried out with immigrants to western countries and native or tribal people in different parts of the world have revealed that people have various options to deal with the problem of acculturative changes. Thus, the *course of acculturative change is multidirectional.*

Changes due to acculturation may be examined at

1. Objective level : changes are reflected in people's day-to-day behaviours and activities. These are referred to as **acculturation strategies.** Changes observed in language, dressing style, means of livelihood, housing and household goods, ornaments, furniture, means of entertainment, use of technology, travel experience, and exposure to movies, etc. can provide clear indications of change that individuals and groups might have accepted in their life. Based on these indicators, we can easily identify the degree to which acculturative change has entered into an individual's or a group's life. The only problem is that these indicators do not always indicate conscious acceptance of change by individuals or groups; they are held by people because they are easily available and economically affordable. Thus, in some cases, these indicators appear somewhat deceptive.

2. Subjective level : Changes are often reflected in people's attitudes towards change. They are referred to as **acculturation attitudes.** In order to place some confidence in conscious acceptance of change, we need to analyse them at the subjective level. **John Berry**, well-known for his studies on psychological acculturation argues that there are 2 important issues that all acculturating individuals and groups face in culture-contact situations :

(i) Degree to which there is a desire to maintain one's culture and identity.

(ii) Degree to which there is a desire to engage in daily interactions with members of other cultural group(s).

Based on people's positive or negative answer to these issues, **4 acculturative strategies** have been derived:

1. Integration : an attitude in which there is an interest in both, maintaining one's original culture and identity, while staying in daily interaction with other cultural groups. In this case, there is some degree of cultural integrity maintained while interacting with other cultural groups.

2. Assimilation : an attitude in which people do not wish to maintain their cultural identity, and they move to become an integral part of the other culture. In this case, there is loss of one's culture and identity.

3. Separation : an attitude in which people seem to place a value on holding on to their original culture, and wish to avoid interaction with other cultural groups. In this case, people often tend to glorify their cultural identity.

4. Marginalisation : an attitude in which there is little possibility or interest in one's cultural maintenance, and little interest in having relations with other cultural groups. In this case, people generally remain undecided about what they should do, and continue to stay with a great deal of stress.

1.4.5 Life span development

Stage Theories

- A stage theory : Any theory which proposes that all human beings move through an orderly & predictable series of changes.

- Basic assumptions/ideas of stage theories
   - Human beings move through a set of series of stages
   - They move from one stage to another at specific ages
   - The order of such progress is unchanging

- Criticism of stage theories
   - Presence of much **variability among individuals** makes it difficult for us to assume that there is such a high degree of orderliness in human development.
   - **Social Age Clocks :** Internalized calendars telling us when certain events should occur in our lives and what we should be doing at certain ages. i.e. when to marry, have children, retire etc.
   This clock greatly varies depending on our occupation, socio-economic status, times & geographical location we live in etc. e.g. olympic gymnasts are considered *old* 16 or 17 but cricketers not till 35. Thus, rigidness in ages of stage theories is not very relevant.

Prenatal Development

Teratogens : Environmental factors that can damage the foetus and interfere with normal patterns of growth. e.g.

1. Prescription and over the counter drugs. e.g. overuse of aspirin can harm foetus's circulatory system.
2. Caffeine found in coffee, tea and many soft drinks can slow down foetus's growth and can contribute to premature birth, and also cause irritability in newborns.
3. Cocaine : premature birth, brain lesions , impaired sensory functioning, heart deformities, increased inrritability.
4. Alcohol : **fetal alcohol syndrome** (small than normal head-size, deformities of face, iritability, hyperactivity, retarded motor and mental development, heart defects, limb and joint abnormalities, feeding problems, short attention spans, behavioural problems as children grow up.)
5. Smoking : decreased birth weight and size, increased risk for miscarriage and stillbirth (dead baby born)

Infancy

Some reflexes present in the newborn — coughing, blinking, and yawning persist throughout their lives. Others such as the ones mentioned in the table below disappear as the brain functions mature and voluntary control over behaviour starts developing.

Reflex	Description	Developmental Course
Rooting	Turning the head and opening the mouth when touched on the cheek	Disappears between 3 and 6 months
Moro	If there is a loud noise, the baby will throw her arms outward while arching her back then bring the arms together as if grasping something	Disappears in 6-7 months (although reaction to loud noises is permanent)

Grasp	a.k.a palmar grasping reflex. When a finger or some other object is pressed against the baby's palm, baby's fingers close around it	Disappears in 3-4 months; replaced by voluntary grasping
Babinski	When the bottom of baby's foot is stroked, the toes fan out and then curl	Disappears by 8-12 months
Blinking	Baby closes eyes in response to light	
Sucking	When nipple or other object is placed in mouth, baby sucks	
Tonic Neck	When placed on back with head turned to one side, baby stretches out arm and leg on the facing side.	
Stepping	Baby makes stepping motions if held upright so one foot just touches a surface.	

The newborn is not as helpless as we might think. The activities needed to sustain life functions are present in the newborn

- it breathes, sucks, swallows, and discharges the bodily wastes.
- The newborns in their first week of life are able to indicate what direction a sound is coming from
- can distinguish their mother's voice from the voices of other women
- can imitate simple gestures like tongue protrusion and mouth opening

Q. Can locomotor development in infancy and early childhood be affected due to cultural factors ? Substantiate.

Cross-cultural studies indicate that motor-development is not just a function of maturation, rather it can be speeded up or slowed by various child rearing practices.

e.g. :

1. Mothers in Uganda and Kenya start early to teach their babies to sit and the babies learn to do so at an earlier age than children in several Western countries like U.S. **(Super, 1981)**
2. Mothers in West Indies massage their babies and exercise their motor skills frequently (throwing them up in air, holding them upside down etc.). Such practices seem to speed up motor development.
3. In contrast, infants living in nomadic tribes in Paraguay are carried everywhere and prevented from exploring their environments; as a result, they show delayed motor development and don't begin to walk till they are > 2 years of age.

Q. "Babies from birth are social creatures". Elucidate and substantiate.

- An infant starts preferring familiar faces and responds to parent's presence by cooing and gurgling.
- When they become more mobile by 6 to 8 months of age, they start showing a preference for their mother's company. When frightened by a new face or when separated from their mother, they cry or show distress. On being reunited with the parent or caregiver they reciprocate with smiles or hugs.
- In babies, there is close emotional bond of **attachment** i.e. affection that develop between infants and their parents (caregivers)
- **Harlow and Harlow (1962)**: baby monkeys were separated from their mothers ~ 8 hours after birth and were placed in experimental chambers and reared for 6 months by surrogate (substitute) "mothers"; half the baby monkeys were fed by cloth moms and other half by wire moms:
  - Mother 1 : made of wire and
  - Mother 2 : made of cloth.

Regardless of whether they were fed by the wire or the cloth mother the baby monkeys showed a preference for the cloth mother and spent a lot more time with her. This study clearly demonstrates that providing nourishment or feeding was not crucial for attachment and **contact-comfort** is important.

Human babies also form an attachment with their parents or caregivers who consistently and appropriately reciprocate to their signals of love and affection.

Piaget's theory of cognitive development
Central assumption :

Constructivism : The assumption that children are active thinkers who are constantly trying to construct more accurate & advanced understanding of the world around them i.e. children construct their knowledge about world by interacting with it.

A/c to Piaget, children build such knowledge through 2 basic processes :
Assimilation : incorporation of new info or knowledge into existing knowledge structures called **schemas**
Accommodation : modifications in existing schemas due to exposure to new info or knowledge.

Stage 1 : Sensorimotor Stage (0-18/24 months)
Infants learn that there is a relation b/w their actions & the external world e.g. they can manipulate objects & produce effects. *(Cause-Effect concept)*

Throughout this stage infants discover the world only through their sensory impressions &motor activities; use of mental images or symbols to represent objects or events is unknown to them.

Object Permanence - the idea that objects continue to exist even when hidden from view, only develops by 9 months of age, not before that.

Stage 2 :Preoperational Stage (1.5/2 to 6/7 years)
Toddlers acquire the ability to form mental images of objects &events
Language starts to develop
Children demonstrate **symbolic play** (pretending that one object is another e.g. pencil is a rocket)
Maturing cognition :

- **Decentration:** Children begin to make others rather than themselves the recipients of their playful actions.(e.g. feeding a doll)
- **Decontextualization:** Objects are made to substitute for each other. (e.g. pretending twig as a spoon)
- **Integration:** Combining play actions into increasingly complex sequences. (e.g. weaving a family story around with dolls as characters)

Still Immature traits :

- **Egocentrism:** inability to understand that others may perceive the world differently than they do. e.g. a cat & a dog on opposite faces of a card, researcher &child face opp. sides, the child isn't able to realize that the adult & him are seeing diff. pictures. (however, this point is debatable &some say Piaget had underestimated children's abilities)
- **Animism:** Thinking that all things are living. "*door hurt me*"
- **Centration:** Focusing on a single characteristic or feature for understanding an event. e.g. preferring a *bigger* glass of juice which is tall &narrow than a short &broad one even though the two possess equal amounts of juice.
- **Reversibility:** Children at this stage canNOT comprehend that physical changes can be undone by reversal of the original action. (e.g. if a lump of clay formed from a ball to a cake can be remade into a ball)
- Lack of understanding of **relational terms** such as lighter, larger, softer etc.
- Lack of **seriation** - ability to arrange objects in order along some dimension.
- Lack of **principle of conservation-** understanding that certain physical attributes of an object remain unchanged even if its outward appearance is altered. (e.g. if a 4-year old is shown 2 identical lumps of clay &one lump is flattened into a large pancake as tha child watches & then he is asked whether the two lumps contain the same amount of clay,he might answer NO.

Stage 3 : Stage of Concrete Operations(6/7-11/12)

- After or around 6 or 7 years, most children are able to solve simple problems of the stages mentioned above like *seriation, conservation, relational terms &reversibility*.
- They begin to engage into **logical thought.** e.g. "*Why did you & our mom go to the store*" . Ans. from children of stage of concrete operations - *"because she needed milk"*. Children of earlier stages may answer - "*because afterwards we came home !"*

Stage 4 : Stage of Formal Operations (>11/12)

- Major features of adult thought appear
- Diff b/w concrete &formal stages : In concrete operations stage, although children can think logically, they can only do it for concrete events &objects while after entering into formal operational stage, they can think abstractly. Not only do they think logically about the real or the concrete but also about possibilities-events &relationships that do not exist but can be imagined.
- They become capable of what Piaget terms as **hypothetico-deductive reasoning**
- **Inter-propositional thinking** develops- in which they seek to test the validity of several propositions.(Children at concrete operations stage can only sometimes test single propositions)
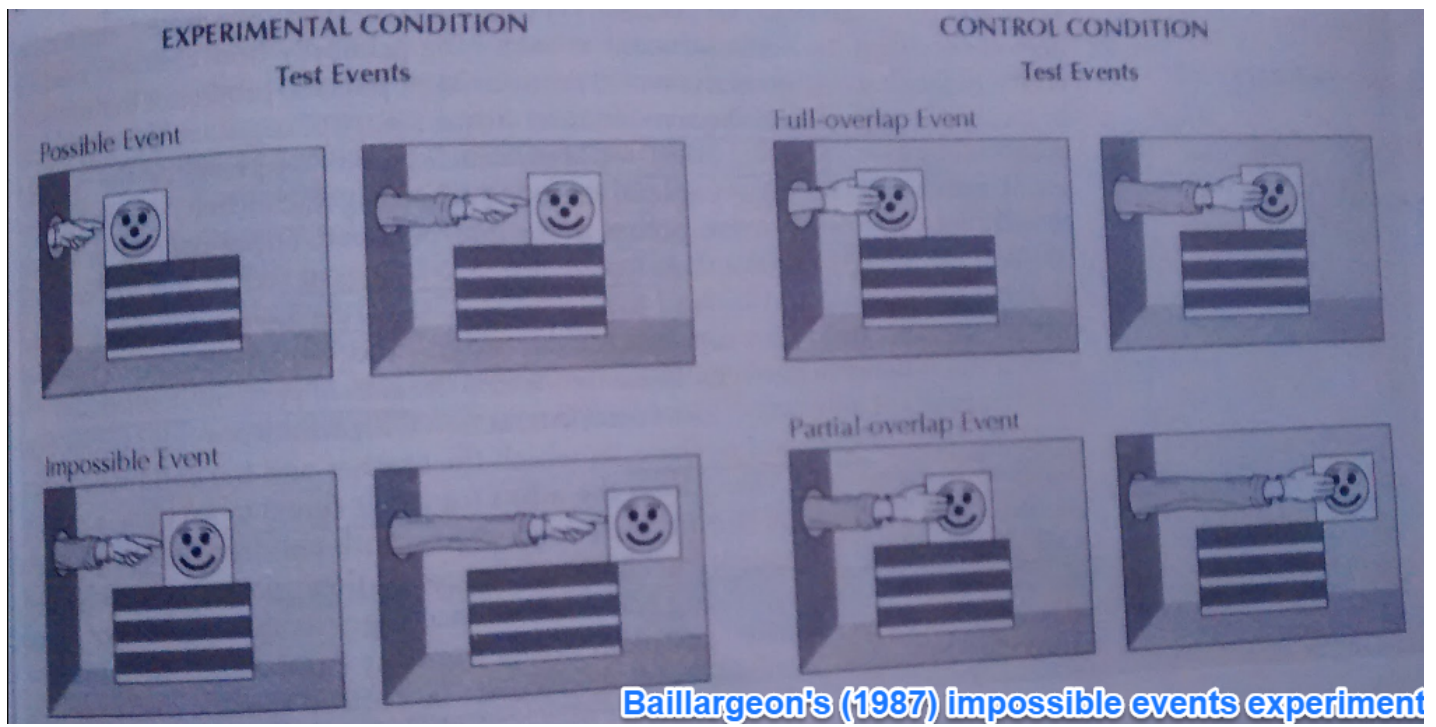
Criticism of Piaget's theory
Under-estimation of cognitive abilities
In later research (e.g. **Siegal & Peterson, 1996**) it was found that cognitive abilities of infants & preschoolers is considerably greater than what Piaget believed. Specific e.g. are :

- Object Permanence: Children~4-5 months old do act as if they know the object is still there when it is hidden *behind* a screen but not when it is put *under* a blanket. On this basis, it has been argued that it rather than the concept of object permanence, it can be lack of the concept of "*under*" or the fact that a thing can be pout *under* another.

- Properties of objects -- **Baillargeon's (1987)** *impossible events* experiments

EXPERIMENTAL CONDITION
Test Events

CONTROL CONDITION
Test Events

Possible Event

Full-overlap Event

Impossible Event

Partial-overlap Event

Baillargeon's (1987) impossible events experiment

Baillargeon (1987)-
6.5 months old infants looked longer at the
impossible event
of an object being pushed by a hand glove even when it was off the surface (suspended in air !) as compared to the event when the object was only pushed till it was on surface. In the control condition, a hand was shown
holding
the object instead of pushing it & children showed no marked diff. in observation times in the two analogous events, showing that they understood that objects can be
held
even when they are off the surface (but can't continue to be pushed).

- Egocentrism: **Schickedanz et al. (1998)** said that infants of even 14-18 months show some awareness of the fact that others may not see what they see e.g.they look back and forth b/w objects and adults as they point to objects they want adults to notice.

- Other attributes in Piaget's theory e.g. conservatism, seriation, object classification, meaning of being alive etc. have been shown in respective studies to be underestimated w.r.t. children.

Criticism on the ground of discreteness of*stages* of cognitive development : development is a more continuous and gradual process and can be diff. in diff. domains (high in one and low in other)

Importance of social interactions b/w children & caregivers in their cognitive development is ignored. (Vygotsky stressed on role of these)

Vygotsky's socio-cultural theory of development (also relevant for paper-2 : ch 5: Educational psychology/pedagogy)

Main Ideas:

- Level of **actual development :** what children are capable of doing unassisted
- Level of **potential development :** what they are capable of achieving with assistance from the **More Knowledgeable Others** (MKOs) (teachers, parents, an older adult, a coach or even a peer)
- zone of **proximal development :** gap b/w the two levels mentioned above.

- **Reciprocal teaching :** in which teacher and the child take turns in engaging in an activity. This allows the adult (teacher) to serve as a **model** for the child.

- **Scaffolding :** temporary support given to the child by MKOs that enable the child to perform the task till he is able to perform it independently. Changing the quality and quantity of support provided to a child in the course of a teaching session. More-skilled instructors adjust the level of guidance needed in order to fit the student's current level of performance i.e. direct instructions for novel tasks and lesser guidance as progress at acquiring the skill is achieved.

- **Make-believe play :** as children take part in made up situations they learn how to act in agreement with their internal ideas, not just external ideas. During play children put themselves into the adult roles of their culture and practice how they will act in the future. Make-believe play allows children to practice how they would act in the real world. It provides them with a way to gain the basic skills needed to function in their society before they become adults. However, learning these roles and skills is only done with help from others in their culture.

- **Private speech :** takes place when children talk to themselves.Vygotsky saw this as the starting point for all mental developments. He suggested that children spoke to themselves as a way of guiding themselves through an action & that private speech changes as children age, beginning as external (out loud) speech when they are younger but then becoming more internal (within themselves) as they age. Through relationships with more capable people, children get information and use that understanding in their private speech. Vygotsky thought private speech showed how children use the support given to them by others to assist their own way of thinking and how they act.

Contribution of Vygotsky's Theory

- acknowledgment of the **social component** in both cognitive and psychosocial development. Due to his ideas, research attention has been shifted from the individual onto larger interactional units such as parent and child, teacher and child, or brother and sister.

- called attention to the imp. of variability of **cultural realities and diversities**- children from diff cultural and social backgrounds differ in development. It would NOT be fitting, therefore, to utilize the developmental experiences of children from one culture as a norm for children from other cultures.

- The theory has significant ramifications in **education and cognitive testing**. Vygotsky was a strong advocate of non-standard assessment procedures for the assessment of what and how much a child has learned and in the formulation of approaches that could enhance the child's learning.

Erik Erikson's stages of psychosocial development

Sl.	Crisis/Issues	Age Duration	Description (*read along with the age duration name*)	Existential Question	Virtues
1	Trust vs Mistrust	Infants (0-2 yrs.)	learn to either trust the environment (if needs are met) or to mistrust it.	*Can I trust the world ?*	Hope
2	Autonomy vs Shame and Doubt	Toddlers (2-3 yrs.)	acquire self-confidence if they learn to regulate their bodies and act independently. If they fail or are labeled as inadequate, they experience shame and doubt.	*Is it OK to be me ?*	Will
3	Initiative vs Guilt	Preschoolers (3-5)	acquire new physical and mental skills but must learn to control their impulses because unless a good balance is struck, they either become unruly or inhibited.	*Is it OK for me to do,move and act ?*	Purpose
4	Industry vs Inferiority	Children (6-11 yrs.)	acquire many skill and competencies. If they take pride in these, they acquire high self-esteem but if they compare themselves unfavourably to others, they develop low self esteem	*Can I make it in the world of people and things ?*	Competence
5	Identity vs Role Confusion	Adolescents (13-20)	must integrate various roles into a consistent self identity. If they fail to do so, they may experience confusion over who they really are.	*Who am I ? Who can I be ?*	Fidelity
6	Intimacy vs Isolation	Young Adults (20-40)	must develop the ability to form deep, intimate relationships with others. If they do not, they may become socially or emotionally isolated.	*Can I love ?*	Love
7	Generativity vs Stagnation/Self-Absorption	Adults (40-65)	must take active interest in their work and in helping and guiding younger persons. If they do not, they may become preoccupied with purely selfish needs.	*Can I make my life count ?*	Care
8	Integrity vs Despair	>65	"whether my life had a meaning ?"-If the answer to this question is yes, a sense of integrity appears otherwise despair is experienced.	*Was it alright to have been me ?*	Wisdom

Lawrence **Kohlberg's Stages of Moral Development**(*Highly relevant for GS-IV*)

Level 1 (Pre-Conventional)
especially common in children, although adults can also exhibit this level of reasoning. Reasoners at this level judge the morality of an action by its direct consequences; solely concerned with the self in an egocentric manner. A child with pre-conventional morality has not yet adopted or internalized society's conventions regarding what is right or wrong but instead focuses largely on external consequences that certain actions may bring.

1. Obedience and punishment orientation *(How can I avoid punishment?)*

Individuals focus on the direct consequences of their actions on themselves. e.g. an action is perceived as morally wrong because the perpetrator is punished. "The last time I did that I got spanked, so I will not do it again." The worse the punishment for the act is, the more "bad" the act is perceived to be This can give rise to an inference that even innocent victims are guilty in proportion to their suffering.There is "deference (*polite submission or respect*) to superior power or prestige."

e.g. a child's classmate tries to dare the child to skip school. The child would apply obedience and punishment driven morality by refusing to skip school because he would get punished.

2. Self-interest orientation *(What's in it for me?) (Paying for a benefit)*
Right behavior is defined by whatever the individual believes to be in their best interest but understood in a narrow way which does not consider one's reputation or relationships to groups of people; limited interest in the needs of others.

e.g. when a child is asked by his parents to do a chore. The child asks, "what's in it for me?" The parents offer the child an incentive by giving a child an allowance to pay them for their chores. The child is motivated by self-interest to do chores.

Level 2 (Conventional)
Typical of adolescents and adults; characterized by an acceptance of society's conventions concerning right and wrong; a rule's appropriateness or fairness is seldom questioned.

3. Interpersonal accord and conformity *(Social norms) (The good boy/girl attitude)*
Individuals are receptive to approval or disapproval from others as it reflects society's views.

4. Authority and social-order maintaining orientation *(Law and order morality)*
Reasoning in stage four is beyond the need for individual approval exhibited in stage three. There is an obligation and a duty to uphold laws and rules. When someone does violate a law, it is morally wrong; culpability is thus a significant factor in this stage as it separates the bad domains from the good ones. Most active members of society remain at stage four, where morality is still predominantly dictated by an outside force

Level 3 (Post-Conventional aka **Principled Level)**
Post-conventional moralists live by their own ethical principles—principles that typically include such basic human rights as life, liberty, and justice. Individual's own perspective may take precedence over society's view; individuals may disobey rules inconsistent with their own principles. Some theorists have speculated that many people may never reach this level of abstract moral reasoning.

5. Social contract orientation
the world is viewed as holding different opinions, rights, and values. Such perspectives should be mutually respected as unique to each person or community. Laws are regarded as social contracts rather than rigid edicts. Those that do not promote the general welfare should be changed when necessary to meet "the greatest good for the greatest number of people" (**utilitarianism**). This is achieved through majority decision and inevitable compromise. Democratic government is ostensibly based on stage five reasoning.

6. Universal ethical principles *(Principled conscience) (universal ethical principles driven)*
Laws are valid only insofar as they are grounded in justice, and a commitment to justice carries with it an obligation to disobey unjust laws. This involves an individual imagining what they would do in another's shoes. The individual acts because it is right, and not because it avoids punishment, is in their best interest, expected, legal, or previously agreed upon. Although Kohlberg insisted that stage six exists, he found it difficult to identify individuals who consistently operated at that level

Kohlberg suggested that there may be a 7th stage—Transcendental Morality, or Morality of Cosmic Orientation—which linked religion with moral reasoning. Kohlberg's difficulties in obtaining empirical evidence for even a sixth stage,however, led him to emphasize the speculative nature of his seventh stage.

Criticisms of Kohlberg's theory

Contextual/Ecological Models of Development

Contextual theories suggest that since life events & conditions may vary from culture to culture and over diff. periods of time, adult development must be viewed against this backdrop of social and historical factors. e.g. in ancient culture of India, aged persons were treated as sources of wisdom, were highly respected but in contemporary times, *ageism* has become a negatively stereotyped word.

Theory of Mind of Adolescents

It is their understanding of how they or others think. It continues to change and develop.

Younger Children : **Realist Approach** : They believe that knowledge is a property of the real world and that there are definite truths or facts that can be acquired.

Older Children and pre-adolescents : **Relativist Approach** : They become aware of the fact that experts often disagree. This approach thus realizes that people may interpret the same information in contrasting ways.

Older Preadolescents : **Defended Realism Approach** : They recognize the difference between facts and opinions. Yet they continue to believe that there is a set of facts about the world that are completely true, and that differences in opinion stem from differences in available information.

Adolescents: **Dogmatic-Skepticism** : They realise that there is no secure basis for knowledge or for making decisions. They alternate between blind faith in some authority and doubting everything.

Some older adolescents : **Post-skeptical rationalism :** Finally some adolescents realize that while there are no absolute truths, there are better or worse reasons for holding certain views. This is the kind of thinking democrat

Levinson's Theory of Adult Development *(Baron Pg-356)*

Psychologist Daniel Levinson developed a comprehensive theory of adult development, referred to as the **Seasons of Life** theory, which identified stages and growth that occur well into the adult years.

His theory is comprised of sequence-like stages. Each stage is shaped by an event or action that leads into the next stage. The stages are:

1. **Early Adult Transition** (Age 17-22). This is the stage in which a person leaves adolescence and begins to make choices about adult life. These include choosing to go to college or enter the workforce, choosing to enter a serious relationship, and choosing to leave home.

2. **Entering the Adult World** (Age 22-28). This is the stage in which a person makes more concrete decisions regarding their occupation, friendships, values, and lifestyles.

3. **Age 30 Transitions** (Age 28-33). In this stage, there are often lifestyle changes that could be mild or more severe. For example, marriage or having children impact one's lifestyle, and these changes have differing consequences on how a person develops depending on how they embrace the event.

4. **Settling Down** (Age 33-40). In this stage, one often begins to establish a routine, makes progress on goals for the future, and begins behaving like an adult. People in this stage are often parents or have more responsibilities.

5. **Mid-Life Transition** (Age 40-45). This time period is sometimes one of crisis. A person begins to evaluate his or her life. Values may change, and how society views these people may change also. Some people make drastic life changes, such as divorce or a career change. At this point, people begin thinking about death and begin to think about leaving a legacy.

6. **Entering Middle Adulthood** (Age 45-50). In this stage, choices must be made about the future and possibly retirement. People begin to commit to new tasks and continue to think about the legacy they are leaving.

7. **Late Adulthood** (Age 60+). In this stage, one begins to reflect on life and the decisions they have made.

Levinson also indicated that each stage consists of two types of periods:

- **The Stable Period**, in which a person makes crucial choices in life.
- **The Transitional Period**, in which one stage ends and another begins.

Vaillant's Theory

Psychiatrist George Vaillant spent most of his career researching and charting adult development. His work is based on research of over 800 men and women spanning 60 years.

Vaillant identified six adult life tasks that must be successfully accomplished in order for a person to mature as an adult.

The tasks are:

1. **Developing an Identity**. Vaillant explained that an adolescent must establish an identity that allows a separation from parents. This identity is made up of one's values, passions, and beliefs.

2. **Development of Intimacy**. This allows a person to have reciprocal relationships with another person. This task involves expanding one's sense of self to include another person.

3. **Career Consolidation**. In this task, the person finds a career that is valuable to society and to him or herself. According to Vaillant, a job turns into a career once one has contentment, compensation, competence, and commitment. He notes that such a career could be that of a spouse or stay-at-home parent as well.

4. **Generativity**. This involves the unselfish will and capacity to give. Generativity means being in a relationship in which one gives up much of the control. For example, serving as a consultant or mentor to others would help establish generativity.

5. **Becoming Keeper of the Meaning**. This task involves passing on the traditions of the past to the next generation.

6. **Achieving Integrity**. This task involves achieving a sense of peace and unity with respect to one's life and to the world itself.

Neugarten's Theory

The psychologist Bernice Neugarten was one of the first to research and teach adult development. She proposed **The Social Clock Theory** in which there are age-graded expectations for life events. Being on-time or off-time from these major life events, such as beginning a first job, getting married, or retiring, can profoundly affect self-esteem.

The type of society that a person lives in will also set the expectations for the landmark events. For example, one society may promote early marriage, while another may promote waiting until a career is established to have children or get married. Think about the major landmark events our society promotes. Going to college immediately after high school is one of those societal expectations.

Individuals who keep pace with the social clock are more likely to be accepted and engaged with society. Those who either choose to lag behind or choose to ignore the clock completely may be ostracized because they are not fitting in with the established norms of the community. This could lead to feelings of low self-esteem.

Similarities/Differences

Each of the three theories we discussed view the development of adults as an important area of research.

Both Vaillant and Levinson agree that developing quality relationships with others is important for shaping future development. Neugarten emphasizes these types of relationships, too, but says the relationships may look differently and occur at different times according to societal norms.

Both Vaillant and Levinson agree that there is a mid-life stage in which conflict, confusion, and turmoil typically occurs. The successful navigation and resolution of this stage leads to a calmer, more established adult life.

Finally, Vaillant's and Levinson's theories are both limited in the fact that their research was largely based off interviews with people born in the first few decades of the 20th century. Different types of relationships, the economy, and different family structures make these theories less applicable to today's society.

The major difference in these three theories deals with how each researcher viewed development. Levinson's theory proposed a series of sequential stages, while Valliant proposed tasks that act as a cumulative guide for building a satisfying life. Neugarten proposed that the social clock guided development for adults.

Imprinting

In psychology and ethology, imprinting is any kind of phase-sensitive learning (learning occurring at a particular age or a particular life stage) that is rapid and apparently independent of the consequences of behavior. It was first used to describe situations in which an animal or person learns the characteristics of some stimulus, which is therefore said to be "imprinted" onto the subject. Imprinting is hypothesized to have a critical period.