

## ADOLESCENCE: THE STAGE OF TRANSITION

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Received : 01-09-2015

Accepted : 15-09-2015

### ABSTRACT

*This article examines the important transitory stage in human life i.e. adolescence- a life stage, that lies between childhood and adulthood. Beginning around 10, 11 or 12 years, adolescence concludes between 18-21 years of age. It is a stage, when complete metamorphosis takes place and is akin to a butterfly emerging from its cocoon which in its former stage is a caterpillar! The speed of adolescent changes varies among cultures and societies since they are contingent on the processes of socialization, training and education. Key developmental milestones are achieved during adolescence and in order to understand adolescents it is important to understand their physical, cognitive, psychological, social-emotional, moral, educational and vocational development and the ensuing changes. Sex differences exist between boys and girls when we examine all these factors. The end of this tumultuous period entails physical and sexual maturation, social and economic independence, development of identity, acquisition of skills needed to carry out adult relationships and roles, and the capacity for abstract reasoning. Parents, teachers, peers and the significant others in the adolescent's environment have to be supportive and empathetic of the turmoil that they go through to enable a smooth well adjusted transition into adulthood.*

**Keywords:** adolescence, adolescents, human development, child development, child, childhood, adulthood, cognitive, social, emotional, moral, development, vocational, late maturer, early maturer, transition.

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### INTRODUCTION

Human beings go through many stages of growth and development right from the time of conception till their death. Each of this stage is characterized by distinct and unique characteristics, which set it apart from the previous stage. The stage of development that is marked at the beginning by the onset of puberty and at the end by the attainment of physiological and psychological maturity is called as adolescence. The bit by bit development changes of the childhood are followed by changes of adolescence that erupt as a sudden storm. There

is nothing subtle or gradual about the transformation. The individuals' entire body undergoes changes and they look like adult however their emotional and intellectual ability are not at the same level of maturity. Adolescent changes are so profound that they mark the rebirth of human being.

Adolescence is derived from a Latin word *adolescere*, meaning "to grow into maturity". It is a life stage between childhood and adulthood. Adolescents are referred to as teens or teenagers and the period of adolescence is closely associated with teenage years.

### **Defining Adolescence**

Adolescence as per the Dictionary.com is defined as “the transitional period between puberty and adulthood in human development, extending mainly over the teen years and terminating legally when the age of majority is reached i.e. youth”. It also refers to the period or stage of development, as of a society, proceeding maturity. The Merriam Webster Dictionary refers to adolescence as “that period of life when a child develops into an adult”. In studying adolescent development adolescence can be defined biologically as the physical transition marked by the onset of puberty and the termination of the physical growth; cognitively it is viewed as changes in the ability to think abstractly and multi-dimensionally; and socially as a period of preparation for adult roles (Arnett, 2007). However it should be noted that the term adolescence is much less precise than it appears since both the onset of puberty and attainment of maturity are effectively impossible to define or specify (Reber, 1985).

### **Understanding Adolescence**

Adolescence begins around 10, 11 or 12 years with variations existing among cultures and societies. However it concludes between 18-21 years of age. A thorough understanding of adolescence in any society depends on information from various viewpoints gathered from history, anthropology, psychology, sociology, the cultural heritage and traditions. However from all the given viewpoints it is

apparent that adolescence is the transitional period between childhood and adulthood. This stage gradually prepares and then inducts the human being into taking up adult roles. It is a transitory phase in the life of a human being and is contingent upon the culture of that society, acquisition of education including formal, non formal or informal (all or one as the case maybe), socialization and training for taking on adult roles, preparing for future vocations for employment and adjusting to varying living circumstances also takes place.

In many traditional cultures as in our own Indian context, adolescence is akin to adulthood. In the rural India an adolescent is ready to take on the adult roles fully, i.e. with the onset of menstruation the girl is married, although it is not permitted by law and is viewed as child marriage, but this child bride bears children of the groom who is not much older than herself! As the girl bears and rears children, her adolescent partner toils hard to make both ends meet and provides for the upkeep of his family. In contrast, adolescents in the Indian modern urban families are educated like their Western counterparts and construed as undergoing a transitory stage of development. The adolescents attend educational institutes, choose appropriate professions, undergo training in life skills and gradually take on adult roles.

Adolescence is not just related to age alone that signifies the beginning or end of it. In fact adolescence is related to the achievement of key developmental milestones like in any other stage

of development when it has begun or ended. There are a variety of changes that occur between childhood and adulthood and this complete metamorphosis is akin to a butterfly emerging from its cocoon from its former state as a caterpillar!

### **Developmental Tasks Of Adolescence**

According to Robert Havighurst (1972) growth and development occurs in six stages. He emphasized that learning is basic at all these stages of life and it continues throughout life span. The following changes take place during adolescence:

1. Achieving new and more mature relations with age-mates of both sexes.
2. Achieving a masculine or feminine social role.
3. Accepting one's physique and using the body effectively.
4. Achieving emotional independence of parents and other adults.
5. Preparing for marriage and family life.
6. Preparing for an economic career.
7. Acquiring a set of values and an ethical system as a guide to behaviour; developing an ideology.
8. Desiring and achieving socially responsible behaviour.

### **Developmental Characteristics of Young Adolescents**

It was only during the 20<sup>th</sup> century that early adolescence was recognised as a period of distinct human growth and development. The eminent American Psychologist G. Stanley Hall (1904) is credited with the identification of early

adolescence or preadolescence as a unique stage of growth. This identification captured the attention of both the scholars as well as common people in human life. Havighurst's Developmental Task Theory (1968), Piaget's Developmental stage theory (1952, 1960) and Flavell's (1963) theories of metacognition emphasised and highlighted the importance of early adolescence. It was Donald Eichhorn (1966) who pinpointed that adolescents' developmental characteristics ought to be considered while planning curriculum, instruction and assessment and when structuring the environment of the school. Eichhorn is credited to with the pioneering the middle school movement and went to coin the term "transescence" to identify the transitory stage between elementary schoolers and high schoolers. Subsequently a movement ensued and various professional organizations as the Association for Supervision and Curriculum Development, 1975; National Association of Secondary School Principals, 1989; National Middle School Association, 1982, 1995, 2003, 2010 authored position papers, statements and even gave recommendations that addressed young adolescents' development through various educational programs and practices. Joan Lipsitz (1984), who has done extensive research on middle graders, emphasizes that schools for young adolescents "must be responsive to their developmental needs".

The stage of adolescence is characterized by changes in biological, cognitive, psychological,

social-emotional, moral, educational and vocational developmental changes that set adolescence apart and uniquely distinguishable from the other stages of human development. To understand the characteristics and change during adolescents it is important to understand these changes one by one.

### **Physical Characteristics Durings Adolescence**

The physical changes begin during pubescence. Pubescence is the time that precedes puberty (Helms and Turner, 1995). It connotes the state of being in or reaching puberty. Puberty is derived from Latin word *pubertas* which means adulthood. Puberty takes about four years, typically begins earlier in girls than in boys, and ends when a person can reproduce. During puberty, both boys and girls undergo an adolescent growth spurt. Primary sex

characteristics (the reproductive organs) enlarge and mature, and secondary sex characteristics appear. This stage is characterized by accelerated and uneven growth, improved gross and fine motor skills and rapid growth of reproductive functions. The principal signs of sexual maturity are production of sperm (for males) called 'spermarche' that typically occurs at age 13 and first menstruation or occurrence of 'menarche' (for females) between the ages of 12 and 13 in the United States (Papalia, Olds and Feldman, 2006). The sex organs mature and the secondary sex characteristics appear (Table 1 summarizes these changes). The secondary sex characteristics are those characteristics which are not directly tied to reproduction yet distinguish the male from the female of that species. These changes include breast development, facial and body hair and appearance of voice changes.

<b>Girls</b>	<b>Boys</b>
Breasts	Pubic Hair
Pubic Hair	Axillary Hair
Axillary Hair	Facial Hair
Increased width and depth of pelvis	Body Hair
	Voice Change

**Source: Lefton (1985)**

These phenotypic traits and characteristics, give advantage to an individual over its rival in courtship and aggressive interactions. The adolescent changes are phenomenal and vary between girls and boys.

#### **Adolescent Changes Amongst Girls**

- The development of breasts or appearance of breast buds occurs as early as 8 years of age. The breasts are developed fully between 12-18 years. The hips also get rounded.
- The pubic hair, the arm and leg hair usually begin to grow at 9 or 10 years and by 12-18 years reach the adult pattern of hair growth.
- Two years after pubescence (appearance of breast buds; pubic hair) menarche that is first menstrual cycle sets in. Onset of menstruation maybe as early as 9 and it may be as late as 16. Due to factors such as biology, hereditary or nutrition menarche may occur as early as age 9 or as late as 16 years. The average age of menarche around the world is 13 (Shawky and Milaat, 2000), 12.9 in the UK (Hamilton-Fairley, 2004), 12.72 in Canada (Al-Sahab, Ardern, Hamadeh and Tamim, 2010) and in the US it is about 12.5 years (Anderson S.E., Dallal G.E. and Must, A., 2003). The girls are sterile at this stage.
- The peak period in girls growth spurt is around 11.5 years and girls mature two years ahead of boys (Caissy, 2002). Around 16 years of age growth spurt reaches its peak and then slows down.

- By the end the adolescent girl becomes capable of conception.

#### **Adolescent Changes Amongst Boys**

- Equivalent to the appearance of breast buds in girls is the growth of testicles and scrotum that begins as early as 9 years. The penis lengthens soon after and genitals reach adult size and shape around the age of 17 or 18 years.
- Onset of puberty in boys is marked by nocturnal emissions which are involuntary ejaculation of semen during sleep. Nocturnal emission is common during adolescence and starts between 12 and 16 years once the male reproductive organs are mature. Nocturnal emissions are fairly common at this age and are caused due to sexual excitation during from dreams or even a full bladder or pressure from pyjamas.
- The pubic hair growth starts around the base of penis between 12-14 years. Two years after the beginning of growth of pubic hair, axillary hair- the hair in the armpits, on the leg and the face emerge and by 17-18 years reach the adult pattern of hair growth. Pubic hair growth is caused by hormone androgen, which stimulates or controls the development and maintenance of male characteristics in vertebrates (Rogol, 2002). Chest hair are last to appear and continue growing till late adolescence.

- The sweat glands or apocrine becomes active during puberty due to development of reproductive system.
- While voice change occurs in both boys and girls, it is in boys that voice changes are astonishing and astounding. The voice of boys' cracks, squeaks and makes funny sounds during adolescence. It is due to the fact that the larynx becomes bigger due to testosterone produced in the body. Also the vocal cords become longer and thicker. Hence and at this growing stage that funny sounds are produced and finally the voice becomes deeper once larynx has grown. Once the larynx has grown bigger it turns at an angle and it sticks out of the neck. It is known as the Adams Apple which juts out of the neck in boys.
- Prostate gland also enlarges.
- The peak period in boys growth spurt is around 13.5 years and around 18 years it slows down.
- Sperm production becomes sufficient for fertility, and the growth rate decreases.
- Physical strength is at its peak at this stage.

The developmental growth in boys and girls includes significant increase in height, weight, internal organs as well as the changes in the skeletal and muscular systems (Kellough & Kellough, 2008). A teenager on an average can grow 12 inches taller during puberty. There is lack of proportion in the growth of an adolescent. Hands and feet grow faster than arms and legs. The arms and legs lengthen before the torso does,

and all this creates the impression of "leggy" gawkiness which is common during adolescence.

The changes during puberty are attributable to male and female reproductive hormones. In fact boys and girls have both the male reproductive hormone- the testosterone and female reproductive hormone- the oestrogen. It is the balance of the hormone that changes during puberty, with the girls producing more oestrogen- the female hormone and the boys producing more testosterone- the male hormone.

The brain size remains the same during adolescence but significant internal changes occur within the brain, in the neural circuit and also the gender specific differences appear at this time (Blakemore & Choudhury, 2006; Caskey & Ruben, 2007; Nagel, 2010). The frontal lobes of the brain, which are responsible for judgement, impulse control and planning, are still maturing until early adolescence, hence the adolescents often engage in risk taking behaviours and experience heightened emotions (Casey, Tottenham, Liston and Durston, 2005).

The circulatory and digestive systems undergo rapid phases of growth. The organs of the digestive system reach adult size and shape. Fluctuations in basal metabolism cause these youth to experience periods of restlessness and lassitude. Additionally, young adolescents tend to "have ravenous appetites and peculiar tastes" (Kellough & Kellough, 2008) and have a propensity for improper nutrition. They are often physically vulnerable due to poor physical fitness,

have poor health habits (Scales, 2003) and exhibit high-risk behaviours including the use of alcohol or illicit drugs and experimentation with sexual activity according to National Institute on Drug Abuse (2005).

By the time adolescents reach age 17-18 years the heart is double in size and has grown twelve times heavier as it was at birth (Heald et al., 1963). The vital capacity of the lungs increases rapidly during adolescence. The boys' capacity becomes greater than the girls capacity, this indicates a clear cut sex difference (Helms and Turner, 1976).

#### **Early Maturer Vs the Late Maturer**

Adolescence may be a time of crisis in the life of a human being. The variable rate of growth and development among sexes and also amongst the same sex adolescence can have a profound impact on the psychological development of the maturing adolescent. The conflict and anxiety of the bodily changes puts great demand on the emotions and it becomes a source of conflict too. Feelings of self-consciousness, shyness and insecurity get further compounded by the fact whether or not the adolescent is an early maturer or a late mature. Studies indicate that early maturers were more adept at overall social adjustment than the late maturers (Helms and Turner, 1995). Jones and Bayley (1950) found early maturing boys to be more popular and greater capacity of leadership as compared to late maturers.

Early versus late maturation among boys indicates the following differences

- Early-maturers tend to experience the changes in positive ways.
- Late-maturing boys tend to have lower self-esteem than other boys.
- Early maturers are more likely to get involved with antisocial activities, including drug and alcohol abuse.
- However there are advantages for late-maturing boys. They tend to have higher levels of intellectual curiosity, social initiative, and exploratory behavior when compared to early maturers.
- Late maturity gives a longer period of time to "prepare" them for the changes of puberty.
- Longitudinal research conducted during early middle age indicates that late maturers tend to be more responsible, self-controlled, cooperative and more sociable. They were also found to be more conforming, conventional, and humourless.

Recent research shows that early versus late maturation among girls indicates that an earlier rate of pubertal maturation in girls correlates with a number of detrimental outcomes compared with on-time or later maturation (Mendle, Turkheimer, & Emery, 2007). In particular, girls who mature earlier than their peers seem to find pubertal adjustment especially challenging and are more likely to experience detrimental consequences (Caspi & Moffitt, 1991; Ge, Conger & Elder, 1996). Early maturation precipitates a flurry of

social changes for which girls may not be “developmentally ready” (Rierdan & Koff, 1993). This is because maturation aborts the resolution of developmental tasks from the preadolescent girls and they are less equipped to cope with the social changes as compared to the late maturers. Cultural anthropology researches conducted in the Western world indicate pathological outcomes associated with early puberty. However in some cultures, early menarche is considered socially advantageous in India or Kipsigis of Kenya, (Borgerhoff, 1989)

- Studies have found that early maturers take less time to progress from Tanner stage 2, characterized by breast budding and pubic hair development, to menarche than it does for later maturers (Apter and Vihko, 1985). It seems likely that due to restricted period of time of maturation in early maturers the ensuing physical changes might aggravate the feelings of confusion and fear in early maturers.
- Early-maturing girls were less popular, less poised, less expressive, and more submissive and withdrawn than late maturers.
- Early-maturity in girls compounds emotional problems, including problems with self-image, depression, anxiety, eating disorders, and panic attacks. These problems seem to be related to girls’ feelings about their weight. However these findings tend not to apply to females in cultures such as Germany, where attitudes toward sexuality and appearance are not as important as they are in the U.S.
- While self-image may suffer, early-maturing girls tend to be very popular.
- Due to behaviour problems linked with early maturation early maturing girls are more likely to exhibit poor academic performance in high school (Dubas, Graber and Peterson, 1991) than on-time or later maturing peers. Studies by Graber et al, 1997; Simmons and Blyth, 1987; Stattin and Magnusson (1990) indicate that early maturers are more likely to get in trouble at school, exhibit absenteeism and truancy. They report less interest in academic subjects and are less likely to pursue college educations (Stattin & Magnusson, 1990). They tend to have lower educational aspirations.
- Early-maturing girls may experience more difficulties because of the pressure they feel in relation to males, especially given the fact that early-maturing girls are more likely to associate with males who are older.
- Stice et al. (2001) observed that early maturing girls were at 1.9 times at risk for depression and 1.8 times at risk for substance use such as drug and alcohol abuse.
- However, early-maturing females who attend all-girl schools do not seem to experience the same difficulties.
- The early-maturing females tend to be more psychologically advanced than other females once they reach adulthood.

### Cognitive Changes During Adolescence

Cognitive development refers to the development of the ability to think and reason. The cognitive advancements are both quantitative as well as qualitative in nature. It is during adolescence that acquisition and utilization of knowledge nears its maximum capacity. Improvements in basic thinking abilities generally occur in five areas during adolescence: attention, memory, processing speed, organization, and metacognition. Development at this stage is influenced both by brain maturation and environmental stimulation. Schooling, religious institutions and culture too play an important role in this. The change in cognitive realm helps adolescent's personality development (Helms and Turner, 1995).

According to Jean Piaget, adolescence is that stage where major cognitive changes take place-

- **Shift from concrete to abstract mental functioning** that allows the adolescent to think and reason in a wider perspective. In the previous stage of cognitive development i.e. the middle school years, the children's thinking is bound by immediate perception and concrete-empirical experiences, while an adolescent's thinking is not bound by immediate perceptions and hence are able to understand hypothetical relations in complex abstract propositions. They enter into formal operations during adolescence. Not all people become capable of formal operations; and those who are capable do not always use it.
- **Hypothesis testing and flexibility of thought** is the characteristic feature of mature mind that is exhibited by an adolescent at this stage. Piaget (1953) refers to this as hypothetical-deductive reasoning. The adolescent is able to understand purely hypothetical propositions, think systematically and establish all logical relationships within a problem, then generate tentative solutions and then test each of these solutions and accept those that work and discard those which don't. The ability to consider possibilities, as well as facts, may influence decision-making, in either positive or negative ways. Adolescents make deductions on hypothetical basis. This allows the adolescent to think and reason in a wider perspective. Vocabulary and other aspects of language development takes place during adolescence, especially those related to abstract thought. Adolescents enjoy wordplay and create their own "dialect."
- **Explanation of phenomena** occurs during adolescence due to flexibility and maturity rather than merely describing phenomena as middle-aged children do (Peel, 1972). Explanatory thought includes testing of hypothesis, use of imagination and recall of possibilities to explain phenomena.
- Due to mature thought patterns the adolescents attain **insight into and interpretation of literary materials**. They are able to understand the meanings of metaphors, political cartoons, appreciate and comprehend

riddles (Elkind, 1967; Shaffer, 1930; Shultz and Pilon, 1973).

- **Concept of Time:** The ability to conceive past develops in adolescence. By age 8, the children are readily able to distinguish historical periods and eras. By age 11 years they acquire concept of historical chronology and by the age 14 adolescents are able to understand future perspectives.

There is a difference in time orientation of sexes during adolescence. The male adolescents cling to childhood plans as they make plans for adulthood. As far as females are concerned greater time continuity exists throughout life span (Rogers, 1972).

Time perspective is an outcome of the socialisation process (Lamm, Schmidt, & Trommsdorft, 1976). Social class also influences time orientation. The lower class youth are more present-oriented, while middle-class are future oriented, while the upper-class emphasise on traditions and are oriented to past.

- **Adolescent egocentrism** is a phenomena described by Psychologist David Elkind. Drawing upon the work of Piaget's theory of cognitive development, Elkind (1974) contends that adolescents go through a stage of self-absorption that leads to only being able to see the world through one's own perspective. He called this stage egocentrism. Due to egocentrism an adolescent is unable to draw a distinction between their perception

what others think about them and what people actually think in real life. Although they are introspective, analytical in their cognitive processing, the physical metamorphosis that they are undergoing leads to mental preoccupations. This compels an adolescent to believe that everybody is preoccupied with their appearance and this belief contributes to the egocentrism of the adolescents. Since they fail to make a distinction between what others are thinking about and his own thoughts about self, this leads to egocentrism.

- **Imaginary Audience** is an outcome of egocentrism when adolescent believes that they are the focus of every one's attention or on a "centre stage" (Elkind, 1967). They create imaginary audience which continually evaluates and judges them. This explains their moodiness, being embarrassed at trivialities and a large number of other typical behaviours exhibited by them.
- **Personal fable** is the belief of an adolescent that they are highly special and very unique and no one like them has ever existed on earth.
- **Metacognition** is thinking about one's thoughts. Metacognition is relevant in social cognition, resulting in increased introspection, self-consciousness, and intellectualization. Adolescents are more likely to question others' assertions and less likely to accept facts as absolute truths.

### **Psychological, Social, Emotional Development During Adolescence**

Adolescence is a stage when human beings (age 11-13 years) start questioning “Who am I?”, “What is the purpose of my life?”, “What should I do?”, “Does God actually exist?”, “Why do I have to be under my parents control?” They subject themselves to constant self evaluation and self appraisal. And this makes them very self-conscious. But this is an exercise to define ones sense of self and establish adolescent’s identity. Identity formation begins with process of detachment from parents and greater identification with peers. Conflicts arise between parents and children due to detachment during middle adolescence (age 14-15 years). But these conflicts eventually help in establishment of an independent identity. They develop their individual set of beliefs and values. By late adolescence (ages 16 onwards) the adolescents who are able to cope with conflicts with parents develop a ‘new sense of self’. Self dependence and a sense of responsibility become apparent. They develop a stable sense of identity and place in the society (Evernerd and VanderWerfforteten, 1983; Harris and Liebert, 1984). They develop an identity distinct from their parents. However, those who are not able to cope with identity crisis end up in ‘identity confusion’ (Erikson, 1968). The Identity formation during adolescence is influenced by many factors like family and societal values, cultural & ethnic background and the socio-economic status. Family dependence and

relationships diminish and they develop a strong need for peer support and acceptance. With greater interactions with peers their social skills are enhanced & social and sexual behaviours refined. They are able to establish relationship with the opposite sex. Greater the adolescents’ conflict with their parents, greater the identification with their peers. By the time they are in late adolescence the adolescents are psychologically integrated, have developed a fairly consistent view of the outside world, they have set realistic goal in life and by now have discovered their role in the society.

The social-emotional changes are part of a child’s voyage to adulthood. Adolescents are very emotional and receptive to emotions and exhibit the emotions intensely. They are equipped with greater understanding of emotions, expressing it and regulating with growing maturity. Emotions become the key to establishing social relationships, navigating these relationships and functioning effectively in the world and recognizing purpose of life. Major social-emotional changes include:

- Exploring ‘Who am I?’ and establishing the purpose of life.
- Becoming independent and ability to take on responsibilities. This is a sign of maturity that adolescents are heading towards.
- Become more peer oriented moving away from the family both socially and emotionally. They have frequent arguments. However peers can affect only short term, immediate

decisions e.g. their appearance, their clothes; but it is the parents who shape their long term decisions pertaining to education, career choices, morals and values. Parents hence have to tactfully establish positive dialogue with them as this is just a passing phase.

- Adolescence is the stage of formal operations and adolescents are thinking abstractly and questioning different viewpoints. Hence the teenagers in this stage tend to differ from parents and see things differently.
- They become more sensitive to other people's emotions as they grow older.
- The adolescents exhibit strong feelings and intense emotional ups and downs. They may appear moody, aggressive and withdrawn at times. In a nutshell unpredictable. Adolescents at this stage go through a process of learning and acquiring the skills to control their emotions and express them in a grown-up manner.
- They become more self-conscious, especially about their body image and physical appearance. This affects their self-esteem and they might compare their appearance and bodies with those of peers and age mates. Positive feedback from parents and siblings can lead to a healthy social-emotional development.
- Studies show that there is a difference between the sexes in emotional needs during adolescence. Studies by Bolognini et.al. (1996) on self-esteem and mental health in

early adolescence clearly show that girls tend to have lower self-esteem than boys. Pollack & Shuster's (2000) studies indicate that boys may need to learn to be more cooperative and that they can express emotions other than anger. Girls on the other hand may require help in learning to be more assertive and express their anger.

- Adolescence is the stage when they look for new experiences and even take risks as they think it's a 'bulletproof' stage and nothing bad can happen. However they have to be made aware of the consequences of their action.

### **Moral Development During Adolescence**

Morality refers to the distinction between right and wrong. Moral development is a process whereby an individual is consciously able to distinguish good from bad and right from wrong and is able to adopt guidelines, standards or principles of right and wrong from infancy to adulthood. A number of theories explain moral development and how the moral values are acquired that will be enacted in later life. Moral development in early childhood begins when certain behaviours are termed as "good" which is rewarded by parents and they are distinguished from behaviours that are "bad" and are hence accompanied by punishment. But as children become older, morality encompasses complex set of ideas, values and belief (Elkind, 1971). Eminent Psychologists Jean Piaget and Lawrence Kohlberg delved into moral development.

Piaget (1932) contends that morality comprises of system of rules handed down from adults to children. Children learn the standards of conduct by training, practice, developing consciousness and by nurturing respect for these standards of conduct. Between 5-9 years is the age of 'heteronomous morality' or 'moral realism' where morality is imposed from outside. Morality for children is strictly obeying rules put forth by the authority figure i.e parent, an adult or God. Any transgression means severe punishment or 'immanent justice' and the punishment is related to severity of wrong-doing i.e. 'expiatory punishment'.

During middle school years the children are capable of understanding intentions behind actions and enter into stage of morality cooperation. Middle schoolers start understanding rules are not absolute; they can be changed with agreement. Since they are older and cognitively developed they understand and appreciate reciprocity of relationship.

During adolescence with the attainment of formal operations, highest stage of moral development that is moral autonomy is reached. Adolescents not only understand the rules by which the games are played, but also generate possible new rules that can make games more challenging.

Inspired by Piaget, Kohlberg (1958) too proposed that moral development through a series of stages. He put forth three levels of moral development. While infants are amoral, very young

children exhibit primitive morality. This first level is the Preconventional level when children upto 9 years of age don't have a personal code of morality. They think about morality only in terms of external authority. Moral reasoning is based on person's own needs and perception of right and wrong. When actions are wrong they are punished. And when right they are rewarded. In the second level that is the Conventional morality level, when moral reasoning develops through a set of rules that are put forth by parents or laws of the society. This is the stage when middle schoolers, take into account the expectations of society and law. The moral rules are internalized. Moral thinking is rather inflexible at this stage and they are absolute guidelines for the child that ought to be followed. According to Kohlberg developmentally most adults' in fact are in this level of morality. During adolescence moral development reaches Post Conventional morality stage. The adolescents self define moral principles. They begin to question nature of society and their moralities are based on reason and personal principles and not defined by the society rules.

Keniston (1970) while describing factors in moral development during adolescence emphasizes that it's important that adolescents should continue the search for self and not become prematurely integrated into adult society. He further contends that there are many catalysts that increase Post Conventional morality in adolescents. College bound students have higher levels of moral development than youths not

headed for college. Interactions with Professors and fellow students allow them to abandon simple dualities of right and wrong and enable them to seek relativistic concept of morality and truth. In addition new educational, technological and historical factors promote Post Conventional morality. And finally whether highest stages of moral development leads to bigotry, dogmatism or development of real ethical values, will all be contingent upon extent of development of compassion and empathy for fellow humans.

### **Educational & Vocational Development During Adolescence**

During adolescence school is important as it is so organized to address the changing cognitive, physical, social, emotional, moral development of an adolescent. School transmits knowledge and information and represents adolescent's society where they have their peers, companionship and common interests. School offers valuable group experiences, group discussions, decisions, peer interactions (Kellough & Kellough, 2008), team projects which are all essential for effective and sound communication skills and interpersonal relationships.

Teachers play a significant role in the lives of adolescents. Teachers provide a space where adolescents can test their emerging ideas, they provide appropriate learning experiences, train them to be sensitive to the needs of self and others and provide an environment so that it fosters active participation and learning on part of

adolescents. If classroom experiences can nurture feelings of progress and growth, feelings of dignity and self respect, it can go a long way in drastically reducing school dropout rates among adolescents.

Schools and teachers have another important contribution and that is providing successful vocational and career guidance programs. The adolescents have to be given factual information about various career choices and vocations of specific and pragmatic nature by their teachers and guides. Effective Vocational /occupational planning are contingent on number of factors (Bryant, Zvonkovic and Reynolds 2006) :

- Whether it is based on adolescent's interests?
- Has the adolescent made a realistic appraisal of self?
- Does the adolescent have the requisite potential and ability (physical, intellectual, social etc) to pursue the desired vocation/career?
- What are parental aspirations and expectations?
- Whether the occupational/vocational choice is realistic or distorted perception of certain jobs?
- Whether the essential competencies for the occupational/vocational choice are present?
- Has the socioeconomic background of the student been assessed i.e. is the family in a situation to support and sustain the aspirations?

Vocational guidance in schools offers opportunities for taking informed future decisions about appropriate career choices. It actually can set and steer an adolescent's future course of life in the right direction.

## Conclusion

In conclusion adolescence is a tumultuous stage in human life. It is akin to rebirth of a human being, as the adolescence is faced with extreme challenges to cope with the manifold changes in physical, psychological, social, emotional changes that are triggered by the hormonal changes and shaped by the environment. The emerging social and moral values of an adolescent, the sexual adjustments and finally the educational & vocational choices that they make are influenced by the culture and society that they grow up in. Parents, teachers, peers and the significant others in the adolescent's environment have to be supportive and empathetic about the turmoil that they grow through to enable a smooth well adjusted transition into adulthood. According to WHO (2015) "adolescence is a period of preparation for adulthood during which time several key developmental experiences occur. Besides physical and sexual maturation, these experiences include movement toward social and economic independence, and development of identity, the acquisition of skills needed to carry out adult relationships and roles, and the capacity for abstract reasoning. While adolescence is a time of tremendous growth and potential, it is also a time of considerable risk during which social contexts exert powerful influences".

## Reference

- adolescence. (n.d.). *Dictionary.com Unabridged*. Retrieved August 22, 2015, from Dictionary.com website: <http://dictionary.reference.com/browse/adolescence>.
- Adolescence. (n.d.)/*Merriam-Webster.com*. Retrieved August 22, 2015, from. Merriam-Webster website: <http://www.merriam-webster.com/dictionary/adolescence>.
- Al-Sahab B., Ardern C.I., Hamadeh M.J., Tamim H. (2010). Ageat menarche in Canada: Results from the National Longitudnal Survey of Children and Youth. *BMC Public Health* **10**: 736.
- Anderson S.E., Dallal G.E. and Must A. (April 2003). "Relative weight and race influence average age at menarche: results from two nationally representative surveys of US girls studied 25 years apart". *Pediatrics* Vol. 111 No. 4 April 1, 2003 pp. 844 -850.
- Apter, D. and Vihko, R. (1985). Premenarcheal endocrine changes in relation to age at menarche. *Clinical Endocrinology*; 22:753-760.
- Arnett, J. J. (2007), Emerging Adulthood: What Is It, and What Is It Good For?. *Child Development Perspectives*, 1: 68-73.
- Blakemore, S., & Choudhury, S. (2006). Development of the adolescent brain: Implications for executive function and social cognition. *Journal of Child Psychology and Psychiatry*, 47(3/4), 296-312.

- Bolognini, M., Plancherel, B., Bettschart, W., & Halfon, O. (1996). Self-esteem and mental health in early adolescence: Development and gender differences. *Journal of Adolescence*, 19, 233-245.
- Borgerhoff, Mulder M. (1989). Early maturing Kipsigis women have higher reproductive success than later maturing women, and cost more to marry. *Behavioral Ecology and Sociobiology*. 24:145–153.
- Bryant, Brenda K., Zvonkovic, Anisa M. and Reynolds, Paula (2006). Parenting in relation to child and adolescent vocational development. *Journal of Vocational Behavior*. 69 (1), 149–175
- Caissy, G. A. (2002). *Early adolescents: Understanding the 10 to 15 year olds* (2nd ed.). Boston, MA: Da Capo Press.
- Casey, B.J., Tottenham, N., Liston, C and Durston, S. (2005). Imaging the developing brain: What have we learned about cognitive development? *Trends in Cognitive Science*. 9:104–110.
- Caskey, M. M., & Ruben, B. (2007). Under construction: The young adolescent brain. In S. B. Mertens, V. A. Anfara, Jr., & M. M. Caskey (Eds.), *The young adolescent and the middle school* (pp. 47-72). Charlotte, NC: Information Age.
- Caspi A. (1998). Personality development across the life course. In: Damon W, editor. *Handbook of Child Psychology*. 5. New York: Wiley & Sons, Inc;. pp. 311–388.
- Caspi, A. and Moffitt, T.E. (1991). Individual differences are accentuated during periods of social change: the sample case of girls at puberty. *Journal of Personality and Social Psychology* Jul;61(1):157-68
- Dubas, J.S., Graber, J.A. and Petersen, A.C. (1991). The effects of pubertal development on achievement during adolescence. *American Journal of Education*. 99:444–460.
- Eichhorn, D. (1966). *The middle school*. New York, NY: Center for Applied Research in Education.
- Elkind, D. (1974). *Children and Adolescents: Interpretive Essays on Jean Piaget* New York: Oxford University Press.
- Elkind, D. (1971). Measuring young minds. *Horizon*. 13(1): 35.
- Elkind, D. (1967). Egocentrism in Adolescence. *Child Development*. 38: 1025-1034.
- Elkind, D. (1967). Cognition in infancy and early childhood, in Y. Brackbill (Ed.) *Infancy and Early Childhood*. New York: Free Press.
- Erikson, E.H. (1968). *Identity: Youth and Crisis*. New York: Norton.
- Evernerd, W. and VanderWerfforteten, J. J. (1983). *Development in Adolescents*. Heidelberg: Martinus Nijhoff Publishers.
- Flavell, J. H. (1963). *The developmental psychology of Jean Piaget*. New York: D. Van Nostrand. Education. Education.
- Ge, X., Conger, R.D. and Elder, G.H. (1996). *Coming of age too early: pubertal influences on*

girls' vulnerability to psychological distress. *Child Development*, 67:3386–3400.

Graber, J.A., Lewinsohn, P.M., Seeley, J.R. and Brooks-Gunn, J. (1997). Is psychopathology associated with the timing of pubertal development? *Journal of the American Academy of Child and Adolescent Psychiatry*, 36:1768–1776.

Hall, G. S. (1904). *Adolescence: Its psychology and its relation to physiology, anthropology, sociology, sex, crime, religion, and education*. New York, NY: Appleton & Company.

Hamilton-Fairley, Diana (2004). *Obstetrics and Gynaecology* (2nd Ed.). USA: Blackwell.

Harris, J. and Liebert, R.M. (1984). *The Child: Development from Birth to Adolescence*. New Jersey : Prentice Hall Inc.

Havighurst, Robert J. (1972). *Developmental Tasks and Education*. New York. N.Y.: David McKay Company Inc.

Havighurst, R. J. (1968). The middle school child in contemporary society. *Theory into Practice*, 7, 120-122.

Heald, F. P., Daugela, M. and Brunschyber, P. (1963). Physiology of adolescence. *New England Journal of Medicine*, 268, 192-198.

Helms, Donald B. and Turner, Jeffrey S. (1995). *Lifespan Development*. Harcourt Brace College Publishers: USA.

Helms, Donald B. and Turner, Jeffrey S. (1976). *Exploring Child Behaviour*. W.B. Saunders: Toronto.

Jones, M.C. and Bayley, N. (1950). Physical maturing among boys as related to behaviour. *Journal of Educational Psychology*, 41, 129-148.

Kellough, R. D., & Kellough, N. G. (2008). *Teaching young adolescents: Methods and resources for middle grades teaching* (5th ed.). Upper Saddle River, NJ: Pearson Merrill Prentice Hall.

Keniston, K. (1970), Student Activism, Moral Development, and Morality. *American Journal of Orthopsychiatry*, 40: 577–592.

Kohlberg, L. (1984). *The Psychology of Moral Development: The Nature and Validity of Moral Stages (Essays on Moral Development, Volume 2)*. Harper & Row.

Kohlberg, L. (1958). The Development of Modes of Thinking and Choices in Years 10 to 16. *Ph. D. Dissertation*, University of Chicago.

Lamm, H., Schmidt, R. W., & Trommsdorft, G. (1976). Sex and social class as determinants of future orientation in adolescents. *Journal of Personality and Social Psychology*, 34, 317-326.

Lefton, Lester A. (1985) *Psychology*, Boston: Allyn and Bacon Inc.

Lipsitz, J. (1984). *Successful schools for young adolescents*. New Brunswick, NJ: Transaction Books.

Mendle, J., Turkheimer, E., & Emery, R. E. (2007). Detrimental Psychological Outcomes Associated with Early Pubertal Timing in Adolescent Girls. *Developmental Review/ : DR*, 27(2), 151–171.

- Nagel, M. C. (2010). The middle years learner's brain. In D. Pendergast & N. Bahr (Eds.) *Teaching middle years: Rethinking curriculum, pedagogy, and assessment* (pp. 86-100). Crows Nest, Australia: Allen & Unwin.
- Papalia, Diane E., Olds, Sally W. and Feldman, Ruth D. (2006). *Human Development*, 10<sup>th</sup> Edition. McGraw-Hill Higher Education.
- Peel, E.A. (1972). Intellectual growth during adolescence, in R.C. Smart and M.S. Smart (Eds.) *Readings in Child Development and Relationships*. New York: MacMillan
- Piaget, J. (1960). *The child's conception of the world*. Atlantic Highlands, NJ: Humanities Press.
- Piaget, J. (1953). *Logic and Psychology*. New York: Basic Books
- Piaget, J. (1952). *The origins of intelligence in children*. New York, NY: International University Press. Education.
- Piaget, J. (1932). *The moral judgment of the child*. London: Kegan, Paul, Trench, Trubner & Co.
- Pollack, W. & Shuster, T. (2000). *Real Boys' Voices*. New York: Random House.
- Reber, Arthur S. (1985). *Dictionary of Psychology*. England: Penguin Books.
- Rierdan J. and Koff, E. (1993). Developmental variables in relation to depressive symptoms in adolescent girls. *Development and Psychopathology*. 5:485-496.
- Rogers, (1972). *The Psychology of Adolescence*. New York: Appleton-Century-Crofts.
- Rogol, Alan, (2002). Androgens and puberty. *Molecular and Cellular Endocrinology*. 198 (1), 25-29.
- Scales, P. C., Sesma, A., Jr., & Bolstrom, B. (2003). *Coming into their own: How developmental assets promote positive growth in middle childhood*. Minneapolis, MN: Search Institute.
- Shaffer, C.F. (1930). *Children's interpretation of cartoons*. Contributions to Education. New York: Columbia University, Teachers College. NO. 429.
- Shawky, S.; Milaat, W. (2000). Early teenage marriage and subsequent pregnancy outcome. *Eastern Mediterranean Health Journal* 6 (1).
- Shultz, T.R. and Pilon, R. (1973). Development of ability to detect linguistic ambiguity. *Child Dev.* 44: 728-733.
- Simmons, R.G. and Blyth, D.A. (1987). *Moving into adolescence*. New York: Hawthorne.
- Stattin, H. and Magnusson, D. (1990). *Pubertal maturation in female development. Paths through life*. Vol. 2. Hillsdale, NJ: Erlbaum.
- Stice, E., Presnell, K. and Bearman, S.K. (2001). Relation of early menarche to depression, eating disorders, substance abuse, and comorbid psychopathology among adolescent girls. *Developmental Psychology*.;37:608-619.
- WHO (2015). *Adolescent Health*. Retrieved August 30, 2015, from [http://www.who.int/maternal\\_child\\_adolescent/topics/adolescence/dev/en/](http://www.who.int/maternal_child_adolescent/topics/adolescence/dev/en/)