

‘A brief summary on the

‘Biological, Psychological, Intellectual &

Spiritual Development of Adolescence’

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ABSTRACT

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The adolescent developmental stages are filled with many factors, both internal and external. The biological development is most known by its maturational changes. The intellectual development is sometimes not readily noticed but expresses itself eventually as successes in academia begin to flourish. The psychological development is internal but manifests itself in varied behaviors. All these aspects are intertwined and all very from individual to individual. Studies and research from Erickson, Piaget, Golden, Ratcliff, Meier and others give specifics on each area of development while sometimes blending the aspects together to show a wide spectrum of interconnected growth indicators.

Introduction

Adolescence is the developmental stage that lies between childhood and adulthood. It is generally viewed as starting just before the teenage years and ending just after them ¹. Adolescent development encompasses many different components into its overall development, such as biological, psychological, social, spiritual, intellectual, cultural, environmental and from the Christian perspective, the aspect of the anthropological nature of mankind. These components are neither exhaustive nor linear. All of these components have some sort of interface and all develop somewhat differently from individual to individual. In this brief research paper, I hope to expound on the four basic components of the adolescence...the biological, the intellectual, the psychological and the spiritual.

1 – Feldman, R., *Development Across the Life Span* (Pearson Custom Publishing, 2006) p. 390

Biological Development

Puberty is the period during which sexual organs mature and begins when the pituitary gland in the brain signal glands in children's bodies to begin producing the sex hormones, androgens (male hormones) or estrogens (female hormones), at adult levels ².

Additionally, puberty is the age at which a person becomes capable of sexual reproduction ³. Androgens (the most important of which is testosterone) are

'masculinizing' hormones produced mainly in the testes but also in the ovaries and adrenal cortex. Androgens produce the physical changes males experience at puberty, cause pubic and underarm hair to develop in females and appear to influence sexual arousal in both sexes. Estrogens are feminizing hormones produced primarily in the ovaries but also in the testes and adrenal cortex. They produce the physical changes females experience at puberty and influence the course of the menstrual cycle ⁴.

Throughout childhood, both boys and girls produce about the same amount of male hormones (androgens) and female hormones (estrogens). Specifically speaking, the hypothalamus in the brain sends messages to the pituitary gland saying that 'childhood is over, we're moving on to adulthood'. The pituitary gland, in turn, stimulates increased hormone production in the adrenal and other endocrine glands and in the reproductive glands. During puberty, the sex organs mature and the individual becomes capable of reproduction. In girls, the onset of menstruation (called mearche) and the development of

2 – Feldman, R., *Development Across the Life Span* (Pearson Custom Publishing, 2006) p. 391

3 – Wade C., Tavis C., "Psychology", (Harper and Row, 1990) p. 502

breasts are major signs of sexual maturity. In boys, the major signs are the onset of nocturnal emissions and the growth of the testes and scrotum. Hormones are also responsible for the emergence of secondary sex characteristics, such as a deepened voice and facial and chest hair (in boys) and pubic hair (in both sexes). The dramatic physical changes of puberty are the last growth spurt on the child’s road to adulthood. For girls, the adolescent growth spurt begins, on the average, at 10, peaks at 12-13, and stops at about 16, by which time most girls are sexually mature. For boys, the average adolescent growth spurt starts at about age 12 and ends at about age 18. This difference in the rates of development is often a source of misery to adolescents, for most girls mature sooner than most boys. There is, however, enormous individual variation in the onset and length of puberty. Some girls menstruate as early as age 8 and others do not begin until age 15. One 15-year-old male may be as developed as an adult man and another will still be a boy. Different parts of the body mature at different rates, a phenomenon called asynchrony 5.

Psychological Development

The biological storms of puberty are reputed to carry over into psychological storms: insecurity about oneself in relation to friends, dislike of one’s newly mature body, a fierce and unhappy struggle for self-identity, and a distrust and dislike of parents. This view represents the turmoil theory of adolescent development. It argues that adolescent anguish and rebellion are necessary from their parents and form their own identities (Blos, 1962; G. Hall, 1904). Moreover, the changing rise and fall of hormones

may contribute to the rapid mood swings that some adolescents feel, to the depth of their passions and to their sensation of being out of control of their emotions. In one study teenagers described their thoughts and feelings at random intervals for a week, whatever they ‘beeped’ on a pager they carried with them. The most striking result was the frequency and extent of emotional changes, from highs to lows. Adolescents who had the greatest mood swings were just as happy and well adjusted, however, as their steadier peers (Csikszentmihalyi & Larson, 1984). Further, adolescence is a transition time, a farewell to childhood, in which adolescents are learning the rules of adult sexuality, morality, work and family (Kaplan, 1984). Teenagers are beginning to develop their own standards and values and often do so by testing their parents. They are growing more independent of their parents. They are questioning adult life even as they are rehearsing for it (Douvan, 1986; Douvan & Adelson, 1966). For some teenagers, these changes can feel overwhelming and lead to loneliness, depression and a sense of isolation. But such feelings do not give us the whole picture. In fact, studies of representative samples of normal teenagers find that extreme turmoil and unhappiness are the exception, not the rule. For instance, a massive study of more than 20,000 teenagers surveyed between 1962 and 1982 found that the vast majority reported feeling happy, strong and self-confident (Offer & Sabshin), 1984). Furthermore, research found that most adolescents travel one of three routes to adulthood, depending on their genetic endowment, childhood experiences, opportunities, coping skills and social life (Offer & Sabshin, 1984). Also, at this time, ‘Secondary Socialization occurs in later childhood and adolescence, when the child enters school and comes under the influence of adults and peers outside the

household and immediate family' 6. Socialization is the term sociologists use to describe the ways in which people learn to conform to their society's norms, values and roles. People develop their own unique personalities as a result of the learning they gain from parents, siblings, relatives, peers, teachers, mentors and all the other people who influence them throughout their lives (Elkin & Handel, 1989). Another consideration of interest is that adolescents of different races, cultures and social classes have different experiences as teenagers – they differ in average age at puberty, in sexual and social rules and in expectations about work. Black adolescents on the average, face greater economic problems (such as unemployment) and discrimination than whites; that alone makes a certain amount of struggle and stress more likely. Yet the black teenager's overall self-esteem is as high as that of white, and black adolescent girls have higher self-esteem on the average than white girls (Bush & Simmons, 1987). A model to consider in the stage of adolescent development would be Erickson's developmental model of 'Learning Identity Versus Identity Diffusion (Fidelity)', which states that the adolescent, now learns how to answer satisfactorily and happily the question of "Who am I?" But even the best adjusted of adolescents experiences some role identity diffusion: most boys and probably most girls experiment with minor delinquency; rebellion flourishes; self - doubts flood the youngster, and so on. Erikson believes that during successful early adolescence, mature time perspective is developed; the young person acquires self-certainty as opposed to self-consciousness and self-doubt. He comes to experiment with different – usually constructive - roles rather than adopting a "negative identity" (such as

delinquency). He actually anticipates achievement, and achieves, rather than being "paralyzed" by feelings of inferiority or by an inadequate time perspective. In later adolescence, clear sexual identity - manhood or womanhood - is established. Finally, the adolescent seeks leadership (someone to inspire him), and gradually develops a set of ideals (socially congruent and desirable, in the case of the successful adolescent).

Intellectual Development

According to Golden, 'the fifth stage of brain development occurs in adolescence, when the prefrontal (or tertiary frontal) areas develop. The prefrontal region continues to mature throughout adolescence and is not completely mature until the individual is approximately 24 years-old. This area regulates the planning & evaluation of behavior ⁷' Also, during one's adolescence, cognitive development reaches its adult level. The formal operations stage is the stage at which people develop the ability to think abstractly. Piaget suggested that people reach it at the start of adolescence, around 12 ⁸. Piaget does point out that some people may never reach this stage of cognitive development. The formal operational stage is characterized by the ability to formulate hypotheses and systematically test them to arrive at an answer to a problem. The individual in the formal stage is also able to think abstractly and to understand the form or structure of a mathematical problem. Another characteristic of the individual is their ability to reason contrary to fact. That is, if they are given a statement and asked to use it

7 – Meier, Minirth, Wichem, Ratliff, "Introduction to Psychology and Counseling" (Baker Books, 1991) pp. 49

8 – Feldman, R., *Development Across the Life Span* (Pearson Custom Publishing, 2006) p. 401

as the basis of an argument they are capable of accomplishing the task. For example, they can deal with the statement "what would happen if snow were black". Research, however, shows that not all adolescents develop the ability for formal operational thought or complex moral reasoning (Laboratory, 1984). Further, calm reflective children seem more likely than impulsive children to have patience for formal operation (Neimark, 1975). Cultures value different cognitive abilities and children develop the skills they need to get along in their communities (Laboratory, 1984).

Spiritual Development

According to research, 6-8 year old children have God concepts that are relatively uniform across denominations (Ratcliff 1985). By the adolescent years, God is understood to be the upholder of natural laws. He is thought to act out of concern for people rather than just judging them. The teenager realizes that God is beyond mere sensory experience...the individual's encounters with God are internal and mental rather than external. The adolescent characteristically feels unworthy before God and may realize that when God seems unfair it is because humans do not see the whole picture⁹. Furthermore, teenagers have a powerful need to strengthen their consciences and seek the meaning of life. They begin to integrate faith into their life systems, making a pact with God (Piaget).

⁹ – Meier, Minirth, Wichem, Ratliff, "Introduction to Psychology and Counseling" (Baker Books, 1991) pp. 250

Engel and Norton (1975, 45) describe eight stages of spiritual development prior to the new birth experience. First, the individual is aware of the existence of a Supreme Being but has no real knowledge of the gospel. With proclamation of the gospel, comes conviction and an embryonic awareness of the message of Christ. This initial awareness comes to include the fundamental of that message in the third stage. The implications of the gospel come to be understood (stage 4), followed by an increasingly positive attitude toward Christ and the gospel (stage 5). In stage 6 the person comes to recognize the presence of a problem – the lack of salvation, sometimes in connection with other personal problems. Stage 7 involves the decision to accept or reject the Gospel, while stage 8 involves repentance and faith in Christ.

Adolescence is a time of great temptation for the teen. With the development of puberty, the possibility of sexual exploration and experimentation begins. Unchecked and untaught, this could lead the teen down the destructive path of illicit sex and unhealthy social relationships, all with devastating consequences. The Christian parent can take solace in knowing that the scriptures provide hope, comfort and instruction. Proverbs is filled with warnings to the young man about improper relations with the ‘strange’ woman while Psalms, Proverbs and Ephesians gives hope with instruction... *‘Children, obey your parents in the Lord: for this is right. Honour thy father and mother; which is the first commandment with promise; That it may be well with thee, and thou mayest live long on the earth’ (Eph 6:1-3) and ‘For he established a testimony in Jacob, and appointed a law in Israel, which he commanded our fathers, that they should make them known to their children: That the generation to come might know*

them, even the children which should be born; who should arise and declare them to their children: That they might set their hope in God, and not forget the works of God, but keep his commandments' Psalms 78:5-7 and 'Train up a child in the way he should go: and when he is old, he will not depart from it' (Proverbs 22:6).

Conclusion

Adolescence is a period of stress and turmoil for many young people (Arnett, 1999). There is vast difference between the secular theory of adolescent growth and the Christian perspective. The secular theories are backed by copious evidence and research. The Christian perspective is also evidence based and research heavy. Nonetheless, the Christian perspective adds the component of scripture and scripture based principles that includes a Divine component of knowing what is truly God's will for the teen as we receive comfort and assurance from the Holy scriptures

BIBLIOGRAPHY

- Arnett, J., (199). *Adolescent Storm and Stress, Reconsidered*.
American Psychologist, 54, 317-326.
- Bush D. & Simmons, R. (1987). *Gender and Coping with entry Enter Early Adolescence*.
In R.C. Barnett, L. Biener, & G.K. Baruch (eds.), *Gender & Stress*. New York:
Free Press.
- Blos, P. (1962). *On Adolescence*. New York: Free Press
- Csikszentmihalyi, M. & Larson, R. (1984). *Being Adolescent: Conflict and Growth in the
Teenage Years*. New York: Basic Books.
- Douvan, E., (1986). *Adolescence*. In C. Travis (ed.), *Every Women's Emotional
Well-Being*. New York: Doubleday.
- Douvan, E. & Adelson, J. (1966). *The Adolescent Experience*. New York: Wiley.
- Elkin F., & Handle G., (1989). *The Child and Society: The Process of Socialization*. (5th
ed.). New York: Random House
- Engel, J., Norton, H., (1975). *What's Gone Wrong with the Harvest?*
Grand Rapids: Zondervan.
- Feldman, R., (2006). *Development Across the Life Span*
Upper Saddle River, New Jersey: Pearson Custom Publishing
- Golden, C., (1981). *Diagnosis and Rehabilitation in Clinical Neuropsychology*.
Springfield, Ill.: Thomas
- Kaplan, L., (1984). *Adolescence: The Farewell to Childhood*.
New York: Simon & Schuster.

Kornblum, W., (1997). *Sociology in a Changing World*. Fort Worth: Harcourt Brace.

Laboratory of Comparative Human Cognition (1984). *Culture and Cognitive Development*. In P. Mussen (ed.), *Handbook of Child Psychology* (4th ed.) Vol I, W. Kessen (ed.), *History, Theory and Methods*. New York: Wiley.

Meier, Minirth, Wichem, Ratliff (1982). *Introduction to Psychology and Counseling*
Grand Rapids, Michigan: Baker Books

Neidmark, E., (1975). *Intellectual Development During Adolescence*. In F.D. Horowitz (ed), *Review of Child Development Research*, Vol 4. Chicago: University of Chicago Press.

Offer, D. & Sabstin, M., (1984). *Adolescence: Empirical Perspectives*. In D. Offer & M. Sabshin (eds.), *Normality and the Life Cycle*. New York: Basic Books.

Offer, D. & Sabstin, M., (1984). *Patterns of Normal Development*. In D. Offer & M. Sabshin (eds.), *Normality and the Life Cycle*. New York: Basic Books.

Piaget, J. (1948). *The Moral Judgement of the Child*.
Glencoe, Ill.: Free

Ratcliff, D., (1985). *The Development of Children's Religious Concepts*.
Journal of the American Scientific Affiliation 34 (Sept.): 169-171.

Wade C., Tavis C., (1990). *Psychology*
New York, New York: Harper and Row

