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# UNIT 1    PHYSICAL CHANGES

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## 1.0 INTRODUCTION

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Adolescence can be understood as a phase of transition from child to an adult. This period generally extends from 12 to 19 years of age, which is broadly categorised into three stages, viz., early adolescence, middle adolescence and late adolescence. Teenagers experience some physical milestones as they move from childhood to adolescence. Normal growth during adolescence includes both an increase in body size and sexual maturation (puberty).

During adolescence, boys and girls reach adult height and weight. Adolescence is the time for growth spurts and puberty changes. An adolescent may grow several inches in several months followed by a period of very slow growth, and then have another growth spurt.

Puberty happens to all individuals, whether boys or girls. In girls, it may start at the age of 9 or 10 and in boys it may begin around 12 or 13 years, although there is variation in the age from one person to the other. Girls experience puberty as a sequence of events, but their pubertal changes usually begin before boys of the same age.

In this unit, we will discuss the various physical development that takes place during adolescence and some ways to understand the complex nature of teens.

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## 1.1 OBJECTIVES

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After going through this unit, you will be able to:

- define the meaning and definition of adolescent development;
- describe the physical changes occurring during adolescence;
- explain some of the reactions to the physical changes during adolescence; and
- analyse the factors that contribute to these physical changes.

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## 1.2 ADOLESCENT DEVELOPMENT

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### 1.2.1 Meaning and Definition

Adolescence is the phase of transition from being a child to an adult. It extends from 12 to 19 years of age and it can be broadly categorised into three stages – early adolescence, middle adolescence and late adolescence. This transition involves biological (i.e. pubertal), psychological and social changes. Just before reaching adulthood, the youngster's behaviour seems to be confusing to parents. Parents find this to be a stormy period because it appears, as if there is nothing that parents say or do is right for the adolescents.

### 1.2.2 Early Adolescence (12-14 years)

Early adolescence is a contradictory phase. It is a phase when the child is not yet mature and at the same time she is no longer a child. They insist that they have grown up enough to be independent, while parents do not provide them much freedom. This is the time the youngster finds the drastic physical changes as a source of irritation. Some who are physically not well grown feel somewhat inferior to others. There is a fear that they may remain short and small and become the target of ridicule of the peers. There is a lot of confusion, hesitation and a search for one's own real identity. This arises due to the fact that though physically they look like an adult, mentally they are still children. Parents and elders treat them at one time as a grown up and at other time as a child. This causes problems in identity – as to 'Who am I?' and 'What am I?' etc.

Adolescence is the time when all of a sudden the world starts looking different. The youngster faces considerable competition. The sheer innocence of friendship is lost. Several new kinds of fantasies beyond the fun fantasy of Tom and Jerry start taking a toll on the mind of the youngster. This is the time when the individual needs understanding parents. This is the time in their life when they start thinking about their future.

### 1.2.3 Middle Adolescence (14-17 years)

Middle adolescence is the phase, when a child is on the road to transformation. There are whole lot of changes that occur, be it, physical, mental, cognitive or sexual. While most of the girls cross their puberty stage, boys are still on the road of maturing physically. It is that time of life, when the young individual is most concerned about one's look, body and appearance. Middle adolescent is the time when, the teenagers are developing their unique personality and opinions.

Friends play a pivotal role during these years. Young teenagers take great care to maintain their identity in the peer group.

Competitiveness also becomes a major priority in the life of middle teens. Many of them try to analyse the experiences they are going through and try to understand their inner turbulence by writing diaries and journals. Remember, middle teens are more capable of setting goals. However, the goals they set are often too high and as a result are unable to reach the goal and feel frustrated and disappointed. Withdrawal from the parents is also one of the key characteristics found in children of this age. That is they reduce their dependency on their parents and try to take decisions for themselves.

### 1.2.4 Late Adolescence (17-19 years)

A late adolescent is closer to adulthood and the youngster develops a firm identity and more stable interests. Soon to be adults they attain greater emotional stability and have a more developed sense of humor. They are able to delay their gratifications of their desires, and are able to think ideas through. They learn to express their feelings in words, compromise and make independent decisions. Unlike the earlier stages of childhood, late adolescents show greater concern for others. They become more self-reliant and take pride in their work. They start finalising their thoughts about the role they want to play in their lives and become more concerned about their future. Table below presents the details regarding heights and weights of adolescents during this period.

**Table 1: Reference Body Weights and Heights of Adolescents according to NCHS**

Age (Years)	Boys		Girls	
	Height (cm)	Weight (kg)	Height (cm)	Weight (kg)
12 +	147	37.0	148	38.7
13 +	153	40.9	155	44.0
14 +	160	47.0	159	48.0
15 +	166	52.6	161	51.4
16 +	171	58.0	162	53.0
17 +	175	62.7	163	54.0
18 +	177	65.0	164	54.4

This table gives an outline of average proportion of weight and height for both boys and girls in different age group.

## 1.3 PHYSICAL DEVELOPMENT

Adolescence is characterised by dramatic physical changes moving the individual from childhood into physical maturity. Teenagers experience some physical milestones as they move from childhood to adolescence. Normal growth during adolescence includes both an increase in body size and sexual maturation (puberty). The timing and the speed with which these changes occur vary and are affected by both heredity and environment.

During adolescence, boys and girls reach adult height and weight. Early, prepubescent changes are noted with the appearance of secondary sexual characteristics.

Adolescence is the time for growth spurts and pubertal changes. An adolescent may grow several inches in several months followed by a period of very slow growth, and then have another growth spurt. Changes with puberty may occur gradually or several signs may become visible at the same time.

There is a great amount of variation in the rate of changes that may occur. Some adolescents may experience these signs of maturity sooner or later than others. It is important to remember that these changes happen at different times for everyone. Being smaller or bigger than other girls or boys is normal as each child experiences puberty at his/her own time.

Sexual and other physical maturation that occurs during puberty results from hormonal changes. As the adolescent nears puberty, the pituitary gland increases the secretion of a hormone called follicle-stimulating hormone (FSH). This hormone then causes

additional effects. In girls, FSH activates the ovaries to start producing estrogen. In boys, FSH causes sperm to develop.

The following are the average ages when puberty changes may occur:

**Adolescent Males:** Height: 4 to 12 inches

Age of Puberty: 9.5 to 14 years

First pubertal change: enlargement of the testicles

Penis enlargement: begins approximately one year after the testicles begin enlarging

Appearance of pubic hair: 13.5 years of age

Hair under the arms, on the face, voice change, and acne: 15 years of age

Nocturnal emissions (or wet dreams): 14 years of age

In boys, it is difficult to know exactly when he has reached puberty. There are changes that occur, but they occur gradually over a period of time rather than as a single event.

The following are additional changes that may occur for the male as he experiences the changes of puberty:

His body size will increase, with the feet, arms, legs, and hands sometimes growing “faster” than the rest of the body. This may cause the adolescent boy to experience a feeling of clumsiness.

Some boys may get some swelling in the area of their breasts as a result of the hormonal changes that are occurring. This is common among teenage boys and is usually a temporary condition.

Voice changes may occur, as the voice gets deeper. Sometimes, the voice may “crack” during this time. This is a temporary condition and will improve over time.

Not only will hair begin to grow in the genital area, but males will also experience hair growth on their face, under their arms, and on their legs.

As the hormones of puberty increase, adolescents may experience an increase in oily skin and sweating. This is a normal part of growing. It is important to wash daily, including the face. Acne may develop.

As the penis enlarges, the adolescent male may begin to experience erections. This is when the penis becomes hard and erect because it is filled with blood. This is due to hormonal changes and may occur when the boy fantasizes about sexual things or for no reason at all. This is a normal occurrence.

During puberty, the male sex organs begin producing sperm. Semen, which is composed of sperm and other bodily fluids, may be released during an erection. This is called ejaculation. Sometimes, this may happen while the male is sleeping. This is called a nocturnal emission or “wet dream.” This is a normal part of puberty and will stop as the male gets older.

**Adolescent Females:** Height: 2 to 10 inches

Age of Puberty: 8 to 13 years of age

First pubertal change: breast development

Pubic hair development: shortly after breast development

Hair under the arms: 12 years of age

Menstrual periods: 10 to 16.5 years of age

Girls experience puberty as a sequence of events, but their pubertal changes usually begin before boys of the same age. Each girl is different and may progress through these changes differently.

The following are additional changes that may occur for the female as she experiences the changes of puberty:

There may be an increase in hair growth, not only the pubic area, but also under the arms and on the legs.

The females' body shape will also begin to change. There may be not only an increase in height and weight, but the hips may get wider. There may also be an increase in fat in the buttocks, legs, and stomach. These are normal changes that may occur during puberty. Her body size will increase, with the feet, arms, legs, and hands beginning to grow in advance of the body. This may cause the adolescent girl to experience a time of feeling clumsy. As the hormones of puberty increase, adolescents may experience an increase in oily skin and sweating. Acne may develop.

Adolescent girls will also experience menstruation, or menstrual periods. This begins when the body releases an egg from the ovaries. If the egg is fertilized with a sperm from a male, it will grow into a baby inside the uterus. If the egg is not fertilized, the endometrial lining of the uterus is not needed and is shed through the vagina as fluid. The fluids are bloody and are usually released monthly. After a girl begins to menstruate, she is able to get pregnant.

### Self Assessment Questions

1) Define and discuss the characteristics of each in brief:

a) Late Adolescence

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b) Early Adolescence

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c) Middle Adolescence

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2) Complete the sentences

a) Adolescence is the phase of \_\_\_\_\_

b) They may lead to few health problems such as \_\_\_\_\_ during this stage.



c) There is lot of confusion in this stage because \_\_\_\_\_

3) Describe the physical changes that occur during adolescence, in both males and females separately.

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### 1.3.1 Puberty

Puberty is the stage of life during which you become biologically and sexually mature. Puberty is the one to three-year process of hormonal and physical change that causes the young person to reach sexual maturity; girls usually enter it about a year earlier than boys. It is the entry into adolescence, a period of tremendous changes in the body, emotions, attitude, values, intellect and relationships. This is the transition from the world of the child that gives way to the world of the adult.

Puberty happens to all individuals – boys and girls. In girls, it may start at the age of 9 or 10 and in boys it may begin around 12 or 13 years, although there is variation in the age from one person to the other.

Puberty is often talked about as a period of turbulence and trials because the child begin to develop a sex drive, experience mood swings, develop relationships with people of the same and/or opposite gender, and face different kinds of pressure at home and at school. Change is always a difficult process, but is an inevitable part of life. Without change and without pain there is no journey, there is no quest, there is no progress. Holding on to the past can be comfortable and secure, and the future often appears uncertain; but tries to think of it as an exciting adventure into and with you.

Most adolescents feel that they do not get adequate information about the changes they are going through, and they feel that the adults around are not understanding. So there is worry, fear, and insecurity. However, feelings like this are normal during puberty.

Some of the greatest anxiety at this stage is about our physical body because it is changing and growing in new and uncertain ways; it appears to have a life of its own and nothing what we think or feel can stop its rate of change. Understanding these physical changes helps in realising that you are not alone in this journey, and will help the youngster make their way through the turbulent sea of adolescence.

There are some very visible and invisible changes that occur in an individuals body. Some changes occur silently without you realising them, and there are other more obvious changes that are loud and confusing. Though the external feeling is confusion or awkwardness, there is an internal chemistry that is in harmony, all changes are interconnected and proceed smoothly within. What it all reveals is the miracle of life and the mystery of the human body as it prepares itself for change and choice and growth.

Puberty in boys and girls begins in a tiny corner of the brain called the pituitary gland, chemical messengers called hormones are send to the reproductive organs

to release another set of hormones, which leads to changes in the body. In boys, the hormone that creates these changes is called testosterone, and in girls it is estrogen.

**Adolescent Males:** Changes in the male body start between the age of 12 and 14 years. Different boys react differently to the changes, and the changes happen at different times to all of us. This is reflective of our uniqueness, and since all of us are different there can really be no “standard” to compare ourselves to.

- i) *The penis:* The penis has two main parts, a head (tip or glans) and a shaft. The head of the penis, particularly its rim is much more sensitive than the shaft. The penis is used for two things, urinating and penetrative intercourse. Usually penises are not straight, some tilt to the left and others to the right. There is no need to worry about it.

Angle or tilt, all of us feel uncomfortable or insecure about how the penis is shaped and how it looks. To reproduce, the male penis must be inserted into the woman’s vagina where sperm (testicles) are released, which will eventually meet and fertilize the egg.

- ii) *Foreskin:* The penis is covered with fine loose skin. The skin that surrounds the head of the penis is loose and is called the foreskin. The foreskin usually does not fully retract for several years and should never be forced. The foreskin can be retracted when it’s inside surface separated from the glands and the opening widens. This usually happens by age 18. Once a boy discovers that his foreskin is retractable, he can easily learn to care for himself. When the Foreskin is fully retractable, it is important to wash underneath it everyday, so as to prevent SMEGMA (a white waxy substance consisting of natural secretions and shed skin cells) from forming. Good general hygiene and common sense are key to preventing infection and disease.
- iii) *The testicles:* Men have two testicles, which hang in a sack called the scrotum. The testicles produce tadpole-shaped sperm, which join with a woman’s eggs to make babies. Sperms are contained in fluid called semen. The scrotum hangs outside the body because sperm need to be kept cooler than your internal body temperature, to prevent them from getting damaged. The scrotum is usually darker in color than the surrounding skin. One testicle always hangs lower than the other, this is so that they don’t bash into each other when you are running or playing. The testicles are connected to the penis by a long thin tube. Both urine from the bladder and semen pass down this tube through the penis. This tube is called the urethra.
- iv) *Erections:* Normally a mans penis is soft and hangs down, but different kinds of sensations and feelings – physical, psychological, or sensual - can lead to an erection. An erection occurs when a nerve centre at the base of your spinal cord sends out impulses to your penis, filling it up with blood. At this point the penis gets stiff, grows longer and wider, sticks upward and outwards from the body and the foreskin stretches, leaving the head of the penis exposed. The muscles at the base of your penis tighten, so that blood can’t drain back out. There are no muscles in the penis itself, it is a kind of a sponge (that is why you can’t move it very much when soft!). Erections are unreliable and can come and go without warning.
- v) *Ejaculation:* Ejaculation is the emission of semen from the penis. This is essential for reproduction, and it also leads to a feeling of sexual pleasure – a combination of physical sensations and intense emotional feelings. During this time 3-15

contractions occur. Each last about a second and the first three are usually the most intense. To achieve ejaculation there must be stimulation and erection of the penis. When a man ejaculates, he releases on average a teaspoonful of semen containing up to 300 million sperm. Ejaculation is not always voluntary. For example, sometimes, while sleeping men can ejaculate. Although the semen comes out of the penis through the urethra (through which urine too comes out), there is no chance of any urine coming out during ejaculation as a muscle closes the bladder off. After ejaculation, the semen is stored again at the base of the penis, until the next one.

While the male child is developing in the uterus, the testicles are already secreting the male hormone, testosterone, which after 13-14 years kick in and steer the baby towards becoming a boy and man. During childhood, the sex gland remains inactive and makes neither hormones nor sperm. During puberty, the testicles begin to be active again under the influence of a secretion from the pituitary gland, which is tucked away in a small part of the brain. The testicles produce testosterone, which is circulated throughout the body in the blood. Under its influence the boy is transformed into a man over a period of years.

Most changes in boys are all external and visible unlike with girls where most changes happen inside the body.

- vi) *The genitals:* It is commonly believed that the first sign of puberty is enlargement of the testicles. They may double or quadruple. At the same time, the skin of the scrotum changes, the colour deepens becoming darker and its texture gets wrinkled. Sometime after this the penis starts to enlarge, becoming first longer and then broader. The final size is reached at the end of your growth spurt, which usually happens when you are 15-16 years old, but sometimes earlier or later.
- vii) *Wet dreams:* During puberty a boy becomes ready to reproduce since he can now produce and release sperm. At this stage wet dreams occur often in nearly all boys. At night there is an involuntary release of semen (ejaculation) during sleep, either during an erotic dream, or sometimes even in the absence of an erotic stimulation. This happens because there is a build-up of semen in the body and it needs to be released.

Boys wake up in the morning to find a sticky or dry residue of semen on the sheet, which is embarrassing, awkward, and even frightening. Wet dreams are a signal that you are growing up, which stops after a while.

- viii) *Growth Spurt:* Boys begin growing later than girls and carry on for longer, after the girls have stopped growing. The growth spurt in boys begins around 13-14 years and ends at 16-17 years. There is a sudden increase in height and weight, the chest expands and becomes broader, and the arms and legs fill out and become more muscular. Due to the influence of testosterone the larynx (the voice centre in the throat) expands, and the voice cracks before it deepens. This is another awkward phase but it soon evens out to a voice cracks before it deepens. The aureole surrounding the nipples generally doubles in size during puberty. During this period hair starts growing on different part of the body, like legs, arms, chest, groin, armpits and face. Hair on face starts as a fine fuzzy layer and then becomes tougher and thicker as he starts shaving. Pimples, spots and blackheads may grow on face, neck, chest and back. These are by-products of androgens (male hormones that are responsible for most of the changes in adolescents' body).



- ix) *Body Odour:* The adolescents sweat glands (under their arms and in genital areas) are becoming more active. When sweat comes into contact with bacteria on the skin it creates an unpleasant smell, both in adolescent boys and girls.
- x) *Pimples:* The oil glands or 'sebaceous glands' produce an oily substance called sebum. If the sebum blocks the pores on the skin and combines with the bacteria, you can get pimples.
- xi) *Sexual Feelings:* During puberty and adolescence, sexual thoughts and fantasies become more frequent and become aware of sexual stimuli around. These sexual feelings and fantasies are also normal, and is common among all girls and boys at this stage.

### ***Adolescent Females***

Changes in the female body can be considered in terms of visible and invisible changes..

***The invisible changes:*** There are some invisible change that happens in a young girl's body in their reproductive organs like ovaries, uterus and vagina. These are the changes that are also having an impact on the visible changes in her body.

- i) *Ovaries:* There are two ovaries in a young girls body, one on either side of the uterus and below the fallopian tube. These organs are located in the lower abdomen. Ovaries are about an inch long, approximately the size and shape of an almond and contain tiny egg cells. All the eggs are in a 'frozen' state before puberty. At puberty each ovary alternatively releases an egg or ovum every month, however sometimes two or more ova (the plural of ovum) may get released from the ovaries.

The hormone called estrogen is also produced in the ovary. The pituitary gland sends the message to the ovaries to produce this hormone. Estrogen is responsible for making a girl grow up to have a woman's body and make it possible for her to have children.

- ii) *Uterus:* The uterus is called a womb. Its an upside-down pear-shaped structure inside a women's abdomen, which is hollow and made of smooth muscles. This is where the baby grows, and during pregnancy the uterus expands to accommodate a full grown fetus (an unborn child). The uterus is wider at the top and narrows into a neck called the cervix, which opens into the upper end of the vagina.
- iii) *Fallopian Tube:* The fallopian tubes are called uterine tubes or oviducts. The two fallopian tubes are trumpet shaped and are located close to their respective ovaries. These tubes open on each side into the upper end of the uterus. The fallopian tubes pick up the eggs released in their respective ovaries and push it into the uterus and it takes 3 to 7 days for ovum to reach the uterus.
- iv) *Vagina:* The vagina is the passageway or a muscular tube extending from the cervix to the external genitals. The opening of the vagina is between the urinary opening and the anus. Every women has three opening in the genital area and these are :

- a) urinary opening which is for the passage for urine
- b) vaginal opening which is for:
- c) passage for period/menstrual flow
- d) passage through which baby comes out at birth
- e) opening for sexual intercourse
- f) Male sperm travel through it to fallopian tubes.

The external genitals structure also consists of a clitoris, which is a small cylindrical body and is situated above the urinary opening. It exists to provide women with sexual pleasure.

Near the opening of the vagina is the porous membrane called the Hymen, it stretches from one wall of vagina to the other. The hymen tears or gets ruptured during the first penetrative sexual act (intercourse) and is accompanied with little bleeding and pain.

**The visible changes:** There are some visible changes in female body, these are discuss here:

- i) *The Growth Spurt:* There is sudden increase in height and the body fills out. The greatest increase in height occurs around 10 to 11 years for girls. A girl usually stops growing between 16-18 years. Along with height the young girls note changes in the pelvic bones and hips widening.
- ii) *Breast:* Breast will start to develop and will become larger and fuller. They enlarge with a deposit of fat, they become soft and rounded during this stage. Breasts have milk glands and milk tubes that open into the nipples.
- iii) *Hair Growth:* Youngsters can notice hair growing on their arms, underarms, legs, upper lips, etc. Hair grows in the pubic area, this is a V-shaped area above the vagina. This is called pubic hair and it is thicker, curlier and coarser than the hair on head.
- iv) *Body Odour:* The adolescents' sweat glands (under their arms and in genital areas) are becoming more active. When sweat comes into contact with bacteria on the skin it creates an unpleasant smell, both in adolescent boys and girls.
- v) *Pimples:* The oil glands or 'sebaceous glands' produce an oily substance called sebum. If the sebum blocks the pores on the skin and combines with the bacteria, the person can get pimples.
- vi) *Sexual feelings:* At this stage the young girls may start to feel sexually aroused, and spend time in a fantasy world thinking about love and sex. The movements of hormones inside make the youngster feel more sexual and the body is changing.

#### Self Assessment Questions

- 1) Define and discuss puberty.

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2) What are visible and invisible changes occurring during adolescence? Explain.

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3) Discuss the following terms:

Growth spurt

Pimples

Sexual feelings

Body odour

## 1.4 LET US SUM UP

According to the study of the entire unit, we can understand that adolescence is the phase of transition from being a child to an adult. In this period teenage or adolescence is generally extended from 12 to 19 years of age and which is broadly categorised into three stages viz., early adolescence, middle adolescence and late adolescence. Adolescence is characterised by dramatic physical changes moving the individual from childhood into physical maturity. Teenagers experience some physical milestones as they move from childhood to adolescence. Normal growth during adolescence includes both an increase in body size and sexual maturation (puberty). There are several marked changes during this period in the lives of both adolescent males and females.

Boys and girls begin the growth spurt at different ages, girls, on average, begin two years earlier than boys and complete them earlier as well. Boys and girls also begin to go through puberty during adolescence. Menstruation is just one of several changes in puberty that are related to the development of primary and secondary sex characteristics. Boys' penises and scrotums begin to grow at an accelerated rate around age 12 and reach adult size 3 or 4 years later. Spermatogenesis occurs after boys' penises enlarge about the age of 13. Secondary sex characteristic development is characterised by growth of pubic hair and growth of underarm and facial hair. For girls, early maturation might offer increased popularity and an advanced social life, but they might also experience embarrassment over the changes in their bodies, which make them different from their peers. Late maturation can put boys at a distinct physical and social disadvantage, which can affect self-esteem and leave lasting, negative effects. Girls who mature late might suffer neglect by their peers of both sexes, but ultimately they appear to suffer no lasting ill effects and may even benefit from late maturation in the long run.

## 1.5 UNIT END QUESTIONS

- 1) Define and describe the period of adolescence.
- 2) What are the characteristic changes that take place during this period?
- 3) What are the changes that occur in the males during this period?
- 4) What are the changes that occur during this period?

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## 1.6 SUGGESTED READINGS

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Nielsen, Linda,(1996). *Adolescence: A Contemporary View*, (3rd edition) Harcourt Brace College Publishers.

Meese, Judith L. (2004). *Child and Adolescent Development for Educators*. (3<sup>rd</sup> edition). McGraw Hill College, USA.



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## UNIT 2 COGNITIVE CHANGES

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### Structure

- 2.0 Introduction
- 2.1 Objectives
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  - 2.2.1 Cognitive Development in Adolescence
  - 2.2.2 Early Adolescence
  - 2.2.3 Middle Adolescence
  - 2.2.4 Late Adolescence
- 2.3 Piaget's Theoretical Approach on Cognitive Development
- 2.4 Information Processing Perspective
  - 2.4.1 Information Processing
  - 2.4.2 Information Processing Theory
  - 2.4.3 Information Processing Model
- 2.5 School Performance and Cognitive Development
- 2.6 Let Us Sum Up
- 2.7 Unit End Questions
- 2.8 Suggested Readings
- 2.9 Answers of the Self Assessment Questions

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### 2.0 INTRODUCTION

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Adolescence is the developmental stage between childhood and adulthood; it generally refers to period ranging from ages 12 through ages 19. Although its beginning is balanced with the beginning of puberty, adolescence is characterised by psychological and social stages as well as by biological changes.

Adolescence can be prolonged, brief or virtually non existent, depending on the type of culture in which it occurs. In societies that are simple, for example, the transition from childhood to adulthood tends to occur rather rapidly, and is marked by traditionally prescribed passage rites. Psychologists have discussed four areas that especially touch upon adolescent behaviour and development: physiological changes and growth, cognitive or mental development, identity or personality formation and parent- adolescent relations. In this unit, we will discuss on the cognitive development and changes during adolescence.

Cognitive development refers to the development of the ability to think and reason. It refers to how a person perceives, think, and gains understanding of his/her world through the interaction of genetic and learned factors. It takes a fast pace during adolescence. Teenagers accumulate general knowledge and start applying the learned concepts to new tasks.

During early adolescence, they use more complex thinking, they are focused on personal decision making in school and home environments. With some experience in using more complex thinking processes, the focus of middle adolescence often expands to include more philosophical and futuristic concerns. During late adolescence,



complex thinking processes are used to focus on less self-centered concepts as well as personal decision making.

In the theory of cognitive development, Piaget discusses about the four distinct, universal stages, each characterised by increasingly sophisticated and abstract levels of thoughts. These stages always occur in the same order, and each builds on what has been learned in the previous stage.

Adolescents, ages 12 through 19, are and should be at the “formal operations” stage of Piaget’s cognitive development theory. It is characterised by an increased independence for thinking through problems and situations. Adolescents should be able to understand pure abstractions, such as philosophy and higher math concepts. During this age, children are able to learn and apply general information needed to adapt to specific situations. They are able to learn specific information and skills necessary for an occupation.

Adolescent egocentrism is also characterised by an imaginary audience with an increased self consciousness. They consider that their people around them especially peers observe their activities and may comment on them.

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## **2.1 OBJECTIVES**

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After going through this unit, you will be able to:

- define and describe the meaning of cognitive changes that takes place in adolescence;
- describe the cognitive development during adolescent years;
- explain Piaget’s theoretical approach on cognitive development;
- describe the information processing perspective in cognitive development; and
- analyse the school performance and cognitive development during adolescence.

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## **2.2 COGNITIVE DEVELOPMENT**

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The term “cognition” refers to all processes by which the sensory input is transformed, reduced, elaborated, stored, recovered, and used. It is concerned with these processes even when they operate in the absence of relevant stimulation, as in images and hallucinations. Cognitive psychology is a discipline within psychology that investigates the internal mental processes of thought such as visual processing, memory, thinking, learning, feeling, problem solving, and language.

Cognitive psychology is different from previous psychological approaches in two major ways: (i) It accepts the use of the scientific method, and (ii) It generally rejects introspection as a valid method of investigation. Unlike Freudian approach it does not believe in symbolism. It explicitly acknowledges the existence of internal mental states (such as belief, desire and motivation). It is believed that cognitive development takes place during adolescence at a more rapid pace and the ability to think, contemplate and analyse etc. become all the more sharp.

### **2.2.1 Cognitive Development in Adolescence**

Cognitive development refers to the development of the ability to think and reason. It refers to how a person perceives, think, and gains understanding of his/her world through the interaction of genetic and learned factors. It takes a fast pace during

adolescence. Teenagers accumulate general knowledge and start applying the learned concepts to new tasks. Interest in learning life skills, such as cooking, fixing things, driving and so on, from adults at home and else where is also seen during these years. In terms of school, there is a great transition for the budding adult. As performance improves so does the individual's understanding of complex materials.

Adolescence is the developmental stage between childhood and adulthood. It generally refers to a period ranging from age 11 or 12 through ages 19 or 21. Adolescence marks the beginning development of more complex thinking processes called as formal logical operations. This includes (i) abstract thinking (thinking about possibilities), (ii) the ability to reason from known principles (form own new ideas or questions), (iii) the ability to consider many points of view according to varying criteria (iv) compare or debate ideas or opinions), and (v) development of the ability to think about the process of thinking. In addition to these, a sense of ego and personal uniqueness also develop in the youngster, who starts thinking that no one can really understand her/him.

Some common indicators of the youngsters progression from more simple to more complex cognitive development include the following:

### 2.2.2 Early Adolescence

During early adolescence, the youngsters are able to use more complex thinking. They are focused on personal decision making in school and home environments.

- They begin to demonstrate use of formal logical operations in school work.
- They begin to question authority and society standards.
- They begin to form and verbalize their own thoughts and views on a variety of topics, usually more related to their own life, such as:
  - which sports are better to play.
  - which groups are better to be included in.
  - what personal appearances are desirable or attractive.
  - what parental rules should be changed.

### 2.2.3 Middle Adolescence

With some experience in using more complex thinking processes, the focus of middle adolescence often expands to include more philosophical and futuristic concerns, including the following:

- They often question more extensively.
- They often analyse more extensively.
- They think about and begin to form their own code of ethics (i.e., What do I think is right?).
- They think about different possibilities and begin to develop their own identity (i.e., Who am I?).
- They think about and begin to systematically consider possible future goals (i.e., What do I want?).

- They think about and begin to make their own plans.
- They begin to think on long term basis.
- The use of systematic thinking begins to influence relationship with others.

#### 2.2.4 Late Adolescence

During late adolescence, complex thinking processes are used to focus on less self-centered concepts as well as personal decision making, which include the following:

- They start thinking more about global concepts such as justice, history, politics, and patriotism.
- They often develop idealistic views on specific topics or concerns.
- They debate and discuss a great deal and also show intolerance to opposing views.
- They begin to focus their thinking on making career decisions.
- They begin to focus their thinking on emerging role in adult society.

Adolescence can be prolonged, brief, or virtually nonexistent, depending on the type of culture in which it occurs. In societies that are simple, for example, the transition from childhood to adulthood tends to occur rather rapidly.

Adolescents become capable of logical thought. However, they may not necessarily demonstrate such thinking. Adolescents' understanding of how they and others think continues to change and develop. Younger children take what has been described as realistic approach to knowledge. They believe that knowledge is a property of the real world and that there are definite facts or truths that can be acquired. Older children or preadolescents become aware of the fact that experts often disagree, this leads them to develop a realistic approach, which recognises that different people may interpret the same information in contrasting ways.

Preadolescents go a bit farther, adopting a defended realism approach, which recognises the difference between facts and opinions. Adolescents realise that there is no secure basis for knowledge or for making decisions. They adopt an approach that is described as dogmatism-skepticism, in which, they alternate between blind faith in some authority and doubting everything. Later, some adolescents realise that while there is no absolute truths, there are better or worse reasons for holding certain views, an approach known as post skeptical rationalism.

Cognitive development continues throughout adolescence and results, in more mature modes of thought.

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### 2.3 PIAGET'S THEORETICAL APPROACH ON COGNITIVE DEVELOPMENT

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Swiss psychologist Jean Piaget (1896-1980), was the most well known and influential theorist for cognitive development. Piaget was interested in how children reacted to their environments. He proposed a more active role for them as suggested by learning theory. He envisioned a child's knowledge as composed of schemas, basic unit of knowledge used to organise past experiences and serve as a basis for understanding new ones.

Piaget's theory of cognitive development is a comprehensive theory about the nature and development of human intelligence first developed by Jean Piaget. It is primarily known as a developmental stage theory, but in fact, it deals with the nature of knowledge itself and how humans come gradually to acquire it, construct it, and use it. Moreover, Piaget claims the idea that cognitive development is at the centre of human organism and language is contingent on cognitive development.

In the theory of cognitive development, Piaget discusses about the four distinct, universal stages, each characterised by increasingly sophisticated and abstract levels of thoughts. These stages always occur in the same order, and each builds on what has been learned in the previous stage.

The stages are:

- *Sensorimotor Stage (infancy)*: In this period, there are six sub-stages, intelligence is demonstrated through motor activity without the use of symbols. Knowledge of the world is limited, but developing, because it is based on physical interactions and experiences. Children acquire object permanence at about seven months of age (memory). Physical development (mobility) allows the child to begin developing new intellectual abilities. Some symbolic (language) abilities are developed at the end of this stage.
- *Pre-operational stage (toddlerhood and early childhood)*: In this period, there are two sub stages, intelligence is demonstrated through the use of symbols, language use matures, and memory and imagination are developed, but thinking is done in a non-logical, non-reversible manner. Egocentric thinking predominates.
- *Concrete operational stage (elementary and early adolescence)*: This stage is characterised by seven types of conservation (number, length, liquid, mass, weight, area, and volume), intelligence is demonstrated through logical and systematic manipulation of symbols related to concrete objects. Operational thinking develops (mental actions that are reversible). Egocentric thought diminishes.
- *Formal operational stage (adolescence and adulthood)*: In this stage, intelligence is demonstrated through the logical use of symbols related to abstract concepts. Early in the period there is a return to egocentric thought. Only 35 percent of high school graduates in industrialised countries obtain formal operations; many people do not think formally during adulthood.

Adolescents, ages 12 through 19, are and should be at the “formal operations” stage of Piaget's cognitive development theory. It is characterised by an increased independence for thinking through problems and situations. Adolescents should be able to understand pure abstractions, such as philosophy and higher math concepts. During this age, children are able to learn and apply general information needed to adapt to specific situations. They are able to learn specific information and skills necessary for an occupation. A major component of the passage through adolescence is a cognitive transition. During this stage adolescents think in ways that are more advanced, more efficient, and generally more complex as compared to children.

This ability can be seen in five ways:

- 1) During adolescence individuals become better able than children to think about what is possible, instead of limiting their thought to what is real. Whereas children's thinking is oriented to the here and now—that is, to things and events

that they can observe directly—adolescents are able to consider what they observe against a backdrop of what is possible; they can think hypothetically.

- 2) During the passage into adolescence, individuals become better able to think about abstract ideas. For example, adolescents find it easier than children to comprehend the sorts of higher-order, abstract logic inherent in puns, proverbs, metaphors, and analogies. The adolescent's greater facility with abstract thinking also permits the application of advanced reasoning and logical processes to social and ideological matters. This is clearly seen in the adolescent's increased facility and interest in thinking about interpersonal relationships, politics, philosophy, religion, and morality.
- 3) Teenagers begin to think more often about the process of thinking itself, or metacognition. As a result, adolescents may display increased introspection and self-consciousness. Although improvements in metacognitive abilities provide important intellectual advantages, one potentially negative byproduct of these advances is the tendency for adolescents to develop a sort of egocentrism, or intense preoccupation with the self.
- 4) Thinking tends to become multidimensional, rather than limited to a single issue. Whereas children tend to think about things one aspect at a time, adolescents can see things through more complicated lenses. Adolescents describe themselves and others in more differentiated and complicated terms and find it easier to look at problems from multiple perspectives. Being able to understand that people's personalities are not one-sided or that social situations can have different interpretations depending on one's point of view permits the adolescent to have far more sophisticated and complicated relationships with other people.
- 5) Adolescents are more likely than children to see things as relative, rather than absolute. Children tend to see things in absolute terms—in black and white. Adolescents, in contrast, tend to see things as relative. They are more likely to question others' assertions and less likely to accept facts as absolute truths. This increase in relativism can be particularly exasperating to parents, who may feel that their adolescent children question everything just for the sake of argument. Difficulties often arise, for example, when adolescents begin seeing their parents' values as excessively relative.

### ***Egocentrism in Adolescence***

An important aspect of the psychosocial development contributing to the adolescent period is adolescent egocentrism. According to Elkind (1967), adolescent egocentrism includes a belief system carried by adolescents that makes them consider themselves as special and unique. This feeling is accompanied by the acquisition of many new psychological abilities.

Adolescent egocentrism is also characterised by an imaginary audience with an increased self consciousness. They consider that people around them especially peers observe their activities and may comment on them. They are extremely conscious of what others think of them, their appearance and everything related to themselves. This way they perceive themselves as seen by them contributing to the development of self confidence.



### Self Assessment Questions

1) Answer the following in True (T) or False (F):

- Adolescence is the period from age 12-19 years. ( )
- Early adolescence uses more complex thinking, focus and expands them futuristic and philosophical concern. ( )
- Adolescence becomes capable of logical thoughts. ( )
- Adolescence egocentrism is characterised by an increased self consciousness. ( )
- Egocentric thinking predominates in concrete operational stage. ( )

2) Fill in the blanks:

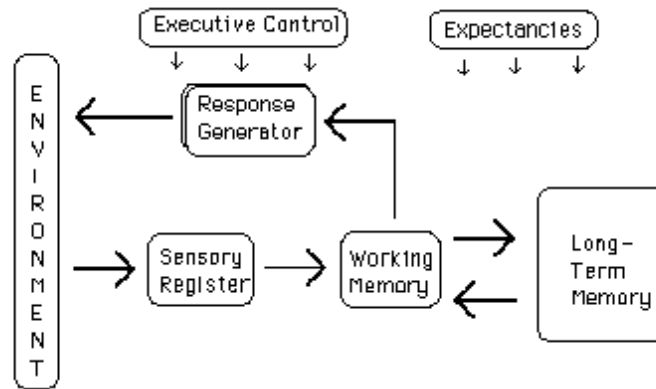
- The development of the ability to think and reason is known as \_\_\_\_\_.
- Individuals in \_\_\_\_\_ focus on less self centred concept.
- Piaget discusses \_\_\_\_\_ distinct stages about cognitive development.
- Early in the period of formal operational stage there is a return to \_\_\_\_\_.
- Aspects of psychosocial development (i.e, belief systems) contributing to adolescence period is \_\_\_\_\_.

## 2.4 INFORMATION PROCESSING PERSPECTIVE

### 2.4.1 Information Processing

Information processing is the change (processing) of information in any manner detectable by an observer. As such, it is a process which *describes* everything which happens (changes) in the universe, from the falling of a rock (a change in position) to the printing of a text file from a digital computer system. In the latter case, an information processor is changing the form of presentation of that text file. Latent and manifest information is defined through the terms of equivocation (remaining uncertainty, what value the sender has actually chosen), dissipation (uncertainty of the sender what the receiver has actually received) and transformation (saved effort of questioning, that is equivocation minus dissipation).

When we deal with information, we do so in steps. One way to think of this is to picture the process of acquiring, retaining, and using information as an activity called information processing. Information comes from the outside world into the sensory registers into the human brain. This input consists of things perceived by our senses. We are not consciously aware of most of the things we perceive; we become aware of them only if we consciously direct our attention to them. When we do focus our attention on them, they are placed in our *working memory*.



### A Model of Human Information Processing

Another name for our working memory is *short-term memory*. Our working memory has a very limited capacity – we can attend to only about seven items at a time. Therefore, we must take one of the following actions with regard to each piece of information that comes into this short-term storage area: (1) continuously rehearse it, so that it stays there; (2) move it out of this area by shifting it to long-term memory; or (3) move it out of this area by forgetting it.

*Long-term memory*, as its name implies, stores information for a long time. The advantage of long-term memory is that we do not have to constantly rehearse information to keep it in storage there. In addition, there is no restrictive limit on the amount of information we can store in long-term memory. If we move information to long-term memory, it stays there for a long time - perhaps permanently! To make use of this information in long term memory, we must move it back to our working memory, using a process called *retrieval*.

Information processing can be viewed as parallel to the way in which an executive manages a business. Information comes into the business across the executive's desk - mail, phone calls, personal interactions, problems, etc. (This is like short-term memory.) Some of this information goes into the waste basket (like being forgotten), and some of it is filed (like being stored in long-term memory). In some cases, when new information arrives, the executive gets old information from a file and integrates the new information with the old before refilling it. (This is like retrieving information from long-term memory to integrate it with new information then storing the new information in long-term memory.) On other occasions the executive may dig out the information in several old files and update the files in some fashion or integrate them in some way to attack a complex problem. The business of human learning operates in much the same manner.

#### 2.4.2 Information Processing Theory

The information-processing theory is associated with the development of high-speed computers in the 1950s. Researchers—most notably Herbert Simon and his colleagues—demonstrated that computers could be used to simulate human intelligence. This development led to the realisation that computer-oriented information-processing models could provide new insight into how the human mind receives, stores, retrieves, and uses information. The information-processing theory was one of several developments that ended the decades-long dominance of behaviourism in American psychology. It focused on innate mental capacities, rather than on conditioned,

externally observable behaviour. By enabling experimental psychologists to test theories about complex mental processes through computer simulation, information-processing models helped reestablish internal thought processes as a legitimate area of scientific inquiry.

The information processing theory is an approach to the cognitive development of a human being, which deals with the study and the analysis of the sequence of events that occur in a person's mind while receiving some new piece of information. In short, it is the analysis of the way a human being learns something new. There is a fixed pattern of events that take place in such a situation, and by knowing this pattern we can enable children and people with special abilities to learn new things faster.

The information processing theory laid down by experts in psychology claims that the human mind is very similar to that of computers, as far as information processing and analysis is concerned. They also say that any new piece of information that enters the brain is first analysed and then put through the test of several benchmarks before being stored in some vestibules of the memory. Since these actions occur at a very fast speed, we are unable to notice them in action.

The sensory perceptrs of a human being function in the same way as the hardware of a computer does, and the mindset and the rules and strategies adopted by the person while learning is equivalent to the software used by computers. The information processing system of a person can thus be enhanced if these perceptrs and rules are altered.

### 2.4.3 Information Processing Model

There is a fixed structure that the information processing theory follows, and it is divided into the following four parts.

- The store model : This is a breakdown of the model which states that the information that has been received can be stored in any of the processing units, or the channels through which it passes. These channels are the sensory register, short-term memory and long-term memory.
- The sensory register : This is that part of the mental processing unit that receives all information and then stores it temporarily or permanently.
- Short-term memory : That part of the sensory register where the information is stored temporarily. Once the decision has been made regarding the information, the information will either be discarded or transferred to the long-term memory.
- Long-term memory : The part where all the information is permanently stored. It can be retrieved later as and when the need arises.

**The four main beliefs of the information-processing approach include the following:**

- 1) When the individual perceives, encodes, represents, and stores information from the environment in his mind or retrieves that information, he is thinking. Thinking also includes responding to any constraints or limitations on memory processes.
- 2) The proper focus of study is the role of change mechanism in development. Four critical mechanisms work together to bring about change in children's cognitive skills: encoding, strategy construction, automatisisation and generalisation. To solve problems effectively, children must encode critical information about a problem and then use this encoded information and relevant prior knowledge to construct a strategy to deal with the problem.

- 3) Development is driven by self-modification. Like Piaget's theory of cognitive development, the information-processing approach holds that children play an active role in their own development. Through self-modification, the child uses knowledge and strategies she has acquired from earlier problem solution to modify her responses to a new situation or problem. In this way, she builds newer and more sophisticated responses from prior knowledge
- 4) Investigators must perform careful task analysis of the problem situations they present to children. According to this view, not only the child's own level of development but the nature of the task itself constraints child's performance. Thus a child may possess the basic ability necessary to perform a particular task when it is presented in a simple form, without unnecessary complexities. However, if extra or misleading information is added to the same task, the child may become confused and be unable to perform it.

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## **2.5 SCHOOL PERFORMANCE AND COGNITIVE DEVELOPMENT**

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During adolescent years, there are many reasons for teens to under perform at school as is given below:

- i) A lack of motivation to do well
- ii) Problems at home or with peers
- iii) Poor work habits or study skills
- iv) Emotional and behaviour problems
- v) Learning disabilities (such as dyslexia)
- vi) Attention deficit hyperactivity disorder
- vii) Mental retardation or below average intelligence
- viii) Other medical problems, including anxiety and depression.

Adolescent's achievement motivation focuses on adolescents' beliefs, values, and goals. These beliefs, goals, and values changes during early and middle adolescence which lead to decline in their motivation during this period.

Specifically, early adolescents have lower perceptions of their competence for different school subjects than do their younger peers. Adolescent's valuing of different school subjects often declines as they move through school, with the declines especially marked across the transition to middle school. Their intrinsic motivation for learning often decreases as well.

The most important implication of this work for middle school counselors is that motivational problems can become more central during early adolescence. This can be a time period in which adolescence motivation declines in significant ways. Counselors can help identify children most at risk of becoming demotivated at school, and work with teachers to help foster these adolescents' motivation.

The early adolescent period is marked by many changes in biological and psychological characteristics and in relations with peers, teachers, and counselors. The transition to middle school can be difficult for early adolescents, especially those struggling with the changes in other areas of their lives.

Middle school counselors and teachers can ease this transition and help early adolescents negotiate successfully the many changes they experience. This can be accomplished by

- a) cooperation among counselors, teachers, and administrators;
- b) involvement of parents;
- c) programs and curricula to foster students' development in multiple domains (i.e., academic, social, career);
- d) responsive counseling to assist with personal issues;
- e) cultural awareness and sensitivity; and
- f) advocacy for and attention to the diverse needs of all students.

A focus on the particular developmental issues that early adolescents face should be an important part of all middle school counseling programs.

### Self Assessment Questions

3) Answer the following in True (T) or False (F):

- Information processing is the change of information in any manner detectable by an observer. ( )
- Information comes from inside ourselves into the sensory registers in the human brain. ( )
- Long term memory stores information for long time. ( )
- Sensory register is the mental processing unit that receives all information and stores it. ( )
- Information processing theory focused on externally observable behaviour. ( )

4) Fill in the blanks:

- When the things are present in our conscious mind, and when we do focus on them, they are placed in our \_\_\_\_\_.
- When we get information from long term memory and focus attention on them, this process is called \_\_\_\_\_.
- \_\_\_\_\_ is the analysis of the way human being learns something new.
- Mails, phone calls, etc. are \_\_\_\_\_ memory.
- Adolescents tend to under perform due to lack of \_\_\_\_\_.

## 2.6 LET US SUM UP

Adolescence can be prolonged, brief or virtually non existent, depending on the type of culture in which it occurs. In societies that are simple, for example, the transition from childhood to adulthood tends to occur rather rapidly, and is marked by traditionally prescribed passage rites.



Cognitive development refers to the development of the ability to think and reason. It refers to how a person perceives, think, and gains understanding of his/her world through the interaction of genetic and learned factors. It takes a fast pace during adolescence.

The early adolescent period is one marked by many changes in biological and psychological characteristics and in relations with peers, teachers, and counselors. The transition to middle school can be difficult for early adolescents, especially those struggling with the changes in other areas of their lives. Middle school counselors and teachers can ease this transition and help early adolescents negotiate successfully the many changes they experience. Particular recommendations to accomplish this include (a) cooperation among counselors, teachers, and administrators; (b) involvement of parents; (c) programs and curricula to foster students' development in multiple domains (i.e., academic, social, career); (d) responsive counseling to assist with personal issues; (e) cultural awareness and sensitivity; and (f) advocacy for and attention to the diverse needs of all students. A focus on the particular developmental issues that early adolescents face should be an important part of all middle school counseling programs.

Adolescents, ages 12 through 19, are and should be at the "formal operations" stage of Piaget's cognitive development theory. It is characterised by an increased independence for thinking through problems and situations. Adolescents should be able to understand pure abstractions, such as philosophy and higher math concepts. During this age, children are able to learn and apply general information needed to adapt to specific situations. They are able to learn specific information and skills necessary for an occupation.

Adolescence can be prolonged, brief, or virtually nonexistent, depending on the type of culture in which it occurs. In societies that are simple, for example, the transition from childhood to adulthood tends to occur rather rapidly.

Adolescents become capable of logical thought. However, they may not necessarily demonstrate such thinking. Adolescents theory of mind their understanding of how they and others think- continues to change and develop.

Piaget's theory of cognitive development is a comprehensive theory about the nature and development of human intelligence first developed by Jean Piaget. It is primarily known as a developmental stage theory, but in fact, it deals with the nature of knowledge itself and how humans come gradually to acquire it, construct it, and use it. Moreover, Piaget claims the idea that cognitive development is at the centre of human organism and language is contingent on cognitive development.

In the theory of cognitive development, Piaget discusses about the four distinct, universal stages, each characterised by increasingly sophisticated and abstract levels of thoughts.

Adolescent egocentrism is also characterised by an imaginary audience with an increased self consciousness. They consider that their people around them especially peers observe their activities and may comment on them. They are extremely conscious of what others think of them, their appearance and everything related to themselves. This way they perceive themselves as seen by them contributing to the development of self confidence.

The information processing theory is an approach to the cognitive development of a human being, which deals with the study and the analysis of the sequence of events that occur in a persons mind while receiving some new piece of information. In short,

it is the analysis of the way a human being learns something new. There is a fixed pattern of events that take place in such a situation, and by knowing this pattern we can enable children and people with special abilities to learn new things faster.

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## 2.7 UNIT END QUESTIONS

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- 1) Define cognitive development in children
- 2) What are the unique features of cognitive development during adolescence?
- 3) Describe Piaget's approach to cognitive development during adolescent stage of development.
- 4) What is information processing approach to cognitive development during adolescence.
- 5) Relate cognitive development and defects thereof to school performance during adolescence.

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## 2.8 SUGGESTED READINGS

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Bruner, J. (1966). *Studies in Cognitive Growth : A Collaboration at the Center for Cognitive Studies*. New York: Wiley & Sons.

David Pruitt, M.D (2000). *Your Adolescent: Emotional, Behavioural, and Cognitive Development from Early Adolescence Through the Teen Years*, Imprint: Harper Paperbacks, NY

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## 2.9 ANSWERS TO THE SELF ASSESSMENT QUESTIONS

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- 1)
  - True
  - False
  - True
  - True
  - False
- 2)
  - Cognitive development
  - Late adolescence
  - Four
  - Egocentric thought
  - Adolescent egocentrism
- 3)
  - True
  - False
  - True
  - True
  - False

**Development During  
Adolescence**

- 4)
- Working memory
  - Retrieval
  - Information processing theory
  - Short term
  - Motivation



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## **UNIT 3    IDENTITY SELF CONCEPT, SELF ESTEEM, PEER GROUP RELATIONSHIP**

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### **Structure**

- 3.0 Introduction
- 3.1 Objectives
- 3.2 Identity in Adolescence
- 3.3 Identity Crisis
  - 3.3.1 Marcia's Identity Statuses
- 3.4 Social Development
- 3.5 Self Concept and Self Esteem in Adolescence
  - 3.5.1 Signs of Negative Self Concepts in Adolescents
  - 3.5.2 Egocentrism in Adolescence
- 3.6 Let Us Sum Up
- 3.7 Unit End Questions
- 3.8 Suggested Readings

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### **3.0 INTRODUCTION**

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Adolescence is known to be a period of exploratory self-analysis and self-evaluation ideally culminating in the establishment of a cohesive and integrative sense of self or identity. The search for identity, during the adolescent period, is very much affected by the social world: peers, parents, schools, and neighborhoods.

Identity formation involves the successful negotiation of a variety of activities and relationships during adolescence, including school achievement, social relations with others, and development of career interests and choices, along with a great deal of exploration of different activities and roles. One's gender, ethnicity, and sexual orientation all are important to adolescents' developing identity. Integrating these experiences and characteristics into a coherent sense of self is fundamental to identity formation, and researchers have proposed different phases of the identity development process. Adolescents' focus on identity as their understanding of that childhood is ending and the adult phase of their life is about to begin.

Identity development involves two steps. First, the adolescent must break away from childhood beliefs to explore alternatives for identity in a particular area. Second, the adolescent makes a commitment as to their individual identity in that area. Some aspects of identity, especially among young adolescents, may be foreclosed. The foreclosure status is when a commitment is made without exploring alternatives.

Identity achievement during adolescence serves as a basis for our adult expectations and goals for us. As individuals enter early adulthood they use their current understanding of whom they are to develop a lifespan construct which serves as the link between the identity developed in adolescence and the adult self. The lifespan construct is an integration of an individual's past, present, and culture.

An identity crisis is a term in an epigenetic and social psychological theory in which an individual loses a sense of personal sameness and historical continuity. The term was coined by the psychologist Erik Erikson. According to Erikson, an identity crisis is a time of intensive analysis and exploration of different ways of looking at oneself.

According to Erikson, an identity crisis is a time of intensive analysis and exploration of different ways of looking at oneself. Erikson's interest in identity began in childhood. Erikson described identity as "a subjective sense as well as an observable quality of personal sameness and continuity, paired with some belief in the sameness and continuity of some shared world image.

In Marcia's model, identity involves the adoption of 1) a sexual orientation, 2) a set of values and ideals and 3) a vocational direction. A well-developed identity gives on a sense of one's strengths, weaknesses, and individual uniqueness.

The self-concept is the accumulation of knowledge about the self, such as beliefs regarding personality traits, physical characteristics, abilities, values, goals, and roles. In adolescence, the self-concept becomes more abstract, complex, and hierarchically organised into cognitive mental representations or self-schemas, which direct the processing of self-relevant information.

Self-concept or self-identity is the sum total of a being's knowledge and understanding of his or her self. The self-concept is different from self consciousness, which is an awareness of one's self. Components of the self-concept include physical, psychological, and social attributes, which can be influenced by the individual's attitudes, habits, beliefs and ideas. These components and attributes can not be condensed to the general concepts of self-image and the self-esteem.

Self-concept refers to self-evaluation or self perception, and it represents the sum of an individual's beliefs about his or her own attributes. Self concept reflects how an adolescent evaluates himself or herself in *domains* (or areas) in which he or she considers success important. An adolescent can have a positive self-concept in some domains and a negative self-concept in others.

Adolescent egocentrism is also characterised by an imaginary audience with an increased self consciousness. They consider that their people around them especially peers observe their activities and may comment on them. They are extremely conscious of what others think of them, their appearance and everything related to themselves. This way they perceive themselves as seen by them contributing to the development of self confidence.

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### 3.1 OBJECTIVES

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After going through this unit, you will be able to:

- define and describe identity and identity crisis in adolescents;
- explain Marcia's identity crisis;
- analyse social development and egocentrism in adolescents; and
- explain self-concept and self-esteem during adolescence.

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### 3.2 IDENTITY IN ADOLESCENCE

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Adolescence is known to be a period of exploratory self-analysis and self-evaluation ideally culminating in the establishment of a cohesive and integrative sense of self or



identity. This process involves the exploration and testing of alternative ideas, beliefs, and behaviours, marking this period as one of both dramatic change and uncertainty. Erikson provided perhaps the most widely recognised theoretical framework for conceptualising the transformation of the self during adolescence. This framework provides for the development of a sense of one's individuality (self-sameness) and continuity with significant others.

Identity is a new way of thinking about oneself that emerges during adolescence. Identity involves a sense of self-unity, accompanied by a feeling that the self has continuity over time. A firmly established identity also provides a sense of uniqueness as a person. According to Erikson's psychosocial model of development, identity must be perceived by the individual, but also recognised and confirmed by others. Thus, the process of establishing an identity involves "Integrating into a coherent whole one's past experiences, ongoing personal changes, and society's demands and expectations for one's future"

The process of developing an identity begins with the infant's discovery of self, continues throughout childhood, and becomes the focus of adolescence. Erik Erikson, identified the goal of adolescence as achieving a coherent identity and avoiding identity confusion. Identity is multidimensional and may include physical and sexual identity, occupational goals, religious beliefs, and ethnic background. Adolescents explore these dimensions, and usually make commitments to aspects of their identity as they move into early adulthood.

Identity development begins with children's awareness that they are separate and unique individuals. First indications of this awareness are evident in infancy when children begin to recognise themselves. They recognise the reflected image as themselves. Also, the words "me," "I," and "mine" emerge very early in children's language. These findings are consistent with Erikson's psychosocial stage of autonomy versus shame and doubt, when infants establish their identity as independent persons.

During childhood, self-awareness grows and changes. Preschoolers describe themselves in terms of observable characteristics and behaviours, including physical attributes ("I have brown eyes"), preferences ("I like to ride my bike"), and competencies ("I can sing 'Itsy, Bitsy Spider'"). Between ages six and twelve, children begin to include less concrete aspects of the self in their descriptions. School-aged children talk about their feelings ("I love my dog") and how they fit into their social world ("I'm the best fielder on my team"). During Erikson's stage of initiative versus guilt children explore their skills, abilities, and attitudes and incorporate the information into their view of self.

As children edge closer and closer to adulthood, it seems they reach a point where they want to be defined by anything BUT their parents. They stop wanting to spend time with family, and may even detest being seen with their parents. "Please drop me off a block from school, Mom. I want to walk the rest of the way." These words are painful to a mother who has devoted many years of her life to meeting all of her teenage son's needs. Suddenly, he's embarrassed to be seen in the same car with her.

The process of separation from parents is a natural one. Erik Erikson was the first major psychological theorist to develop the notion of an adolescent "identity crisis." In his view, all of the earlier crystallisations of identity formed during childhood come into question during adolescence with the overwhelming combination of physical changes, increased sex drive, expanded mental abilities, and increasing and conflicting social demands. To develop a sense of identity amidst the confusion, Erikson stated

in Identity: Youth and Crisis that adolescents need to try on a variety of roles and “must often test extremes before settling on a considered course.”

At this stage, adolescents often reject their parents, and all that they stand for so that they can make a clean break from childhood as they attempt to form an identity of their own. They are hungry for role models and can be rather indiscriminate about where they find them. With their sense of identity in flux, teens will often turn to peer groups for that missing sense of belonging. This explains some of the cult-like tendencies amongst early adolescents to worship the same heroes (movie stars, singers), wear the same clothes and “rebel” against traditional authority. The interesting thing about this so-called rebellion is that it’s often actually another form of conformity — Gina wants a tattoo or a navel ring because everyone else is getting them. Everyone has platform shoes so she’ll feel like an outcast if she’s not wearing them.

At this stage of development (usually early teens), role models can make a critical difference in choices adolescents make, choices that could affect the course of their lives. At this age, teens have a strong need to idealize others, especially those who are older and more worldly, qualities they desperately want to possess. They can be as easily awed by an older (that is, 18- or 19 year-old) guy who drives a fancy car and pushes drugs, as by a sports hero who espouses clean living, hard work and dedication.

The physical, cognitive, and social changes of adolescence allow the teenager to develop the identity that will serve as a basis for their adult lives. During Erikson’s stage of identity versus role confusion, adolescents’ description of self expands to include personality traits (“I’m outgoing”) and attitudes (“I don’t like stuck-up people”). The emergence of abstract reasoning abilities allows adolescents to think about the future and experiment with different identities.

Identity development involves two steps. First, the adolescent must break away from childhood beliefs to explore alternatives for identity in a particular area. Second, the adolescent makes a commitment as to their individual identity in that area. Some aspects of identity, especially among young adolescents, may be foreclosed. The foreclosure status is when a commitment is made without exploring alternatives.

Identity achievement during adolescence serves as a basis for our adult expectations and goals for us. As individuals enter early adulthood they use their current understanding of whom they are to develop a lifespan construct which serves as the link between the identity developed in adolescence and the adult self. The lifespan construct is an integration of an individual’s past, present, and culture.

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### 3.3 IDENTITY CRISIS

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Are you unsure of your role in life? Do you feel like you don’t know the ‘real you’? If you answer yes to the previous questions, you may be experiencing an identity crisis. Theorist Erik Erikson coined the term *identity crisis* and believed that it was one of the most important conflicts people face in development.

An identity crisis is a term in an epigenetic and social psychological theory in which an individual loses a sense of personal sameness and historical continuity. The term was coined by the psychologist Erik Erikson. According to Erikson, an identity crisis is a time of intensive analysis and exploration of different ways of looking at oneself.

According to Erikson, an identity crisis is a time of intensive analysis and exploration of different ways of looking at oneself. Erikson’s interest in identity began in childhood.

Erikson described identity as “a subjective sense as well as an observable quality of personal sameness and continuity, paired with some belief in the sameness and continuity of some shared world image. As a quality of unself-conscious living, this can be gloriously obvious in a young person who has found himself as he has found his communality. In him we see emerge a unique unification of what is irreversibly given—that is, body type and temperament, giftedness and vulnerability, infantile models and acquired ideals—with the open choices provided in available roles, occupational possibilities, values offered, mentors met, friendships made, and first sexual encounters.”

In Erik Erikson’s stages of psychosocial development, the emergence of an identity crisis occurs during the teenage years in which people struggle between feelings of identity versus role confusion. Researcher James Marcia (1966, 1976, 1980) has expanded upon Erikson’s initial theory.

James Marcia argued that identity could be viewed as a structure of beliefs, abilities and past experiences regarding the self. “The better developed this structure is, the more individuals appear to be of their own strengths and weaknesses. The less developed this structure is, the more confused individuals seem to be about their own distinctiveness from others and the more they have to rely on external sources to evaluate themselves.” Identity is a dynamic, not static psychological structure. The formation of identity in adolescence sets the stage for continual changes in the content of identity through the adult years.

### 3.3.1 Marcia’s Identity Statuses

James Marcia refined and extended Erikson’s work on identity. In Marcia’s model, identity involves the adoption of 1) a sexual orientation, 2) a set of values and ideals and 3) a vocational direction. A well-developed identity gives on a sense of one’s strengths, weaknesses, and individual uniqueness. A person with a less well-developed identity is not able to define his or her personal strengths and weaknesses, and does not have a well articulated sense of self.

Marcia (1966) operationalised the stage progression theory of identity development proposed by Erikson by identifying four identity statuses: diffusion, foreclosure, moratorium, and achievement. Through the use of a semistructured interview, an individual could be assigned an identity status on the basis of the evidence of crisis and commitment in the domains of occupation, religion, and politics. Since its inception, Marcia’s interview has stimulated a wide range of research in the area of identity formation.

To better understand the identity formation process, Marcia conducted interviews with young people. He asked whether the participants in his study (1) had established a commitment to an occupation and ideology and (2) had experienced, or were presently experiencing, a decision making period (adolescent identity crisis). Marcia developed a framework for thinking about identity in terms of four identity statuses. It is important to note that these are NOT stages. Identity statuses should not be viewed as sub stages in a sequential or linear process.

i) *Foreclosure*: These people have made commitments to an occupational future, but have not experienced an identity crisis. They have conformed to the expectations of others concerning their future. For example, an individual may have allowed a parent to decide what career they will pursue. These individuals have not explored a range of options (experience an “identity crisis”).

ii) *Diffusion*: The young person has not made a commitment, and may or may not have experienced an identity crisis. He or she appears to have given up any attempt to make the commitments needed for developing a clear sense of identity as Marcia defines the term.

iii) *Moratorium*: Individuals in moratorium are actively exploring alternative commitments, but have not yet made a decision. They are experiencing an identity crisis, but appear to be moving forward toward identity formation, making commitments.

iv) *Achievement*: The individual has experienced an identity crisis and has made commitments necessary for building a sense of identity as described above.

The core idea is that one's sense of identity is determined largely by the choices and commitments made regarding certain personal and social traits. The work done in this paradigm considers how much one has made certain choices, and how much he or she displays a commitment to those choices. Identity involves the adoption of 1) a sexual orientation, 2) a set of values and ideals and 3) a vocational direction. A well-developed identity gives one a sense of one's strengths, weaknesses, and individual uniqueness. A person with a less well-developed identity is not able to define his or her personal strengths and weaknesses, and does not have a well articulated sense of self.

#### Self Assessment Questions

1) Discuss the following in one or two sentences:

- Identity

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- Identity crisis

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- Identity statuses

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- Role confusion

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### 3.4 SOCIAL DEVELOPMENT

Adolescence is a time when parental influences decrease and peer influences increase. Adolescence is a time when the individual searches for her own identity. These happens by the youngsters interactions with her peers and many outsiders including her teachers, neighborhood adults and others. Same sex hero worship is quite common during this period. Also they are highly swayed and impressed by the idealism of hero's and social workers. At this age they enjoy doing work for others, and love



to serve the community. They take up examples of great pioneers and try to mould themselves like them. They may also like to imitate film heroes and try to do things like them. All these efforts contribute in a big way to the youngsters self identity.

Adolescence begins with the physical changes that lead to sexual maturity however studies in the recent years have shown that puberty is occurring at an earlier age so also the physical development.

Adolescents experience many moods and are more prone to mood swings (Myers, 2004). The cognitive development that takes place during this time gives adolescents the ability to reason. These advancing reasoning skills allow adolescents to ponder several options and possibilities to many social situations and experiences. They are able to think more logically than when they were younger. They are also able to think hypothetically, even abstractly.

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### 3.5 SELF CONCEPT AND SELF ESTEEM IN ADOLESCENCE

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The self-concept is the accumulation of knowledge about the self, such as beliefs regarding personality traits, physical characteristics, abilities, values, goals, and roles. In adolescence, the self-concept becomes more abstract, complex, and hierarchically organised into cognitive mental representations or self-schemas, which direct the processing of self-relevant information.

Self-concept-the way in which one perceives oneself-can be divided into categories, such as personal self-concept (facts or one's own opinions about oneself, such as "I have brown eyes" or "I am attractive"); social self-concept (one's perceptions about how one is regarded by others: "people think I have a great sense of humor"); and self-ideals (what or how one would like to be: "I want to be a lawyer" or "I wish I were thinner").

Self-concept or self-identity is the sum total of a being's knowledge and understanding of his or her self. The self-concept is different from self consciousness, which is an awareness of one's self. Components of the self-concept include physical, psychological, and social attributes, which can be influenced by the individual's attitudes, habits, beliefs and ideas. These components and attributes can not be condensed to the general concepts of self-image and the self-esteem.

Self-concept refers to self-evaluation or self perception, and it represents the sum of an individual's beliefs about his or her own attributes. Self concept reflects how an adolescent evaluates himself or herself in *domains* (or areas) in which he or she considers success important. An adolescent can have a positive self-concept in some domains and a negative self-concept in others.

Teachers, administrators, and parents commonly voice concerns about students' self-esteem. Its significance is often exaggerated to the extent that low self esteem is viewed as the cause of all evil and high self-esteem as the cause of all good. Promoting high self-concept is important because it relates to academic and life success. Although the terms *self-concept* and *self-esteem* are often used interchangeably, they represent different but related constructs. *Self-concept* refers to a student's perceptions of competence or adequacy in academic and nonacademic (example, social, behavioural, and athletic) domains and is best represented by a profile of self-perceptions across domains. *Self-esteem* is a student's overall evaluation of him- or herself, including feelings of general happiness and satisfaction.



*Self-concept and academic achievement:* Self-concept is frequently positively correlated with academic performance, but it appears to be a consequence rather than a cause of high achievement. This is a common assumption that an individual's high academic performance results in their self concept. Whereas, the high academic performance is the result of individual's self concept.

*Self-concept and aggression:* Another popular assumption is that aggressive students have low self-concept and use aggression as a means of raising it.

*Self-concept, depression, and use of illegal substances:* Low self-concept is often considered a defining characteristic of depression, but the evidence for this is weak. Similarly, although some evidence suggests that low self-concept may be a weak risk factor for smoking in girls, the relationship between self-concept and the use of alcohol and illegal drugs has little support.

An adolescent's self-concept is dynamic, and causality is complex. That is, problems and difficulties can lower self-concept; but low self-concept can also cause problems. For adolescents, having a high academic self-concept is associated with positive academic performance and having a high physical self-concept is related to increased physical activity, for example.

### 3.5.1 Signs of Negative Self Concept in Adolescents

Several signs may indicate that an adolescent has a negative self-concept. These may include one or more of the following:

- Doing poorly in school;
- Having few friends;
- Putting down one self and others;
- Rejecting compliments;
- Teasing others;
- Showing excessive amounts of anger;
- Being excessively jealous;
- Appearing conceited; or
- Hesitating to try new things.

Strategies that can be used to improve an adolescent's self-concept include providing praise for accomplishments, praising effort, working with the individual to encourage improvement in areas where he or she feels deficient, and refraining from using negative feedback.

Self esteem is the one important factor required by anybody to succeed in life. It is a well proven concept that if you can build self esteem at your adolescent period it will last all through your life. Adolescence is one period in which boys and girls faces with many problems and issues. It is necessary that adolescent self esteem to be at top to face the problems faced with adolescent period. Many teenagers will have low self esteem and it is imperative to know major reasons for low self esteem and find out ways and means to combat the low self esteem. It is highly advisable to make dedicated efforts to bring up the self esteem.

There are many causes for the lack of self esteem. Let us review some of them.

- *Hereditary* is a main factor for low self esteem. If the parents are introverts and they never mingle with people for fear of their inability, the chances that children have low esteem are more.
- *The living conditions*: The surrounding in which you live also affects the lack of self esteem. If the child is brought up in a poor environment without giving proper attention to make him excel in his fields or deprived of doing good activities, the low self esteem at the adolescent stage is possible.
- *Lack of proper education*: is another factor affecting the self esteem. Uneducated children will develop lack of self esteem as they will face problems in interacting with the educated of their age.
- *Physiological*: Adolescence is a period when major physical changes occur in boys and girls. The gender hormones start the functioning in full swing during this period. Many children face problems during this change unable to cope with the changes occurring in their body and behaviour.
- *Societal implications*: During the adolescent stage of a child, society put many restrictions in their behaviours and attitudes. Girls will be automatically tempted to move away from the boys and boys are restricted to mingle with girls during the period. This makes them feel that there are some things to be afraid. This will automatically make them fear in a natural interaction.
- *Fear about future*: During the late periods of adolescence, the children will seriously think about their future and in many cases they will get depressed of their future. Unemployment, dating problems, insecurity, lack of financial backgrounds and many such factors make the adolescents afraid of facing the world.
- *Diseases and other physical ailments*: These children will be thinking that they are debris in the world. These thinking processes make them to keep away from others and they can become agitated.

There are many such reasons for low self esteem of adolescents. If proper care is not given, the low self esteem gradually will lead to many physical and mental ailments. It is important to bring up the adolescents with high self esteem.

### 3.5.2 Egocentrism in Adolescence

An important aspect of the psychological development contributing to the adolescent period is adolescent egocentrism. According to Elkind (1967), adolescent egocentrism includes a belief system carried by adolescents that makes them consider themselves as special and unique. This feeling is accompanied by the acquisition of many new psychological abilities.

Adolescent egocentrism is also characterised by an imaginary audience with an increased self consciousness. They consider that their people around them especially peers observe their activities and may comment on them. They are extremely conscious of what others think of them, their appearance and everything related to them selves. This way they perceive themselves as seen by them contributing to the development of self confidence.

### Self Assessment Questions

1) Discuss the following in one or two sentences:

- Self concept

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- Self esteem

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- Adolescent egocentrism

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- Negative self-concept

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### 3.6 LET US SUM UP

Adolescence is known to be a period of exploratory self-analysis and self-evaluation ideally culminating in the establishment of a cohesive and integrative sense of self or identity. The search for identity, during the adolescent period, is very much affected by the social world: peers, parents, schools, and neighborhoods.

This process involves the exploration and testing of alternative ideas, beliefs, and behaviours, marking this period as one of both dramatic change and uncertainty. Erikson provided perhaps the most widely recognised theoretical framework for conceptualising the transformation of the self during adolescence.

As children edge closer and closer to adulthood, it seems they reach a point where they want to be defined by anything BUT their parents. They stop wanting to spend time with family, and may even detest being seen with their parents. “Please drop me off a block from school, Mom. I want to walk the rest of the way.” These words are painful to a mother who has devoted many years of her life to meeting all of her teenage son’s needs. Suddenly, he’s embarrassed to be seen in the same car with her.

The process of separation from parents is a natural one. Erik Erikson was the first major psychological theorist to develop the notion of an adolescent “identity crisis.” In his view, all of the earlier crystallisations of identity formed during childhood come into question during adolescence with the overwhelming combination of physical changes, increased sex drive, expanded mental abilities, and increasing and conflicting social demands. To develop a sense of identity amidst the confusion, Erikson stated in *Identity: Youth and Crisis* that adolescents need to try on a variety of roles and “must often test extremes before settling on a considered course.”

According to Erikson, an identity crisis is a time of intensive analysis and exploration of different ways of looking at oneself. Erikson’s interest in identity began in childhood. Erikson described identity as “a subjective sense as well as an observable quality of personal sameness and continuity, paired with some belief in the sameness and continuity of some shared world image. As a quality of unself-conscious living, this

can be gloriously obvious in a young person who has found himself as he has found his communality. In him we see emerge a unique unification of what is irreversibly given—that is, body type and temperament, giftedness and vulnerability, infantile models and acquired ideals—with the open choices provided in available roles, occupational possibilities, values offered, mentors met, friendships made, and first sexual encounters.”

Marcia (1966) operationalised the stage progression theory of identity development proposed by Erikson by identifying four identity statuses: diffusion, foreclosure, moratorium, and achievement. Through the use of a semistructured interview, an individual could be assigned an identity status on the basis of the evidence of crisis and commitment in the domains of occupation, religion, and politics. Since its inception, Marcia’s interview has stimulated a wide range of research in the area of identity formation.

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Self-concept refers to self-evaluation or self perception, and it represents the sum of an individual’s beliefs about his or her own attributes. Self concept reflects how an adolescent evaluates himself or herself in *domains* (or areas) in which he or she considers success important. An adolescent can have a positive self-concept in some domains and a negative self-concept in others.

Self esteem is the one important factor required by anybody to succeed in life. It is a well proven concept that if you can build self esteem at your adolescent period it will last all through your life. Adolescence is one period in which boys and girls faces with many problems and issues. It is necessary that adolescent self esteem to be at top to face the problems faced with adolescent period. Many teenagers will have low self esteem and it is imperative to know major reasons for low self esteem and find out ways and means to combat the low self esteem. It is highly advisable to make dedicated efforts to bring up the self esteem.

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### 3.7 UNIT END QUESTIONS

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- 1) Define identity, self concept and self esteem.
- 2) In what ways the peer group relationship contributes to development of self esteem, self concept and identity?
- 3) What is Marcia’s concept of self?
- 4) What is social identity?
- 5) How is identity crisis resolved?

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### 3.8 SUGGESTED READINGS

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David Pruitt, M.D (2000). *Your Adolescent: Emotional, Behavioural, and Cognitive Development from Early Adolescence Through the Teen Years*, Imprint: Harper Paperbacks, NY

Burns, R. B. (1979). “The self-concept in theory, measurement, development and behaviour.” London:

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## UNIT 4 CHALLENGES AND ISSUES IN ADOLESCENT DEVELOPMENT

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### Structure

- 4.0 Introduction
- 4.1 Objectives
- 4.2 Challenges of Adolescence
  - 4.2.1 Coping with the Loss of Normalcy
  - 4.2.2 Acknowledging Sexuality
  - 4.2.3 Change in Point of View
  - 4.2.4 High Risk Behaviours
- 4.3 Let Us Sum Up
- 4.4 Unit End Questions
- 4.5 Suggested Readings
- 4.6 Answers to the Self Assessment Questions

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### 4.0 INTRODUCTION

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Adolescence can be described as a phase of life beginning in biology and ending in society. Adolescence may be defined as the period within the life span when most of a person's biological, cognitive, psychological, and social characteristics are changing from what is typically considered childlike to what is considered adult-like. For the adolescent, this period is a dramatic challenge, one requiring adjustment to changes in the self, in the family, and in the peer group. In contemporary society, adolescents experience institutional changes as well. Among young adolescents, there is a change in school setting, typically involving a transition from elementary school to either junior high school or middle school; and in late adolescence, there is a transition from high school to the worlds of work, university, or childrearing.

Understandably, then, for both adolescents and their parents, adolescence is a time of excitement and of anxiety; of happiness and of troubles; of discovery and of bewilderment; and of breaks with the past and of links with the future. Adolescence can be a confusing time—for the adolescent experiencing this phase of life, for the parents who are nurturing the adolescent during his or her progression through this period, and for other adults charged with enhancing the development of youth during this period.

The hopes, challenges, fears, and successes of adolescence have been romanticised or dramatised in novels, short stories, and news articles. It is commonplace to survey a newsstand and to find a magazine article describing the “stormy years” of adolescence, the new crazes or fads of youth, or the “explosion” of problems with teenagers (e.g. crime or sexuality).

Until the past 20-25 years, when medical, biological, and social scientists began to study intensively the adolescent period, there was relatively little sound scientific information available to verify or refute the literary characterisations of adolescence. Today, however, such information does exist, and it is clear that although adolescence presents many challenges, the evidence is not consistent with the frequently reported belief that adolescence is a protracted period of storm and stress for most individuals.



Adolescents yearn to develop a unique and independent identity, *separate* from their parents. Yes, they love their parents, but they do not simply want to follow in their foot steps. They challenge their parents in any way they can. They disobey their rules; criticize their “old fashioned” values; they discard their suggestions.

Experienced parents know that sometimes they have to be very “political” approaching their adolescent children, if they are going to get their point across. On the other hand, adolescents give a lot of credit to their peers. They yearn to belong to a peer group which would define and support their identity. They may attempt to do things very much out of character just to gain the approval and acceptance of their peers. They tend to hide their weaknesses and exaggerate their strengths. Of course, what adolescents consider as “weakness” or “strength” may sometimes shock their parents.

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## 4.1 OBJECTIVES

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After going through this unit, you will be able to:

- define and describe the challenges and various issues faced by an adolescent;
- explain how to cope with the loss of normalcy;
- analyse the causes underlying the acknowledging of sexuality and high risk behaviours; and
- explain the reasons for the change in their point of view.

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## 4.2 CHALLENGES OF ADOLESCENCE

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Adolescence may be defined as the period within the life span when most of a person’s biological, cognitive, psychological, and social characteristics are changing from what is typically considered childlike to what is considered adult-like. For the adolescent, this period is a dramatic challenge, one requiring adjustment to changes in the self, in the family, and in the peer group. In contemporary society, adolescents experience institutional changes as well. Among young adolescents, there is a change in school setting, typically involving a transition from elementary school to either junior high school or middle school; and in late adolescence, there is a transition from high school to the worlds of work, university, or childrearing.

Adolescence is a period that is full of challenges. This is a time when a teenager undergoes a lot of changes, physically, chemically and emotionally. The adolescent’s life changes dramatically wherein he or she starts having increased hormone levels, the thought process changes, and so also the social life. The teenager has to deal with all these changes at the same time, and this can be extremely challenging.

During adolescence, parents should play a highly supportive role. They have all the necessary experience, resources and maturity to make this transition as easy as possible. Parents have to first of all understand the convoluted and conflicting requirements of a teenager.

During adolescence, a teenager is trying to carve out his or her own identity that is completely separate from their parents. No doubt teenagers love their parents, but they do not want to follow in the foot steps of the parents. They try to challenge their parents’ authority in every possible way and also pay no heed to suggestions given by their parents. Instead adolescents prefer to spend more time with their peers and give all the credit to them. They yearn to be accepted by their peers and go out of their way to gain this acceptance. They end up highlighting their strengths and playing down their weaknesses.

Another challenge during adolescence is shunning social interaction with parents and other adults. They prefer to be with their peers. However, this same preference can also lead to anxiety and depression among some adolescents.

There are multiple pathways through adolescence. Interindividual (between-person) differences and intra-individual (within-person) changes in development are the “rule” in this period of life. Normal adolescent development involves such variability. Temperamental characteristics involving mood and activity level are good example. There are differences among adolescents in such characteristics, which may influence adolescent behaviours such as substance use and delinquency. There is also diversity between and within all ethnic, racial, or cultural minority groups. Therefore, generalisations that: confound class, race, and/or ethnicity are not useful.

Adolescence is full of challenges for any individual. The change is fast, everywhere, and hard to keep up with: The body changes in response to increasing levels of sex hormones; the thinking process changes as the child is able to think more broadly and in an abstract way; the social life changes as new people and peers come into scope. Yet the child needs to deal with every single one of these changes, all at the same time! With their willingness to help, that’s where the parents come in, who have “been there”, with the life experience, maturity and resources. So, how can parents help? Recognising the complex and sometimes conflicting needs of an adolescent would be a good point to start. Adolescents yearn to belong to a peer group which would define and support their identity. They may attempt to do things very much out of character just to gain the approval and acceptance of their peers. They tend to hide their weaknesses and exaggerate their strengths. Of course, what adolescents consider as “weakness” or “strength” may sometimes shock their parents.

Youngsters with autism bring their special flavor to the adolescence, essentially determined by the levels of three ingredients: interest, avoidance and insight.

*Level of interest:* Since all forms of autism has an impact on social development by definition, most adolescents with moderate to severe autism will show little or no interest in others. They may seem to be totally unaware of their peers’ presence or they may appear indifferent when peers try to interact. As autism gets less severe, the level of interest in peers usually increases. For these youngsters, the quality of social interactions mostly depends on the levels of avoidance and insight.

*Level of avoidance:* In the social development of adolescents who show some interest in peer interactions, social anxiety and resultant avoidance play an important role. Some youngsters get very nervous just with the thought of approaching others and may choose to avoid it at all costs. Their avoidance may appear as if they are not interested in others. It is important to differentiate this since anxiety can be treated much more easily than genuine lack of interest.

For adolescents with autism who show interest in peers and do not avoid contact, the quality of social interactions will depend on the level of insight.

*Level of insight:* Yet some adolescents with autism will not avoid interacting with others; younger, older or similar age. Rather, they are eager to communicate, though, often in a clumsy, in-your-face way. The level of their insight into their social disability will then become the determining factor of their social success. If they are unaware of their shortcomings in gauging the social atmosphere and reading social cues, they may inadvertently come across as rude, insulting or boring.

They may miss subtle criticism, sarcasm or tease. As they develop better insight, they

become more motivated to *learn* which had not come naturally and intuitively. They also have a better chance to work through a sense of loss, common to all disabilities.

#### 4.2.1 Coping with the Loss of Normalcy

Regardless of the individual developmental route, most children with autism start realising that they are not quite like others at some point during their adolescence. A few factors seem to facilitate the process:

A higher level of interest in others

A higher level insight into difficulties in social interaction

A higher IQ

Once the adolescent realises that he has significant difficulties in conducting social relationships compared to his peers, he needs deal with this loss, just like dealing with another loss. Understanding the thoughts, feelings and behaviour of an adolescent with autism is the necessary first step in helping him out and being there for him. Considering this coping process in a few stages may make the caregivers' job easier:

Anger

Denial

Depression

Acceptance

Adaptation

Most commonly, the adolescent will not go through these stages one after another, but rather display a larger or smaller aspect of each at any given time. This is a painful process for not only the adolescent but for others who care for him as well. Parents may find themselves compelled to forget the whole thing and act as if nothing is happening. Denial is one form of getting over the problem. It is important for the parents to help the youngster not to deny but to face the problem and handle it squarely. If parents handle the problems calmly and in a matter of fact manner, this will encourage the adolescent to also follow similar approach. Help the youngster to talk about his anger and frustration, which will in turn help the adolescent get closer to the acceptance and adaptation. Parents do not have to bring up any topic or take initiative and give an impression of intrusion; instead if they give a good listening and show patience to the youngster when he or she brings about a problem, will go a long way in easing the situation.

When the youngster is making statement about the problem, stay on the problem without changing the topic unless the youngster changes the topic. This would give confidence and trust to the youngster in regard to the parents that they would listen to him and he can trust them to be patient with his anxiety and concerns. This adds to the youngster's self esteem also.

It is important for the parents to be in line with the youngster, listen to the difficulties and not to trivialise or minimise the problem, but understand the problem entirely from the point of view of the youngster. At the same time parents should also not allow the youngster to exaggerate an issue. They should provide the youngster cues for reality testing in a gentle way.

Where the parents find the youngster not coming forth frankly with the problem or finds the youngster hesitating a great deal, every effort should be made to offer the

option of counseling, since sometimes it is easier to talk to a stranger. However, the parents should never push the idea directly even if they feel that their child clearly needs professional help.

If parents find the youngster depressed, they could consult a psychiatrist and get the needed medication to overcome the depression. It is important for the parents to look for the following common symptoms of clinical depression. If five or more of these are present week after week, then it is indicative of definite depression and the youngster needs immediate help. The symptoms to look for are given below:

- Appearing sad for most of the time;
- Becoming irritable and angry in regard to flimsy issues, so that family members avoid the youngster lest the latter becomes very angry or upset.
- Not being able to fall asleep, waking up in the middle of the night and having difficulty falling back to sleep;
- Complaining that he is tired all the time and wanting to take naps during the day;
- Eating less or more than usual;
- Putting himself down, saying he is stupid;
- Making remarks like they hate life, they hate the counselor, parents etc.
- You, nobody loves him, or wishing he was dead;
- Losing interest in activities he usually enjoys;
- Withdrawing self from the rest of the family, refusing to participate in group activities;
- Blaming self unfairly for anything that goes wrong.
- Most adolescents with autism excel in one or two subjects. They tend to accumulate a lot of information on the subject and love to talk about it over and over.

Unfortunately, after one point family members end up losing interest and start getting bored to death. Rather than avoiding the subject, try finding out new ways to engage the youngster in the subject. Structure the topic in a different way. Find a way to challenge the youngster. Be creative and let the sky be the limit! If the youngster finds that parents are interested, that will make the youngster feel better about self, realising that the youngster's mastery his mastery on the subject will boost his self-esteem.

Many adolescents with autism resolve their sense of loss by turning the issue upside down: Rather than clinging to depression and despair, they find their *identity* in autism. They get in touch with other youths with autism. They take on themselves educating their peers about autism at school. They set up web sites, chat rooms and even write books about it. They gather support for a better understanding and treatment of autism.

Encouraging the youngster, your child, providing him means to this end and removing the obstacles in front of him may turn out to be the best antidepressant treatment ever. All this may seem remote and you may not know where to start.

### 4.2.2 Acknowledging Sexuality

In contrast with their rather slow social development and maturation, adolescents with autism develop physiologically and sexually at the same pace as their peers. As their sons and daughters with autism grow older and display sexualised behaviour, many parents find themselves worrying that their child's behaviour will be misunderstood or that their child will be taken advantage of.

For instance, they may be worried that their daughter will get pregnant or their son will impregnate someone else's daughter. Another concern may be that their child will not have the opportunity of enjoying sexual relationships; or that their child will contract sexually transmitted diseases etc.

While some parents get concerned that their children show no interest in sexual matters, others have to deal with behaviours like the following:

- touching private parts of own in public;
- stripping in public;
- masturbating in public;
- touching others inappropriately;
- staring at others inappropriately; and
- talking about inappropriate subjects.

Talking about sex, especially the sexuality of the adolescent makes the parents feel uncomfortable. Even though parents wish that their youngster have safe and fulfilling sexual lives, we hope the issue just gets resolved by itself, or at least somebody else takes the responsibility of resolving it.

They may find themselves lost trying to imagine their children having significant problems such as inability to carry on a simple conversation, building relationships that may lead to healthy sexuality. Parents may find it comforting to believe that their children do not have sexual needs and feelings, and avoid bringing up the subject in any shape or form.

They may feel uneasy about sex education, believing that ignorance will prevent sexual activity.

The main issue is for the parents to make up their mind regarding addressing the sexual issue rather than avoid it. They have to set up a time with their child to talk about sexuality, rather than making a few comments about it when the issue is hot. There is no point talking about the issue when it is raw and right after the incident. when everybody feels quite emotional about what just has happened.

It is important for parents to ask direct questions about what the youngster knows about sex, his desires and worries. It is for the parents to inform the youngster and tell him or her they parents think should be his first step. *After* inquiring and talking about the normal behaviour, the parents should set realistic but firm limits about inappropriate behaviour.

Seeing parents level of comfort around the issue, the youngster will get the message that it is OK to have sexual feelings and it is OK to talk about them. Getting this message alone will bring the tension around sexuality a few notches down. If this approach is fair, parents should not feel shy about asking for help. Other parents with



adolescent children would be a good starting point. Another is the youngster's school may also be able to help. Finally, parents may inquire about professional help which should provide:

- an *individualized* sexuality assessment
- sex education based on individual needs
- utilise behavioural modification techniques to discourage inappropriate sexual behaviour and promote appropriate sexual behaviour.

### 4.2.3 Change in the Point of Views

In this period, adolescents manifest clear sexual identity and are concerned with serious relationships. They are able to love others tenderly and have a capacity for sensual love. Self-esteem and personal dignity become important to them. They want that they should be respected and treated as adults. They can even offer useful insight on many things, and can set goals for themselves and follow them through. By this time, teenagers learn self-regulation and accept social institutions and cultural traditions more easily. There can be mental and emotional problems involved, but most of them are treatable with the help of an expert professional.

### 4.2.4 High-risk Behaviours

Late adolescence represents a unique period of transition between youth and adulthood. These youngsters are usually considered to be a healthy group but may also develop many chronic medical problems around this time.

A few health problems, such as eating disorders, are actually unique to this group of late adolescents. They are constantly concerned about their looks and do not want to become obese. Thus they tend to starve at this time and develop eating disorders.

Also this is the age when they develop high-risk behaviours. They experiment with drugs, alcohol, smoking, adventurous sport and many more. Many of these behaviours are a challenge to the existing norms and systems. They tend to defy the norms and take risks. Through such behaviours they try to convince themselves and their peers and parents that they are grown ups.

During adolescence, children develop the ability to:

- Comprehend abstract concepts, such as higher mathematical concepts, and develop moral philosophies, including rights and privileges
- Establish and maintain satisfying personal relationships by learning to share intimacy without inhibition or dread
- Move gradually towards a more mature sense of identity and purpose
- Question old values without a sense of dread or loss of identity

#### Self Assessment Questions

1) Answer the following in True (T) or False (F):

- An early adolescent is the time when there is a transition from high school to the world of university. ( )
- The teenage has to deal with all changes at the same time which is extremely challenging. ( )

- iii) Adolescents yearn to develop a unique independent identity separate from their parents. ( )
- iv) Adolescents are able to love others tenderly and have a capacity for sensual love. ( )
- v) Early adolescents commonly experience with drugs, alcohol, smoking adventure sports, etc. ( )

2) Fill in the blanks:

- i) Adolescence is a period when a person changes in \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ characters.
- ii) Sexuality of adolescents makes the parents feel \_\_\_\_\_.
- iii) \_\_\_\_\_ and personal dignity becomes important to adolescents.
- iv) Adolescents are a period that is full of \_\_\_\_\_.
- v) Adolescents in order to look good tend to starve and may develop \_\_\_\_\_.

### 4.3 LET US SUM UP

Adolescence can be described as a phase of life beginning in biology and ending in society. Adolescence may be defined as the period within the life span when most of a person's biological, cognitive, psychological, and social characteristics are changing from what is typically considered childlike to what is considered adult-like. For the adolescent, this period is a dramatic challenge, one requiring adjustment to changes in the self, in the family, and in the peer group.

Understandably, then, for both youngsters and their parents, adolescence is a time of excitement and of anxiety; of happiness and of troubles; of discovery and of bewilderment; and of breaks with the past and of links with the future. Adolescence can be a confusing time—for the adolescent experiencing this phase of life, for the parents who are nurturing the adolescent during his or her progression through this period, and for other adults charged with enhancing the development of youth during this period.

The hopes, challenges, fears, and successes of adolescence have been romanticised or dramatised in novels, short stories, and news articles. It is commonplace to survey a newsstand and to find a magazine article describing the “stormy years” of adolescence, the new crazes or fads of youth, or the “explosion” of problems with teenagers (e.g. crime or sexuality).

Adolescents yearn to develop a unique and independent identity, *separate* from their parents'. Yes, they love their parents, but they don't simply want to follow their foot steps. They challenge their parents in any way they can. They disobey their rules; criticize their “old fashioned” values; they discard their suggestions.

During adolescence, parents should play a highly supportive role. They have all the necessary experience, resources and maturity to make this transition as easy as possible. Parents have to first of all understand the convoluted and conflicting requirements of a teenager.

During adolescence, a teenager is trying to carve out his or her own identity that is completely separate from the parents. No doubt teenagers love their parents, but they do not want to follow in the foot steps of the parents. They try to challenge their parents' authority in every possible way and also pay no heed to suggestions given by their parents.

Youngsters with autism bring their special flavor to the adolescence, essentially determined by the levels of three ingredients: interest, avoidance and insight.

Regardless of the individual developmental route, most children with autism start realising that they are not quite like others at some point during their adolescence. Once the adolescent realises that he has significant difficulties in conducting social relationships compared to his peers, he needs deal with this loss, just like dealing with another loss. Understanding the thoughts, feelings and behaviour of an adolescent with autism is the necessary first step in helping him out and being there for him.

In this period, adolescents manifest clear sexual identity and are concerned with serious relationships. They are able to love others tenderly and have a capacity for sensual love. Self-esteem and personal dignity become important to them. They want that they should be respected and treated as adults. They can even offer useful insight on many things, and can set goals for themselves and follow them through. By this time, teenagers learn self-regulation and accept social institutions and cultural traditions more easily. There can be mental and emotional problems involved, but most of them are treatable with the help of an expert professional.

Late adolescence represents a unique period of transition between youth and adulthood. They are usually considered to be a healthy group but many chronic medical problems may also begin during this time.

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#### **4.4 UNIT END QUESTIONS**

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- 1) What are the various Challenges of Adolescence?
- 2) How do youngsters cope with the Loss of Normalcy?
- 3) How to make youngsters acknowledge sexuality?
- 4) What are the various types of change in the youngster's point of view?
- 5) What are high risk behaviours? Give suitable examples and discuss the remedial measures and preventive measures.

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#### **4.5 ANSWERS TO THE SELF ASSESSMENT QUESTIONS**

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##### **Self Assessment Questions**

- 1)
  - i) False
  - ii) True
  - iii) True
  - iv) True
  - v) False

- 2) i) Biological; cognitive; psychological; and social
- ii) Uncomfortable
- iii) Self-esteem
- iv) Challenges
- v) Eating disorders



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