



A Multidisciplinary Indexed International Research Journal

ISSN: 2320-3714

Volume I



## **A STUDY OF EDUCATIONAL PSYCHOLOGY: MEANING AND ITS IMPORTANCE VARIABLES IN HIGH SCHOOL STUDENTS**

**Mr. M V Lakshminaraswamy**  
Research Scholar, Bundelkhand University  
Guide Name- Dr. Prabhakar Mishra (Professor)

**Declaration of Author:** I hereby declare that the content of this research paper has been truly made by me including the title of the research paper/research article, and no serial sequence of any sentence has been copied through internet or any other source except references or some unavoidable essential or technical terms. In case of finding any patent or copy right content of any source or other author in my paper/article, I shall always be responsible for further clarification or any legal issues. For sole right content of different author or different source, which was unintentionally or intentionally used in this research paper shall immediately be removed from this journal and I shall be accountable for any further legal issues, and there will be no responsibility of Journal in any matter. If anyone has some issue related to the content of this research paper's copied or plagiarism content he/she may contact on my above mentioned e mail ID.

### **ABSTRACT:**

Many high school students are being left behind by an educational system that some people believe is in crisis. Improving educational outcomes will require efforts on many fronts, but a central premise of this monograph is that one part of a solution involves helping high school students to better regulate their learning through the use of effective learning techniques. Fortunately, cognitive and educational psychologists have been developing and evaluating easy-to-use learning techniques that could help high school students achieve their learning goals. The benefits of these techniques do generalize across some variables, yet despite their promise, they fell short of a high utility assessment because the evidence for their efficacy is limited. For instance, elaborative interrogation and self-explanation have not been adequately evaluated in educational contexts, and the benefits of interleaving have just begun to be systematically explored, so the ultimate effectiveness of these techniques is currently unknown. Nevertheless, the techniques that received moderate-utility ratings show enough promise for us to recommend their use in appropriate situations, which we describe in detail within the review of each technique.

**KEYWORDS:** Educational Psychology, Importance, Variables, High School Students, technique, effectiveness, improving.

### **INTRODUCTION:**

In this paper, we shall discuss the meaning of psychology, the home base of the study of Educational Psychology for high school

students. We shall also learn some branches of Psychology. Before we embark on Educational Psychology it is very important

to understand what it is Psychology. Probably you have heard about the term 'Psychology' on several occasions but you have not studied it scholarly. If you do not study Educational Psychology, you will lack something of value as a professional teacher. To students commencing the first year at the school, Psychology is a new subject as it is not studied at high school level. However, for you might have come across this subject when you were training to be a teacher some few years ago. On the other contrast, subjects such as Mathematics, Geography, History and Chemistry are quite familiar to every first Year high school students. Whatever it may appear to you, Psychology, in reality it is a subject which all of us are familiar with as we have lived with it from the time we were born, or even earlier, as life begins at conception. We live with Psychology every day and in every moment. Why? Simply because the main concern of psychology is you and me; it is about you as a person, you and your siblings, yours parents, your relatives and your neighbors. In what way is it about you and me? It focuses on our behavior or what we do and what we do not from moment to moment, and the reasons why we do what we do! Now what is the meaning of the term

'Psychology'? The term 'Psychology' comes from two Greek words 'Psyche' which means 'mind' or 'soul' and 'logic' which means the study of. Therefore in Greek the original meaning of psychology means "the study of mind or soul". Mind or souls are elements believed to differentiate innate objects and plants from animals and human beings. Psychology is presently defined as the scientific study of human behavior and mental processes. Issues regarding behavior and mental processes are inevitable issues of human beings as well as animals. Every day in our lives we portray behavior which means 'actions' or responses that come unconsciously or in a conscious way. As human beings, we also portray mental activities such as thinking, memorizing, understanding and perceiving. Based on scope of the field, you can agree that every moment we encounter psychology in our lives. Psychologists explore such concepts as perception, cognition, attention, emotion, phenomenology, motivation, brain functioning, personality, behavior, and interpersonal relationships. Psychologists also consider the unconscious mind. Psychologists employ empirical methods to infer causal and correlational relationships between psychosocial variables.

## **REVIEW OF LITERATURE:**

The importance of review of related literature or related studies cannot be denied in any research. Such literature provides the researcher with the footprints of earlier travelers gone ahead on the same route; they save her from the pitfalls and help her in removing the hindrances, which are likely to come in her way. Related literature works as a guide-post not only with regard to quantum of work done in the field, but also enables us to perceive the gap and lacuna in the concerned field of research.

**Zhang and Sternberg (2006)** grouped 13 thinking styles into 3 types; Type I styles are perceived more positive and adaptive and include legislative, judicial, hierarchical, global, and liberal styles whereas Type II styles are more negative and less adaptive and include executive, local, monarchic, and conservative styles. Finally, Type III styles are neither positive nor negative but adaptable due to the requirements of a situation and include anarchic, oligarchic, internal, and external.

**White-Clark (2008)** conducted a study on, "The Personality Composition of Teams and Creativity: The Moderating Role of Team Creative Confidence". They examined the possibility that teams composed primarily of individuals with personality characteristics

conducive to team creativity (e.g., high extraversion, high openness to experience, low conscientiousness, high neuroticism, low agreeableness) would show synergistic increases in creativity. The finding indicated that when team creative confidence at T1 was high, team creativity at T2 increased quadratically as the number of team members who scored high on extraversion, high on openness, or low on conscientiousness increased. However, the number of individuals composing a team who scored high on neuroticism or low on agreeableness had no relation to team creativity under conditions of high or low team creative confidence. Implications of these results for the design of creative teams are discussed.

**Gulati, S. (2008)** of Free Universal, Berlin studied creativity, efficacy and their organizational, cultural influences. The findings showed that there were 70 significant differences on cultural efficacy among Caucasian-Germans, Asian Germans, and Chinese studying abroad and domestic Chinese. However there were no cultural, bicultural and bilingual differences in general self-efficacy and creativity self-efficacy between German and Chinese participants. Again it demonstrated that there were significant teaching duration, age

differences and significant two way school teaching subject interaction in creative organizational climate and significant gender difference in general self-efficacy. Path analysis indicated that the significant path coefficients were from creativity organizational climate to cultural efficacy of own culture to creativity self-efficacy. There was only indirect pathway from creative organizational climate to creativity self-efficacy.

**Goodfellow (2009)** conducted A Snapshot of Creativity: Evaluating a Quick and Simple Method for Assessing Divergent Thinking. Creativity assessment commonly uses open-ended divergent thinking tasks. The typical methods for scoring these tasks (uniqueness scoring and subjective ratings) are time-intensive, however, so it is impractical for researchers to include divergent thinking as an ancillary construct. The present research evaluated snapshot scoring of divergent thinking tasks, in which the set of responses receives a single holistic rating. We compared snapshot scoring to top-two scoring, a time-intensive, detailed scoring method. A sample of college students ( $n = 226$ ) completed divergent thinking tasks and measures of personality and art expertise. Top-two scoring had larger effect sizes, but snapshot scoring

performed well overall. Snapshot scoring thus appears promising as a quick and simple approach to assessing creativity.

**Parrish, P., & Linder-VanBerschot, (2010)** conducted a study on, "Intelligence, General Knowledge and Personality as Predictors of Creativity." This study sought to examine the contribution of fluid intelligence, general knowledge and Big Five personality traits in predicting four indices of creativity: Divergent Thinking (DT) fluency, Rated DT, Creative Achievement and Self-Rated creativity and a combined Total Creativity variable. When creativity was assessed by DT test, the consistent predictor was fluid intelligence. When creativity was assessed in terms of achievement or self-rating, personality variables were consistently predictive.

**Liu, X., Liu, S., (2010)** conducted a study on, "Embedding 'Learning & Thinking Styles' Into Engineering Materials Courses." An area identified as useful for both staff and new students is 'Learning & thinking styles'. The majority of new students join the department being used to teaching styles that might be totally different to those they encounter in their first year at University. In addition if they are not aware of the different styles of teaching & learning they could

potentially find themselves overwhelmed by any apparent lack of ‘understanding’ or failing to make the ‘connection’ with a subject. The study results from the experience of running this scheme as part of an Introduction Week & Skills Week combination and discusses any possible benefits from embedding ‘Teaching and Learning’ as seen through personal feedback from students.

**Zhu, C. and Zhang, L. F. (2011)** conducted a study on, “Thinking Styles and Conceptions of Creativity among Students”. This research aimed to understand university students’ thinking styles and the relationship with their views of creativity. Significant relationships were identified between thinking styles and conceptions of creativity. This research contributed to the understanding about the relationship between conceptions of creativity and thinking styles, and brings insights for educators about educational innovations, as one of the key objectives of educational innovations is to develop creativity of the younger generation.

**Historical Background of Educational Psychology:** Educational Psychology did not start as an abstract field. It has history as well as pioneers. The field of educational

psychology was founded by several psychologists before the start of 20th Century. Some of the great educational psychology pioneers include the following:

**(i) William James (1842 – 1910):** He gave a series of studies to teachers in which he discussed the application of psychology in educating children. James argued that lessons should be given to children just beyond the child’s level of knowledge and understanding, in order to stretch the child’s mind.

**(ii) John Dewey (1859 – 1952):** A second major pioneer in shaping the field of educational psychology. He became the driving force in practical application of psychology to education. He established his first major educational psychology laboratory in the United States of America in 1894. He believed that children should not be narrowly educated in academic topics but should learn how to think and solve problems for themselves.

**(iii) E.L. Thorndike (1874 – 1949):** He initiated an emphasis on assessment and measurement and promoted the scientific underpinnings of learning. Thorndike argued that one of schooling’s most important tasks is to motivate children’s reasoning skills. Furthermore, he suggested the idea that

Educational Psychology must have a scientific base that it should focus strongly on measurement.

(iv) Jean Peaget (1896-1980): Best known for his research on children's cognitive development, Piaget studied the intellectual development of his own three children. Piaget's theory described stages that children pass through in the development of intelligence and formal thought processes. The theory describes four stages;

- (1) The sensorimotor stage,
- (2) The preoperational stage,
- (3) The concrete operational stage, and
- (4) The formal operation stage.

Jean Piaget provided support for the idea that children think differently than adults. His research identified several important milestones in the mental development of children. His work also generated interest in cognitive and developmental psychology. Piaget's theories are widely accepted and studied today by students of both psychology and education.

(v) B. F. Skinner (1904-1990): Was an American Psychologist born in Pennsylvania. In 1948, he joined the psychology department at Harvard

University where he remained for the rest of his life. He became one of the leaders of behaviorism and his work contributed immensely to experimental psychology. He also invented the 'Skinner box,' in which a rat learns to obtain food by pressing a lever.

**Growth and Development in Educational Psychology:** From the moment parents greet their newborn, they watch the baby's progress eagerly, anticipating every inch of growth and each new developmental milestone along the way. But how can they tell if their child is growing properly? Physical growth refers to the increases in height and weight and other body changes that occur as a child matures. Hair grows; teeth come in, come out, and come in again; and eventually puberty hits. It's all part of the growth process. Human development is a lifelong process of physical, behavioral, cognitive, and emotional growth and change. In the early stages of life—from babyhood to childhood, childhood to adolescence, and adolescence to adulthood enormous changes take place. Throughout the process, each person develops attitudes and values that guide choices, relationships, and understanding.

A child's growth and development can be divided into four periods:

- Infancy
- Preschool years
- Middle childhood years
- Adolescence

Immediately after birth, an infant normally loses about 5 - 10% of his or her birth weight. However, by about age 2 weeks, an infant should start to gain weight and grow quickly. By age 4 - 6 months, an infant's weight should be double the birth weight. During the second half of the first year of life, growth is not as rapid. Between ages 1 and 2, a toddler will gain only about 5 pounds. Weight gain will remain at about 5 pounds per year between ages 2 - 5. Between ages 2 - 10 years, a child will continue to grow at a steady pace. A final growth spurt begins at the start of puberty, sometime between ages 9 and 15. The child's nutrient needs correspond with these changes in growth rates. An infant needs more calories in relation to size than a preschooler or school-age child needs. Nutrient needs increase again as a child gets close to adolescence. Generally, a healthy child will follow an individual growth curve, even though the nutrient intake may be different for each child. Parents and caregivers should provide a diet that is

appropriate for their child's age. They should offer a wide variety of foods to ensure their child is getting enough nutrition.

### **Why Is Studying Children Development**

**Is Important?** Childhood has become a distinct phase of human life span that is hard to imagine that it was not always thought of it that way. Today we view children quite differently from the way there were viewed in the past. We conceive childhood as a highly eventful and unique time of the life that lays an important foundation for the adult years. We value childhood as special time for growth and change, and we should therefore invest more resources in caring for and educating children in this stage. In this case, education for children should be developmentally appropriate to cater for their needs. That is, teaching should take place at a level that is neither too difficult nor stressful, and not too easy and boring for the age of a child. This is the reason why we should study child development. The physical development which occurs during early childhood has a number of educational implications. First, as a result of engaging in a variety of physical activities, the child's motor skills are facilitated and consolidated. Second, nutrition contributes to physical development, and therefore it is vital that a pre-scholar receives adequate food if he is to

engage in vigorous activities. If the diet is deficient, the pupil is likely to show retardation in weight and height. Third, poor physical growth of a child may cause or may result to poor cognitive development as we shall discuss in the forthcoming study. All teachers (including you) are required to study child psychology, which includes child development. The reason for this is that we need to understand the ways in which children's attitudes and abilities develop so that we may have a better chance of understanding the children and how to teach them. By understanding child development, we are better able to teach and manage our students. There are many scenarios that will come up in the classroom where it will certainly be beneficial for a teacher to have a basic understanding of child development. Children are not "little adults." Their emotional, physical, mental, and intellectual foundations are still forming. Therefore, it is the role of parents, guardians and teachers to ensure that child growth and development are not impaired. This can be facilitated in collaboration with the teachers and parents.

**Periods of Development:** This part of the study will expose you in tracing different periods a child goes through. But before we discuss this part do the following activity.

For the purpose of organization and understanding we commonly describe development in terms of periods. In the most widely used system of classification, the developmental periods of a child can be classified as follow:

**(i) Infancy:** which extends from birth to eighteen to twenty-four months? It is a time of extreme dependence on adults in a number of ways. This is the beginning of many activities such as social learning, sensor motor coordination and language development.

**(ii) Early childhood:** extends from the end of infancy to about six years. During this period children become more self-dependence, develop school readiness skills such as learning to follow instructions and identify letters and also spend many hours with peers. During this time a child starts pre-school/kindergarten education commonly known as 'Chukchee' in Tanzania.

**(iii) Middle and late childhood:** this extends from six years to eleven. For the Tanzanian child or African child in general this is the age in which a child starts primary school. Under this category children master the fundamental skills of reading, writing and simple mathematics. At this age

children interact more socially beyond the family level.

**(iv) Adolescence:** involves the transition from childhood to adulthood. For African children it begins with the age of eleven and ends around eighteen to twenty. Adolescence starts with rapid physical changes, including gains in weight and height. Their thinking becomes more abstract, logical and idealistic. In early adolescence, the child will experience development in sexual functions.

#### **CONCLUSION:**

Undoubtedly, most educators would agree that neither learning theory is flawless in its perception of how students learn and how teachers should instruct. There are two significant differences between the theories in defining the role of the classroom teacher. In a teacher-centered classroom, the teacher assumes the responsibility for instruction. In a learner centered classroom, the learner accepts the responsibility for his/her learning. The traditional view of education is rooted in the research performed believed “high school students develop according to a maturational unfolding of their abilities. Therefore, the set of cognitive structures possessed at each stage of development defines what they (high school students) can

and cannot do”. On the other hand, suggested that constructivism views learning as an interpretive, recursive, and building process by which active learners interrelate with the physical and social world. Supported Fosnot’s views on constructivism, because he also indicated that this approach has shown to have a positive effect on students’ ability to increase their knowledge. Although theorists and educators will continue to debate the strengths and weaknesses of both theories, it is important to remember that there are ongoing shifts in the promotion of educational theories.

#### **REFERENCES:**

1. Sternberg, R. (2006) Applying psychological theories to educational practice. *American Education Research Journal*, 45(1), 150-166).
2. White-Clark, DiCarlo, M., & Gilchrist (2008). “Guide on the side”: An instructional approach to meet mathematics standards. *The High School Journal*, 91(4), 40-45.
3. Gulati, S. (2008). Compulsory participation in online discussions: Is this constructivism or normalization of learning? *Innovations in*

- Education and Teaching International, 45(2), 183-193. Retrieved May 20, 2008, from ProQuest database.
4. Goodfellow, R., & Lamy, M-N. (2009). Conclusions: New directions for research in online learning cultures. In R. Goodfellow & M-N. Lamy (Eds.), *Learning Cultures in Online Education* (pp. 170-183). Harrisburg, PA: Continuum Studies in Education.
  5. Parrish, P., & Linder-VanBerschoot, J. (2010). Cultural dimensions of learning: Addressing the challenges of multicultural instruction. *The International Review Of Research In Open And Distance Learning*, 11(2), 1-19. Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/809/1497>
  6. Liu, X., Liu, S., Lee, S.-h., & Magjuka, R. J. (2010). Cultural differences in online learning: International student perceptions. *Educational Technology & Society*, 13(3), 177-188.
  7. Reiser, R.A. (2012). What field did you say you were in?: Defining and naming our field. In R.A. Reiser & J.V. Dempsey (Eds.), *Trends and Issues in Instructional Design and Technology* (3rd ed.). Boston, MA: Pearson Education.
  8. Massy, J. (2005). The integration of learning technologies into Europe's education and training systems. In C. J. Bonk, & C. R. Graham (Eds.). *Handbook of blended learning: Global perspectives, local designs* (pp. 419-431). San Francisco, CA: Pfeiffer Publishing.
  9. Kinuthia, W. (2009) "Reflecting on embedding socio-cultural issues into instructional design", *Multicultural Education & Technology Journal*, Vol. 3 Iss: 4, pp.266 – 278