What do people strive to achieve during young adulthood?

What sort of relationship gives satisfaction to people in middle adulthood?

What type of achievements lead to a sense of integrity in old age?

Alka, after completing her post-graduation, is planning to get married to Raj. Alka's friend, Rani, has taken up a job in a multi-national company after completing her studies. Anju, another one of Alka's friends, got married after graduation. She is the mother of a child. As her wedding day approaches, Alka has been feeling agitated thinking if she should get married first or find a suitable job. On the other hand, Raj is successfully settled in his job and is happy with how his career has been shaping. He has been thinking about starting a family. Meanwhile, Alka is still struggling to find a job of her choice. This is an example showing the emotional and social side of early adulthood.

Erik Erikson (1989) has developed a psycho-social development theory of personality. He described eight stages. Each stage is a transition period in an individual's life. According to theory, if a person passes successfully through each stage - that is, if he/she achieves whatever is required in that stage - then the person is said to be moving towards healthy development. Otherwise, the stages can cause crises in the individual's life.

Erik Erikson's theory of psycho-social development explained two important themes which dominate adulthood, which are love and work. During early adulthood, adults are faced with intimacy versus isolation. Young adults during this stage develop deep and intimate relationships with others. Those who get consistent care and love from others are able to form intimate relationships with them. However, those who fail to
find intimacy become socially isolated. Adults learn to function independently, become parents and develop friendships.

Alka's inner conflict is regarding whether to marry or to find a job of her choice. Here, Alka is trying to find her identity. Maturity involves a balance between the need for independence and intimacy. Without independence, adults may feel a lack of self-respect.

Erikson labeled the middle adulthood stage as a period of generativity versus stagnation. Individuals at this time start showing concerns for others. They take an active interest in helping and guiding others. Parents help their children in choosing a career and mentor them. Adults who successfully resolve this stage feel generativity. Those who are unable to help others turn out to be self-centered and suffer from a feeling of stagnation.

During late adulthood, individuals enter Erikson's ego-integrity versus despair stage. When older adults look back at their lives, they often ask themselves questions like "what have I achieved?" and "what is the meaning of my life?" If they are able to find answers to these questions, they can be said to have achieved their goals. They feel a sense of integrity. If not, then they may perceive despair. It is the way we deal with our life's problems which determine the course and nature of life.

**OBJECTIVES**

The Learner

- identifies the stages of development during adulthood and old age;
- states the key characteristics - physical, cognitive, socio-emotional - during adulthood and old age;
- understands the concerns faced during adulthood such as career transition, family responsibility and change; and
- recognizes the concerns of old age and act responsibly.

**15.1 ADULTHOOD AND OLD-AGE**

**15.1.1 Adulthood**

An adult is generally defined as someone who can take care of himself/herself, is fully-
developed, has the resources to be able to survive without external assistance and is well-organised to work independently. Important life events take place during adulthood such as getting a job, getting married and having children. The timeline for these events may vary across different countries according to their respective cultural norms. But the course of adult development maybe the same within a culture. During adulthood, two major events happen: choosing a career and selecting a life partner for marriage. It is a gradual transition from dependence to independence.

15.1.2 Old Age

This is the period of late adulthood which starts around the age of 60-65 years. It is often characterized by physical, cognitive and social decline. Early adulthood, middle adulthood, and late adulthood are the three main periods of physical, social and emotional development.

<p>| Table 15.1 Developmental Stages of Adulthood |</p>
<table>
<thead>
<tr>
<th>Stages</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Adulthood</td>
<td>(18-40) years</td>
</tr>
<tr>
<td>Middle Adulthood</td>
<td>(41-60) years</td>
</tr>
<tr>
<td>Late Adulthood</td>
<td>61 years &amp; above</td>
</tr>
</tbody>
</table>

15.2 LEVINSON'S THEORY OF ADULT DEVELOPMENT

Daniel Levinson (1986) has developed a stage theory of social development. He described four eras of adult life. Each era presents a different type of problem.

<table>
<thead>
<tr>
<th>Table 15.2 Four Eras of Adult Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescence (11-17) years</td>
</tr>
<tr>
<td>Early Adulthood (18-45) years</td>
</tr>
<tr>
<td>Middle Adulthood (46-65) years</td>
</tr>
<tr>
<td>Late adulthood 65 years onwards</td>
</tr>
</tbody>
</table>

i. Adolescence (11-17) years

Levinson divides life into four major eras, each separated from the other stage by a transition period. The first transition occurs between childhood and early adulthood. It involves establishing one's independence both emotional and financial. After this, individual enters early adulthood.
ii. Early Adulthood (18-45) years

Levinson talks about two key components of their life structure. They are the dream and the mentor. Dream is a vision of future accomplishments that the individual hopes to achieve in years ahead. Mentor is more experienced person who guides and helps a young adult. An individual's life choices during adulthood pertain to family, job and lifestyle. Throughout this period, they raise their children and achieve positions of seniority in society. They move towards independence. Adults begin to see their children settle in their own lives. It is a period of accepting responsibilities. People in this era start realizing that half of their life is over, and if they have to make changes in their life, they have to make them now. This era is equivalent to Erickson's generativity versus stagnation. People start showing concerns for others besides themselves and their families. They start guiding and nurturing younger generations.

iii. Middle Adulthood (46-65) years

Adults who had faced a mid-life crisis are now living with the decisions which they had made earlier. Families and career are settled and established. Some people experience self-worth and self-satisfaction because they have achieved what they wanted to. Others may feel like much of their life has been wasted. This crisis may continue from earlier crisis or manifest itself as a new one. People in their 60s also begin to prepare themselves for retirement depending upon their sense of achievement.

iv. Late Adulthood (65 years onwards)

Late adulthood is considered to begin at about 65 years of age. Many people at this point are satisfied with their lives and begin to relax and enjoy time with their children and grandchildren. They also find the time to pursue their own interests and hobbies. By the onset of this stage, it is important to find meaning in life rather than feel disappointed.

15.3 Physical Development during Adulthood

People change physically across their lifespan. As adults go through early, middle and late adulthood, they go through a variety of changes in their sensory abilities, muscular strength, reaction time, visual capacity, motor co-ordination, respiratory function, cardiovascular changes, immune functioning and reproductive capacity.
Adulthood and Old age

Aging is of two types

(i) Primary Aging

(ii) Secondary Aging

(i) **Primary Aging:** In primary aging, changes are based on biological factors such as cellular and molecular changes.

(ii) **Secondary Aging:** Secondary aging is related to controllable factors such as lack of physical exercise, poor diet, etc.

- In middle adulthood (41-60 years), the aging process becomes more visible. It is a period of increasing social interaction and responsibility. These adults help the younger generation in becoming competent and self-sufficient individuals. They are at the peak of their careers but a decline in their physical self is noticeable.

- After the age of 55, bones become less dense, and as a result men lose up to 1 inch in height and women lose 2 inches. Their weight also drops after the age of 50 years because of muscle loss. Stamina begins to decline.

- They find it difficult to see things in dim light because of the accommodative capacity of the eye declining. They are unable to discriminate between colours. Sensitivity to glare also increases with age.

- Hair begins to turn grey and wrinkles start appearing on the face.

- Physical strength and lung capacity also decreases.

- The hormonal cycle of adult women around the age of 50 years lead to the cessation of menstruation. The process is called menopause. Men's testosterone levels decrease at about the same age.

- Chronic health problems such as heart disease, hypertension and diabetes may also start at this age.

- Humans are complex beings, which is why aging of physiology can depend on a number of variables. Adults who indulge in routine exercises such as walking, jogging, etc., can reduce the negative effects associated with aging.

15.4 COGNITIVE DEVELOPMENT DURING ADULTHOOD

Physical changes are observable to the eyes. But what about cognitive changes? Do adults change cognitively? The human brain is responsible for cognition. Since human beings change and deteriorate physically across their life span, it is justified to expect
some cognitive changes in brain with age. But as we grow older, we also learn to solve a lot of problems with the help of our experience. This is why it is said that wisdom increases with age.

15.4.1 Memory and adulthood

Memory can get trickier with age. People who were able to maintain their daily schedules in their heads, now have to write it down and carry it around in their pocket diaries.

- Research indicates that older people are able to retain as much information as young adults, i.e., seven to nine items in short term memory. But their ability to transfer information from working memory to long-term memory declines with age.

- Old adults have more trouble with recall than the young adults. They find difficulty in recognizing others. They complain about recalling new information such as names and events. They find difficulty in retrieving information from long-term memory.

- They are unable to plan activities, decide what to say and how to explain their words.

- Sensory storage problem occurs in the short term memory rather than long-term memory.

- There is also some decline found in episodic memory. (Episodic memory is the memory dedicated to remembering events experienced by an individual and is associated with particular places and times.)

- Meanwhile, semantic memory remains the same. (Semantic memory is related to general knowledge.)

- Procedural memory (used in actions like tying shoelaces and cooking a recipe) seems to be stable across one's lifespan.

- Research also indicates that recall of meaningless information such as non-sense syllables or paired associates decline with increasing age.

- The memory of meaningful information remains largely intact, unless an individual suffers from Alzheimer's disease.

- Old people can improve their memory functions by practising mental exercises like playing chess, solving puzzles and reading. All the activities which make use think, reason and remember keep our memory intact throughout age.

- Brain weight of the individual decreases 5 to 10% by the age of 80 years and 29% by the age of 90 years. Almost 50% neurons of motor, visual and auditory
functions die in old age.

- The frontal lobe of the brain is related to working memory. It experiences a greater loss of neurons than other area of the brain.
- The hippocampus plays an important role in memory, but it also suffers from damage due to ageing.
- Women seem to experience less cognitive damage with ageing than men. It maybe because female sex hormones protect their brains from age-related decline.

### 15.4.2 Intelligence during Adulthood

Intelligence may also increase or decline with age. Researchers have found that various aspects of cognitive functioning remain stable throughout the lifespan of adults.

- As adults age, their crystallized intelligence increases and fluid intelligence declines. Fluid intelligence is the ability to use logic and solve problems in novel or new ways without taking help from pre-existing knowledge. Crystallized intelligence is the ability to use knowledge that was previously acquired through education and experience. Their ability to divide and control complex tasks deteriorates, which adults usually achieve through practice and experience in life.
- Some researchers suggest that general intelligence remains stable across life spans, but certain aspects of it decline with age. Old people do poorly on standardized intelligence tests because they have to manipulate objects within set intervals of time during the tests. Their reaction times becomes impaired with age. As a result, this may impair other related activities, such as driving skills.
- Cross-sectional studies have reported different types of results to show that cognitive and intellectual capabilities do decrease with age.

### 15.5 Social and Emotional Development during Adulthood

- Adults have a strong need of affiliation and a desire to meet & interact with other individuals. They gain help, support and information from friends.
- Interacting with relatives, friends and neighbours is always beneficial as we age. We continue to interact with other individuals throughout our life spans. Adult individuals may have casual relationships with a lot of friends, but they may grow closer with a select few as they age. Although the size of their friend groups decrease over time, adults usually maintain close and strong friendships with a small number of people.
ACTIVITY

Observe the adults staying in your locality to understand whether those who have a close knit and stable social support in their life are emotionally more balanced than those who lead a solitary life without social interaction.

INTEXT QUESTIONS

1. What do you understand by the term Adult and Old-Age?
2. What are the three stages of Adulthood?

15.6 PHYSICAL, COGNITIVE & EMOTIONAL DEVELOPMENT IN OLD AGE

15.6.1 Physical Changes During Late Adulthood/Old Age

- This is the period that begins in the 60s and lasts till death. People generally see significant biological decline during late adulthood/old age.

- Physical changes include the reduction in the pumping capacity of the heart and digestive system becoming less efficient.

- Skin loses its elasticity and as a result, wrinkles become more noticeable.

- Nails and bones become brittle because of calcium deficiency, which also causes arthritis in a lot of adults.

- Teeth may also fall out due to gum disease.

- Eye ailments also become a possibility in old age. Cataract of the eye and glaucoma are the most common. Cataract is the thickening of the lens of the eye, because of which vision becomes cloudy and distorted. Glaucoma occurs due to the damage to the optic nerve.

15.6.2 Cognitive Development In Late Adulthood/Old Age

- Information processing speed declines in late adulthood/old age. The most common reason is often due to decline in the central nervous system and brain functioning.

- Mental activities such as reading books, playing computer games and solving
15.6.3 Emotional Development In Late Adulthood/Old Age

- Old people usually experience loneliness after children leave home for various reasons like jobs, marriage, etc.
- Religious and social support systems in old age may help people achieve better physical and psychological health.

Table 15.3 The Cognitive, Emotional And Biological Symptoms Of Late Adulthood / Old age

<table>
<thead>
<tr>
<th>Cognitive Symptoms</th>
<th>Emotional symptoms</th>
<th>Biological symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slow thinking</td>
<td>Loneliness</td>
<td>Joint pains</td>
</tr>
<tr>
<td>Confusion with identity</td>
<td>Irritability</td>
<td>Sensory deficits</td>
</tr>
<tr>
<td>Dullness of mind</td>
<td>Anxiety</td>
<td>Cardiovascular dysfunction</td>
</tr>
<tr>
<td>Feeling lost or confused</td>
<td>Depression</td>
<td>Respiratory decline</td>
</tr>
<tr>
<td>Deline in perceptual speed</td>
<td>Agitation</td>
<td>Age-related changes in lungs</td>
</tr>
<tr>
<td>Slow problem solving</td>
<td>Unexplained pain</td>
<td>Diminished motor activity</td>
</tr>
<tr>
<td>Slow judgement</td>
<td>Less cooperation</td>
<td>Degeneration of muscles</td>
</tr>
<tr>
<td>Impaired memory</td>
<td>Less social interaction</td>
<td>Loss of coordination</td>
</tr>
<tr>
<td>Problem with language</td>
<td>Loss of appetite</td>
<td>Less effective immune system</td>
</tr>
<tr>
<td>Lack of attention</td>
<td>Sadness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lack of energy</td>
<td></td>
</tr>
</tbody>
</table>

15.7 CAREER TRANSITION, FAMILY RESPONSIBILITY AND CHANGE DURING ADULTHOOD

i. Choice of a career

Choosing an appropriate job and building a career are important goals for an adult. A career gives them a sense of security, self-worth and brings financial
Adulthood and Old age

independence. A person may start at their first job, switch to a more satisfying or interesting job if required, retire and stop working outside their house altogether. Each of these life events is termed as a career transition and serves as an important era in their lifespan. The term career transition may refer to the process when an individual shifts to a new position or a new role in the same company or organization. There are various types of career transition which also include any undesired and unanticipated changes in an individual's career. 

There are two categories of career transitions

- Involuntary career transition
- Voluntary career transition

Voluntary career transition

Some individuals choose a career based on the following

- Wishes of their parents
- To earn money
- As a substitute for a job of their choice
- As a change from a different work or interest area
- As a result of their company moving their base to other country, where labour is cheaper
- As a result of their company forcing them to undergo a career transition

Career transition has become more common now. Employees change their job more frequently and a career change is also perceived more positively. Earlier career change was seen in a negative light, such as an individual being unable to perform adequately in a company, lacking in skills to perform or to hold a position, etc. Now that perception is changing. Research indicates adaptation to career change is important for the psychological well-being of the individual. Some individuals adapt quickly to career transitions, while others face anxiety or depression. Adulthood is a period of loss and decline, but there can be growth also. Many factors such as individual personality traits, age and sex contribute to how well they adjust to mid-life transition.

iii. Marriage and family responsibility

Adults adjust their lives after marriage and take care of the likes and dislikes of their partners. When both partners are working, they share the roles and responsibilities. After marriage, becoming a parent brings another transition in life. It can be stressful but coping depends on a number of other factors such as
support from the family in bringing up the child and the level of happiness of both the partners. Sometimes only one of the parents has to take the entire responsibility of the child because of reasons like divorce or death of a spouse. More women are now working outside their homes. The stress of divorce affects working women greatly too. They are faced with taking care of the health and education of their children alone as well as coping with and balancing the workload in the office and at home. Yet, despite all the stress associated with parenting, adults find an opportunity for growth and self-respect as parents.

### 15.8 COMMON ISSUES AND CONCERNS OF LATE ADULTHOOD/OLD AGE

Some of the most common concerns of old people are:

- Financial insecurity
- Social isolation/Empty-nest syndrome
- Feeling left behind or left out by technology
- Declining health
- Malnutrition
- Feeling a lack of warmth and affection in their relationships

#### i. Financial issues of late adulthood/old age

Financial problems are often experienced by old people. As the individual grows old and retires from work, his finances become constraints. They have to depend on sources like their pension or a fixed income from their savings. These savings may not be enough to meet their medical expenses and household responsibilities. A major concern in their lives is their deteriorating health. They need regular medical check-ups. A large chunk of their income is spent on healthcare. Some of them may be diagnosed with major chronic illnesses. They need money for surgeries and medicines. Their savings are not enough to meet their medical expenses. They may slip into poverty as their earnings diminish. They do not find themselves in a position to do a job and earn a livelihood. Even if some of them may try getting a job, not many avenues are open for them because of their age. They may also face ageist discrimination. Many elderly people in India are exploited financially by their children. Another problem they are more prone to when living alone is theft and robbery. There are others who have to attend to the needs of their grandchildren or children. Some grandparents pay for higher education, which may be exponentially higher for foreign universities. Some may take a loan to support this, but have to manage their own households.
alongside. In such situations, they may find it difficult to take care of essentials like cleaning, cooking and paying bills.

Figure 15.1. Financial issues faced by old people

Widowed individuals become more prone to financial difficulties. Although many of them have savings, insurance and a pension, others experience a sharp decline in their income. Economic dependence can be very stressful in late adulthood and even cause suicidal feelings. It stems from a sense of deep insecurity and low esteem due to low income. Therefore, good financial planning is crucial to maintaining adequate funds and reduce financial insecurity in old age. It can make aged individuals financially independent and take care of their own needs.

(ii) Health Concerns of late adulthood/old age

Arthritis and osteoporosis are the most common health problems among the elderly. Arthritis is the inflammation of joints in the body, while osteoporosis is the extensive loss of bone tissue and decreased bone density. It affects more women than men. Some behavioural factors also trigger biological decline. Old people who live alone and suffer from loneliness become inattentive to nutritious eating. This leads to vitamin deficiency. This may or may not affect their day-to-day functioning. Stress related to situational factors such as the loss of a loved one, diagnosis of chronic illness, financial losses and other family-related issues may also have severe impacts on the biological and psychological functioning of old people. Those individuals who take care of their health, do regular exercise and eat nutritious food full of vitamins and minerals and low in fat are found to be healthier. They have reduced risks of heart disease, hypertension, weight gain and osteoporosis.

Today, people all over the world people can expect to live longer than ever before.
Many old people are managing their chronic illnesses by adopting various healthy lifestyle interventions. But still, chronic health conditions lead to two-thirds of deaths worldwide every year. Most common issues faced by old people are:

- Hypertension
- Heart attacks
- Cancer
- Diabetes
- Arthritis
- Chronic pains
- Liver dysfunction
- Kidney dysfunction
- Dementia
- Alzheimer's disease

There are many diseases and illnesses which are specific to old people, but they are also more prone to other chronic and infectious illnesses. Most of them suffer from a long-term disease such as arthritis, Alzheimer's, hypertension, diabetes and cancer. Around 15 to 20% of the elderly over the age of 65 years also suffer from psychological disorders. However, the symptoms of psychological disorders are different in older and younger adults. One of the most prevalent disorders is depression. Unfortunately, it is often under-diagnosed and left untreated. Factors such as the loss of close family members, financial insecurity, loneliness and declining health trigger depression in old people. Depression may even be the side-effect of medicines which they consume to
treat physical ailments. Dementia in older people may also be an underlying symptom of Alzheimer's disease. It is a progressive brain disorder leading to loss of memory and confusion. Doctors can prescribe a treatment plan and medicine to manage the disease, but currently, there are no cures for dementia.

Figure 15.3 Psychological issues faced by old people

(iii) Emptiness in old age

Emptiness is a feeling of isolation. With advancing age, people lose contact with their old friends and find it difficult to initiate new friendships. Old people usually start feeling left out when their children leave the home to go abroad for higher education, jobs or change residence permanently. There are also cases where children ignore their parents when they get old, making them feel unwanted and lonely. The negative effects of emptiness on health in old age have been indicated by many researchers. Some of the contributing factors leading to emptiness are:

- Divorce
- Death of a spouse
- Living alone
- Inability to actively participate in activities
- Loss of socialization after leaving work/after retirement
- Limited opportunities to participate in social gatherings or activities
- Children moving away
- Isolation because of chronic illnesses like cancer, Alzheimer's disease, etc.

As individuals grow old, they face numerous psychological and social role changes that challenge their sense of self and feelings of happiness. They can maintain their
physical and psychological strength by engaging in regular exercise and adopting other healthy lifestyle habits. There is a need for the government to create guidelines and policies to support and protect the health, emotional and financial needs of the elderly. These may include:

- Recognizing the concerns of old citizens and acting responsibly
- Providing preventive healthcare services
- Helping the elderly in managing chronic illnesses
- Encouraging exercise and social activities for healthy aging

WHAT YOU HAVE LEARNT

Adulthood

- Early Adulthood (18-40)
- Middle Adulthood (41-60) years
- Late Adulthood (61 years and above)

Adolescences (11-17 years)

- Early Adulthood (18-45 years)
- Middle Adulthood (46-65 years)
- Late Adulthood (65 years onwards)

Levinson's Theory of Adult development

Physical Development During Adulthood

- Primary Aging
- Secondary Aging
TERMINAL QUESTIONS

1. What do you understand by physical development in middle adulthood?
2. What is cognitive development in adulthood?
3. What cognitive changes occur during middle adulthood?
4. Does memory improve as you get older?
5. What do you mean by career transition?
6. Write short notes on
   a) Social and emotional development during adulthood
   b) Emptiness
   c) Financial insecurity
   d) Health concerns
7. What are some of the transitions and challenges that adults face in their personal lives after marriage, particularly related to parenting and working?
8. What are some of the physical changes that occur during middle and late adulthood, and what are some factors that can influence the aging process?
9. What are the four eras of adult life according to Daniel Levinson's stage theory of social development, and what are the challenges associated with each era?
10. What are the specific challenges individuals face during the intimacy versus isolation, generativity versus stagnation, and ego-integrity versus despair stages?

ANSWERS TO INTEXT QUESTIONS

15.1

1. An adult is generally defined as someone who can take care of himself, is fully-developed, has the resources to be able to survive without external assistance and is organised enough to work independently. Old age is period of decline in physical and psychological factors.

2. Three stages of adulthood are:

   Early Adulthood (18-40) Years
   Middle Adulthood (41-60) Years
   Late Adulthood or Old Age (61) Years and Above

15.2

1. Middle adulthood refers to the period of the life span where an individual experiences physical decline such as greying of hair or hair loss, vision loss, and hearing loss.

2. Late Adulthood or Old Age is the period from age 61 years and above.
**Individual Differences**

Human beings not only respond to the external world but also attend to themselves. In other words, self is also an object and all of us deal with it. In recent years, self has been given significant place in the analysis of cognition, motivation and emotion. The kind of self concept which people have is also influenced by our culture. Understanding of personality has also been detailed out in this module. Various factors such as genetics, environmental and cultural influencing personality of an individual are also dealt with. Intelligence, key theories of intelligence and emotional intelligence and creativity has also been discussed.

16. Diversity and Individual variations
17. Self and Personality
18. Intelligence