

1.3 STAGES OF HUMAN DEVELOPMENT

(Comprehensive Notes for CTET & Other Teaching Eligibility Examinations)

1. INTRODUCTION

Human development is a **continuous, sequential, and lifelong process** of change that begins at conception and continues until death. It involves systematic changes in the physical, cognitive, emotional, social, and moral domains of an individual. For CTET and other teaching exams, "Growth and Development" forms a core part of the **Child Development and Pedagogy (CDP)** section, and questions on stages of development are asked almost every year.

Growth vs. Development (Important Distinction for MCQs):

Growth	Development
Quantitative change (height, weight, size)	Qualitative and quantitative change
Measurable in physical units	Includes physical, mental, emotional, social changes
Stops after a certain age (physical maturity)	Continues throughout life
Part of development	Broader concept; growth is one aspect of it

General Principles of Development (frequently asked):

1. Development follows a definite, predictable pattern/sequence.
 2. Development proceeds from general to specific (mass to specific activities).
 3. Development is continuous but not uniform — it has periods of rapid and slow growth.
 4. Development proceeds cephalocaudal (head to toe) and proximodistal (centre to periphery).
 5. Development is the product of heredity and environment (nature-nurture interaction).
 6. Different aspects of development (physical, mental, social, emotional) are interrelated.
 7. There are individual differences in the rate of development.
 8. Early development is more critical than later development ("critical/sensitive periods").
 9. Development is a product of maturation and learning.
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2. STAGES OF HUMAN DEVELOPMENT — OVERVIEW

Developmental psychologists broadly divide the human lifespan into the following stages. Different textbooks (Hurlock, Piaget, NCERT) give slightly varying age ranges, but for CTET purposes the commonly accepted classification is:

1. **Prenatal Stage** – Conception to birth
2. **Infancy** – Birth to 2 years
3. **Early Childhood** – 2 to 6 years

4. **Late Childhood** – 6 to 12 years
5. **Adolescence** – 12 to 18/19 years
6. **Adulthood** – 19 years onward (Early, Middle, Late Adulthood/Old Age)

Let us examine each stage in detail, covering physical, cognitive, language, social, and emotional development.

3. PRENATAL STAGE (Conception to Birth)

Though often excluded from "childhood" discussions, this stage is foundational and occasionally tested.

- Divided into three phases: **Germinal (0–2 weeks)**, **Embryonic (2–8 weeks)**, and **Fetal (8 weeks–birth)**.
 - All major organs and body structures form during the embryonic stage — this is why it is called the **critical period**.
 - Maternal nutrition, infections, stress, and teratogens (harmful substances like alcohol, drugs) can severely affect development.
 - By birth, the fetus has functioning senses — hearing develops fairly early and the fetus can respond to sound and voice.
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4. INFANCY (Birth to 2 Years)

Infancy is considered the **most crucial period** of human development because the foundations of future development are laid here.

Physical Development

- Fastest rate of physical growth in the entire lifespan (birth weight typically doubles by 5 months, triples by 1 year).
- Development follows **cephalocaudal** (head-to-tail) and **proximodistal** (center-to-outward) principles — babies gain control of the head before the trunk, and of the trunk before the limbs.
- Reflexes present at birth: rooting, sucking, grasping (palmar), Moro (startle), Babinski reflex — these gradually disappear and are replaced by voluntary movements.
- Motor milestones (approximate): head control (3-4 months), sitting without support (6-8 months), crawling (8-10 months), standing with support (10-12 months), walking (12-15 months).

Cognitive Development (Piaget's Sensorimotor Stage: 0–2 years)

- Infants learn through **senses and motor activity**.
- Key achievement: **Object permanence** — understanding that objects continue to exist even when not visible (develops around 8 months).
- Development moves from reflexive action to goal-directed, intentional behaviour.

Language Development

- Cooing (2-3 months) → Babbling (6 months) → First meaningful word (around 12 months) → Two-word/telegraphic speech (18-24 months).

Social-Emotional Development

- **Attachment** with the primary caregiver (usually mother) is the central social achievement — studied extensively by John Bowlby and Mary Ainsworth (Strange Situation experiment).
- Basic emotions like joy, anger, fear, and distress appear early; more complex emotions (shame, pride, guilt) emerge toward the end of infancy.
- Erik Erikson's first psychosocial stage — "**Trust vs. Mistrust**" — occurs during infancy; consistent, responsive caregiving builds a sense of trust in the world.

5. EARLY CHILDHOOD (2 to 6 Years)

Also called the "**Preschool years**", "Pre-gang age," or "Toy age." This is a stage of great curiosity, imagination, and exploratory behaviour — often referred to as the "**Play age.**"

Physical Development

- Growth rate slows compared to infancy but steady progress continues in height, weight, and motor coordination.
- Gross motor skills improve rapidly — running, jumping, climbing, hopping.
- Fine motor skills develop — holding a crayon, buttoning clothes, using scissors.
- Handedness (left/right dominance) becomes established.

Cognitive Development (Piaget's Preoperational Stage: 2–7 years)

- Children begin to use **symbols, language, and imagination**, but thinking is not yet logical.
- **Egocentrism**: inability to see things from another's perspective.
- **Centration**: focusing on only one aspect of a situation (e.g., failing conservation tasks — a child believes a taller glass has "more" liquid than a shorter, wider one holding the same amount).
- **Animism**: attributing life/feelings to inanimate objects (e.g., believing a doll feels pain).
- **Symbolic/Pretend play** becomes prominent — a hallmark of this stage.
- Lack of understanding of **conservation, reversibility, and classification**.

Language Development

- Vocabulary explodes — from about 200 words at age 2 to over 2,000 words by age 6.
- Sentence structure becomes more grammatically correct; children start asking "why" questions extensively.

Social-Emotional Development

- Erikson's stages relevant here: "**Autonomy vs. Shame/Doubt**" (2-3 years, related to independence e.g. toilet training) and "**Initiative vs. Guilt**" (3-6 years, related to taking initiative in play and activities).
- Parallel play (playing alongside but not with other children) gradually shifts to associative/cooperative play by the end of this stage.

- Gender identity and role awareness begin developing.
 - Emotional expression is intense but short-lived; temper tantrums are common.
 - Moral development is at a very basic level — obedience to avoid punishment (linked with Kohlberg's Pre-conventional stage).
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6. LATE CHILDHOOD (6 to 12 Years)

Also called the "**School age**," "**Gang age**," or "**Elementary school years**." This stage aligns with formal schooling and is highly relevant to CTET pedagogy.

Physical Development

- Slow and steady physical growth compared to infancy and adolescence.
- Improved motor coordination — children become skilled in sports, writing, drawing, and other refined physical activities.
- Permanent teeth begin to replace milk teeth.

Cognitive Development (Piaget's Concrete Operational Stage: 7–11 years)

- Children begin **logical thinking**, but only in relation to **concrete** objects and situations (not abstract ideas).
- **Conservation** is achieved — child understands quantity remains same despite changes in shape/appearance.
- **Reversibility** of thought develops — understanding that actions can be reversed.
- **Classification and seriation** abilities improve (grouping objects by category, arranging in order).
- Reduction in egocentrism; improved ability to understand others' viewpoints (**decentration**).
- Memory strategies (rehearsal, organization) and attention span improve significantly.

Language Development

- Vocabulary and grammar become more sophisticated; reading and writing skills are refined.
- Understanding of metaphor, humor, and more complex language structures develops.

Social-Emotional Development

- Erikson's stage: "**Industry vs. Inferiority**" — children strive to achieve competence in academic and social skills; success builds a sense of industry, while repeated failure creates a sense of inferiority.
 - **Peer group ("gang")** becomes highly important — hence the term "gang age." Peer acceptance, teamwork, and rule-based group games are central.
 - Comparison with peers affects self-esteem and self-concept.
 - Kohlberg's **Conventional level** of moral reasoning begins — behaviour is guided by social approval and rules ("good boy/girl" orientation, law and order orientation).
 - Increased independence from family; teachers and peers play a growing role in shaping identity.
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7. ADOLESCENCE (12 to 18/19 Years)

Adolescence is described by G. Stanley Hall as a period of "**Storm and Stress**." It is the transitional stage between childhood and adulthood, marked by puberty and the search for identity.

Physical Development

- **Puberty** brings rapid physical changes — growth spurt, development of primary and secondary sexual characteristics.
- Hormonal changes (increase in estrogen/testosterone) drive these physical transformations.
- Rate and timing of puberty vary widely among individuals, leading to self-consciousness about body image.

Cognitive Development (Piaget's Formal Operational Stage: 11 years onward)

- Development of **abstract, hypothetical, and logical reasoning**.
- Ability to think about possibilities, form hypotheses, and engage in **deductive reasoning** ("if-then" thinking).
- **Adolescent egocentrism** (David Elkind): includes the "**imaginary audience**" (belief that others are constantly watching/judging them) and the "**personal fable**" (belief that one's experiences are unique and one is invincible).
- Capacity for introspection, self-reflection, and moral/philosophical reasoning increases.

Social-Emotional Development

- Erikson's central stage: "**Identity vs. Role Confusion**" — the primary task of adolescence is forming a coherent sense of self/identity; failure leads to confusion about one's role in society.
- Strong orientation toward **peer group** and reduced dependence on family, though parental relationships remain important.
- Emotional intensity and mood swings are common due to hormonal and social changes.
- Kohlberg's **Post-conventional level** of morality may begin to emerge in later adolescence — reasoning based on social contract and universal ethical principles.
- Career choice, value formation, and questions of identity ("Who am I?") dominate psychological life.
- Risk-taking behaviour may increase due to the interplay of the still-developing prefrontal cortex (self-control) and heightened emotional/reward-seeking systems.

8. ADULTHOOD

Adulthood is typically divided into three sub-stages:

(a) Early Adulthood (approx. 19/20 – 40 years)

- Peak of physical strength, health, and reproductive capacity.
- Major life tasks: career establishment, intimate relationships, marriage, and parenthood.
- Erikson's stage: "**Intimacy vs. Isolation**" — the task is forming close, committed relationships; failure results in loneliness and isolation.
- Cognitive abilities are at their peak; some theorists (e.g., Labouvie-Vief) describe the development of "**post-formal thought**" — practical, flexible, and contextual thinking beyond Piaget's formal operations.

(b) Middle Adulthood (approx. 40 – 60/65 years)

- Physical decline begins gradually (reduced stamina, menopause/andropause).
- Erikson's stage: "**Generativity vs. Stagnation**" — focus shifts to contributing to society, guiding the next generation (through parenting, mentoring, or work); failure leads to a sense of stagnation and self-absorption.
- Often accompanied by reassessment of life goals ("midlife crisis" in popular terms, though not universal).

(c) Late Adulthood / Old Age (60/65 years onward)

- Decline in physical abilities, sensory sharpness, and sometimes cognitive speed (though wisdom and accumulated knowledge often remain strong or improve).
- Erikson's final stage: "**Ego Integrity vs. Despair**" — individuals reflect on their life; a sense of fulfillment leads to integrity, while regret leads to despair.
- Retirement, changing social roles, and coping with loss (of health, spouse, peers) are major psychosocial tasks.

9. IMPORTANT THEORIES LINKED TO STAGES (Quick Revision Table)

Theorist	Focus Area	Key Stages/Concepts
Jean Piaget	Cognitive Development	Sensorimotor → Preoperational → Concrete Operational → Formal Operational
Erik Erikson	Psychosocial Development	8 stages, Trust vs Mistrust to Ego Integrity vs Despair
Lawrence Kohlberg	Moral Development	Pre-conventional → Conventional → Post-conventional
Sigmund Freud	Psychosexual Development	Oral, Anal, Phallic, Latency, Genital stages
John Bowlby / Mary Ainsworth	Attachment Theory	Secure/insecure attachment in infancy
Lev Vygotsky	Sociocultural Cognitive Development	Zone of Proximal Development (ZPD), role of social interaction
G. Stanley Hall	Adolescence	"Storm and Stress" theory

10. PEDAGOGICAL IMPLICATIONS FOR TEACHERS (Often Asked in Application-Based Questions)

1. **Infancy/Early Childhood:** Provide a safe, stimulating, play-based environment; encourage sensory exploration; foster secure attachment through warmth and responsiveness.
2. **Late Childhood:** Use concrete examples, hands-on activities, and cooperative learning; encourage peer interaction and provide opportunities for skill mastery to build a sense of industry.
3. **Adolescence:** Encourage abstract thinking through discussion and debate; respect the need for identity exploration and peer belonging; avoid excessive comparison or ridicule, which can damage self-esteem.
4. Teachers should always keep in mind **individual differences** — not all children of the same age reach milestones at the same time, and teaching strategies should be developmentally appropriate.

5. Understanding these stages helps teachers align curriculum, classroom management, and assessment methods with the developmental readiness of learners — a core principle of **child-centered education**, as emphasized in NCF 2005 and NEP 2020.
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11. QUICK MCQ-STYLE POINTS TO REMEMBER

- Fastest physical growth occurs during **infancy**, not adolescence.
 - **Object permanence** – infancy (sensorimotor stage).
 - **Conservation & reversibility** – late childhood (concrete operational stage).
 - **Abstract/hypothetical reasoning** – adolescence (formal operational stage).
 - "**Gang age**" = Late childhood; "**Storm and stress**" = Adolescence; "**Toy age**" = Early childhood.
 - Erikson's stage for adolescence = **Identity vs. Role Confusion**.
 - Erikson's stage for infancy = **Trust vs. Mistrust**.
 - Development proceeds **cephalocaudal** and **proximodistal**.
 - Growth is quantitative; development is both quantitative and qualitative.
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These notes are structured to align with the Child Development and Pedagogy (CDP) portion of the CTET syllabus (Paper I & II) and are suitable for classroom teaching, revision handouts, or student self-study.