

Emotional Cognitive Process as a Predominant Factor an Academic Performance

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Abstract---*The existence of man is characterized by his unique behavior and own, from birth to death is expressed through dialogue, gestures, movements, songs, sounds, and emotions. The emotions are of psychosocial study that to achieve a clear understanding one must know which and how many emotions a person experiences, the use, and management that they must have for better development in all the daily areas of life as it is in the educational field. Knowing about the emotions in the most changing stage and in the development of the human being was necessary to understand many of the positive and negative events that are experienced in the adolescence stage, there has been a confusion relating them to undisciplined students but in reality, it is that Teenagers express their emotions in different ways than any other being of another chronological age. The objective of the research was the analysis of the functionality of emotions in adolescent students that is in a range of age between 14-18 years as a predominant factor in academic performance. In the investigation of this work, the inductive-deductive and experimental methods were used where the behavior of the emotions of the adolescents in front of the school performance is evidenced. A literature review was conducted to contextualize the research; In addition to qualitative and quantitative analysis to make an interpretation of the instrument applied. In this research, we will find the main information about emotions, their conceptualization and their functionality in adolescents about the application in the educational field and the relationship between the terms of this research. At the end of this investigation, the analysis of the results of the applied survey and the cited bibliography are exposed, this will serve as fundamental support in the realization of this research work.*

Keywords---*academic performance, adolescents, behavior, emotions, learning.*

I. INTRODUCTION

In recent years, it is hard to say “the youth of now is not like that of before”, referring to the phrase as a change in the process of personal development of children and adolescents in many cases in adults. There is a difference between past decades with those of the present. But this at the same time is related to the global globalization of a whole, which has to do with fashion, art, music, technology, politics, social conditions, economic, cultural levels, beliefs and even educational training of the human being This reality is altered by a set of behavioral and emotional norms governed by behaviors characteristic of each person according to age and their level of study (Sudipa *et al.*, 2019; Brandberg & Amzel, 2017).

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Changes and behavioral behaviors emphasize the study of the brain and its functionality of emotions; throughout the growth, these psychosocial changes of the human being flourish and the most notorious occurring in the adolescence stage. A characteristic of the human being is given by the rational use of his brain, which allows him to develop harmoniously with his environment, an attitude that he has acquired since childhood and that is demonstrated in his behavior and handling of emotions; the necessary factor for his personal and professional training, which is related to the lessons learned at different stages of his life(Niyomugabo *et al.*, 2018; Sudirtha *et al.*, 2019).

To talk about the brain and learning is to adhere to a wonderful world of science, discover how the brain is structured and how each of its parts acts in the process of constant learning (Salvatierra, Vallejo, & Moya, 2019).It is necessary to indicate that in the phase of the process from child to adolescent changes occur in the brain, in the emotions that are reflected in the success and in the failures obtained in your life, in the daily activities and this at the same time influence the academic performance in the learning process.

(Colom & Fernández, 2009; Suiroaka *et al.*, 2017; Suryasa *et al.*, 2019) state: Affective states, rather than being a hindrance to good judgment, reason or coexistence, as conceived throughout history, play an essential role in the development of relationship skills, intelligence as well as the ethical condition (p.238).Consequently, the results of the knowledge, which are acquired in a classroom are determined by the group of emotions, the management that the student gives, this at the same time expands the investigation to know the way in which the emotions influence the learning, if a student is sad, how does it assimilate new knowledge? to the contrary if the student is happy.

In this investigation, a study was carried out on the learning of adolescents and the influence that emotions have on their formation, at the same time they intervene in the life process in the way that affects their emotional states in the family environment, with friends, and at school.

II. MATERIALS AND METHODS

In the following investigation, an inductive-deductive and experimental method was used in addition to the literature review to contextualize the research. A qualitative and quantitative analysis was carried out where a survey of a sample of 53 students was applied, resulting from a population of 200 high school students of the Cascol Fiscal Educational Unit, of the Cascol Parish,Paján canton, province of Manabí Ecuador.The methodology applied by Larry and Murray 2005 for finite samples was used to select the sample.

III. COGNITIVE PROCESSES AND LEARNING IN ADOLESCENTS

1. Emotional intelligence and intellectual quotient

Emotions are related to happiness, sadness, fear, fear, anguish, etc. These are generated by external factors, which the human being perceives and at the same time help social relations and coexistence. Emotions are a set of changes suffered by the body and the brain as a result of a reaction to an emotional stimulus, which leads us to act.

The study of emotions is of great importance for the psychological and educational field since it is necessary to know how they influence the adolescent psychosocial development (Orbea, 2019; Asimi *et al.*, 2019;

Astuti & Darma, 2019). In the functionality of the brain, emotions are housed and this organ not only takes care of the learning that is acquired throughout the life process but also of the emotions generated from conception and its psychosocial management dependent on personal situations. (Goleman 1996), cited by (Román, 2012; Ruano *et al.*, 2019; Ruperti *et al.*, 2019) pose:

What matters is not just the intellectual quotient (CI); but emotional intelligence (IE), because the intellect cannot operate optimally without emotional intelligence in general, the complementarity of the limbic system and the neocortex, of the tonsil and prefrontal lobes, means that each of them is a full partner of mental life, when these partners act positively, emotional intelligence increases, as does intellectual capacity (p.15).

According to the authors of emotional intelligence depends on the acquired learning, such as a preschool child must know the management of emotions, which the teacher makes him experience using techniques, strategies, stimulating creativity based on meaningful learning which It will help them to be formed as safe people of their thoughts and emotions in the other stages of life.

2.Relationship between emotional cognition and learning in adolescents

In the cognitive process of man and lessons learned at any age, anywhere, whether reading, dancing, singing, painting, writing that knowledge is synthesized and interpreted accordingly With his intelligence and emotional state of mind, Aristotle defends that emotions are linked to certain beliefs and judgments, which in general is called the evaluative dimension of emotions(Pineda & Yáñez, 2018; Atechi, 2018; Brandberg & Amzel, 2017).

In addition, all learning needs motivation, an engine that realizes the impulse to achieve a proposed objective that is called emotion. Goleman (1998) cited by Páez & Castaño (2015) affirms: Emotional skills are more important for work success than intellect and technical knowledge since it allows establishing connections between reasoning, emotional skills and coping strategies (p.270).

At present the education system is an open field for teachers to direct their students towards the experimentation of their (CI) and (IE) these two terms should not be separated, a teenager with judicious criteria can control emotions and Make your learning meaningful.

On the other hand, Vygotsky considers that the key aspect to determining adolescent thinking is the ability to resemble the process of concept formation, which will allow the subject, of this age of development, to adapt and express their own ideas, taking a step towards exploration in the most desired, such as new interests, knowledge, forms of expression (verbal, corporal, visual, and emotional) and even a change of beliefs and religions (Cano, SF).

3.Adolescents and biological, physical, psychosocial and psycho-affective changes

Each generation of children is changing, evidenced in the genetic traits generated by the crossing of DNA (Deoxyribonucleic Acid) from parents with different origins, new beings are acquiring physiognomy and ideologies unlike since the mother's pregnancy, these changes are influential in the later stages of life throughout its existence.

The WHO (World Health Organization) affirms that “adolescence is a period of bio-psycho-social transition that occurs between childhood and adulthood in which body modifications and adaptation to new psychological and environmental structures occur that lead to adulthood, the average age of this process is between 10 to 20 years”(Ministry of Labor and Social Affairs, sf, p.11).

Biological, physical, and psychosocial changes in adolescents do not go unnoticed, their body transformation as an increase in height, weight, mammary glands in the case of women, in men the change of the voice due to the enlargement of the larynx due to the Testosterone hormone production occurred during puberty, development, and formation of reprocessing systems in both cases. These changes are only the most relevant at the same time they influence your personality, showing your identity, forming a dynamic, risky, impulsive, highly expressive beings giving notice of your emotions whatever it is without any fear(Iglesias, 2013; Nugraha, 2019; Pemaun *et al.*, 2019).

Also, the emotions flourish in this stage, denote their expressions and feelings like fear, anxiety, depression, shyness, their mood is unexpected and radical, it is changing denote lack of interest in activities especially if they are required, being defensive before situations that bothers them by altering their behavior towards the environment (Fernadéz, 2014; Vowel *et al.*, 2017; Widiani *et al.*, 2019).

In some cases adolescents are not able to control emotions, the same thing that makes them respond before oddities in strange ways as an example when they have to cry laughing and when they have to laugh they cry, the study of this life is very complex and necessary especially for professionals who work in their working lives with adolescents as in the case of doctors, teachers, psychologists.

4.Influence of the environment on the emotions of adolescents

a) Educational environment

Adolescents detach themselves from their teachers, they passed the initial stage in the first years of age in which the teacher was their priority in learning, that detachment is related to the satisfaction and enthusiasm to be able to carry out their activities without constant control of a guide while integrating with other classmates. In addition, the body appearance is relevant in the well-being of the person and even more so if it is a teenager, his body must be according to his perspective of his thoughts and emotions, acceptance towards himself will define in his life process perhaps in his future Professions(Gaete, 2015; Kurniawan, 2019; Niyomugabo *et al.*, 2018). On the other hand her clothes, her hairstyles are their own according to their personalities.

On the other hand, every adolescent due to their psychosocial and psycho-affective changes feels misunderstood at the same time as dissatisfied by the difficulty of forming groups of academic works, as a cause of school dropout (Colom & Fernández, 2009; Aini, 2017; Aryani *et al.*, 2017).

b) Social environment

During the adolescence process, transformations occur that lead to disorientation in students. They are usually verbally influenced as problems and conflicts. Previously, it was mentioned that adolescents form their own

concepts regarding everyday realities, and acquire new precepts of this environment, as it is necessary to emphasize that it begins to form commitments towards society, wanting to participate in events that involve them or be taken into account for any activity, they begin to form friendships, choose their sentimental partner and experience their first disappointments, but also consolidate their way of dressing, their mode of behavior(Fernadéz, 2014)

IV. POSITIVE AND NEGATIVE EMOTIONS IN ADOLESCENTS

Nowadays it is very common to find a group of adolescents elaborating their own rules, imposing their own fashion, inventing their own style of study; they are characteristic of their age. Adolescence is a stage of physical, emotional and social growth, where the individual acquires new roles and responsibilities that lead him to the adult world. This period starts from 11 to 12 years and can reach 19 to 20 years, it is at this time where the identity and personality of the adolescent are formed. One of the main objectives of the subject is to establish and consolidate social relationships with their peers, whoever is socially intelligent will find it easy to develop their social skills(Orbea, 2019; Kurniawan, 2019; Wijaya *et al.*, 2018).

Therefore, emotions are expressed according to the interpretation of the thoughts and feelings that a teenager is experiencing, the same that can be understood as stimuli of responses to what they have learned and the control that they have been doing since childhood; For example, if you are in a classroom and do not understand the class because you feel ashamed, you do not intervene to improve the uptake of educational content and that emotion is transformed into frustration that can be considered as a negative emotion that later affects your final grades.

The following figure (1) shows a possible classification of emotions according to information obtained in observation of adolescent students in their school activity.

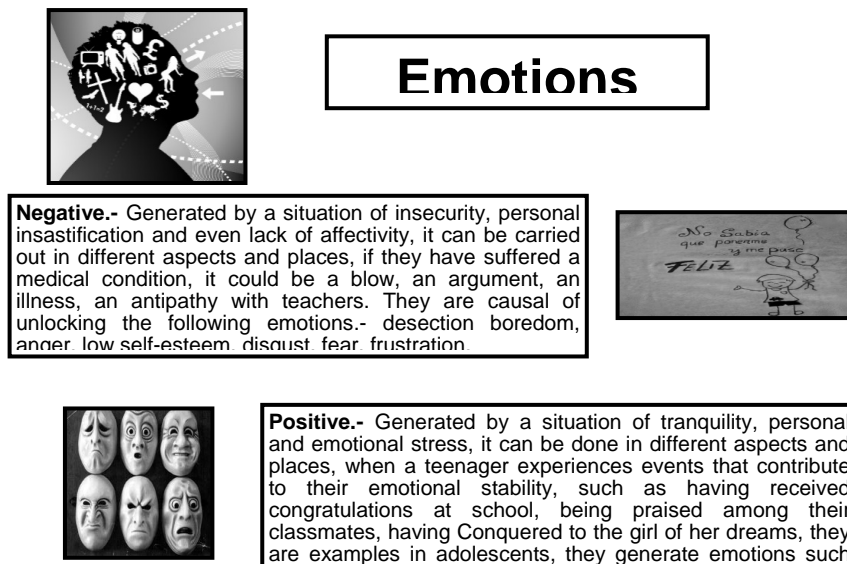


Figure1. Classification of emotions

V. EMOTIONS AND LEARNING ENVIRONMENTS

Emotions and the way to perceive, conceive and understand them in a meaningful way is necessary for the development in the educational environment (Polo, Zambrano, Muñoz, & Velilla, 2016). Brain dexterity and emotional intelligence allow understanding, interpreting and manifesting emotional language and intrapersonal and interpersonal relationships is an achievement that not all people possess. Goleman (2017) affirms that as it is defined that some students are good in mathematics, good students will also be found in emotional development not only based on the theoretical knowledge of emotions but also on the expression of each of them through of the years and at different stages of life in addition to the relationship with other people and their environment.

The set of emotions that a person acquires is understood to be according to their way of life, their environment, their parents, their teachers, their friends. The first guides in the emotional behavior of men are the parents or those who encounter a newborn being; The way to teach him to behave emotionally from birth to his own reasoning, this behavior is due to norms, rules, principles, and values added to this the teaching of emotions such as motivation, pride, enthusiasm that give the child security and harmony of its existence and that are mandatory for its formation that in the future will be involved with the other personal characteristics.

There is the contradictory part, the influence of the parents or other characters in the formation of the child can cause negative emotions that even become emotional limitations. An example of this, when there is a ban on the child, adolescent to express their emotions such as crying, laughing, screaming, the expression of feelings is limited, which underlie the formation of negative emotions such as hate, frustration, courage, anxiety, mockery, anger, that lack of compression on the part of the environment induce these changes directly which will be reflected in the future behavior thus causing people with problems of affectivity and little social dexterity, that is, it will hardly express their emotions.

Also, the psychopaths where brain alterations related to inappropriate behaviors towards a peaceful environment are revealed are impulsive behaviors; indices of; murderers, physical aggressors, rapists (López, 2013). The characteristics of psychopathy or dissociative disorder demonstrate different personalities to obtain an end to their own emotional well-being.

VI. ANALYSIS OF THE RESULTS OF THE APPLIED SURVEY

For the analysis of the interpretation of the results, the equation proposed by Larry and Murray showed in (1) was used. The population studied was 200 students, the sample that is 53 obtained by equation 1 is selected.

$$N = \frac{N * Z^2 * \alpha * p * q}{d^2 * (N-1) + Z^2 * \alpha * p * q} \quad (1)$$

Where:

N → Total population

Z → 1.96 squared (if the security is 95%)

p→expected proportion (in this case 5% = 0.05)

q→1- p (in this case 1-0.05 = 0.95)

d→accuracy (in your research use 5%)

n= 53

The sample resulting in this investigation that was considered of the population was 53 students from the evening section of the level Baccalaureate of the Fiscal Education Unit “Cascol” of the Cascol parish of the Paján canton, province of Manabí shown in Table 1.

Table 1.Details the population and sample obtained from the applied survey

Population	Sample
200 students	Fifty-three (53)

VII. PROCEDURES AND DATA COLLECTION TECHNIQUES DATA

The collection in this research was carried out through surveys, in which several questions were raised that formally allowed to obtain the information of those involved, the observation was also made, to analyze the behaviors of the emotions experienced in different events. In figure 2 survey of 6 interrogative items and 4 variables applied to 53 students on the knowledge and management of emotions in the Cascol fiscal educational unit.

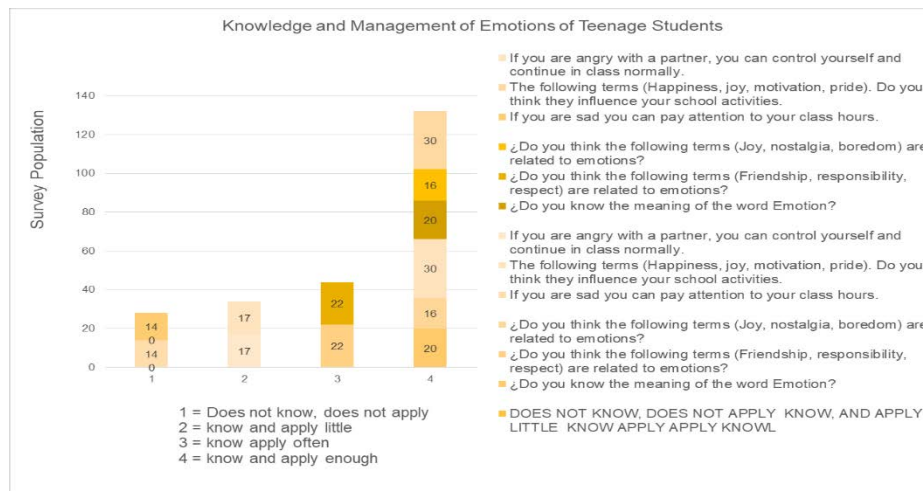


Figure 2.Results of the applied survey

The analysis of each of the questions applied in the survey is detailed, the variables with the highest score were taken into account.

1. Do you know the meaning of the word Emotion? The result showed that 20 students out of 53 know the terminology and apply it, but this was the value that shows a low level of knowledge for the sample applied according to the research. It was analyzed that the students confuse the terminology with the feelings.
2. Do you think the following terms (Friendship, responsibility, and respect) are related to emotions? 22 students out of 53 agreed that the terms mentioned above relate to emotions, which is consistent with the previous analysis as feelings are similarly experienced by adolescents.

3. Do you think the following terms (Joy, nostalgia and boredom) are related to emotions? 16 of 53 students know and apply what proves emotional instability in adolescent development, in which they are in a transition process and also demonstrates the low level of knowledge on the subject.
4. If you are sad you can pay attention to your class hours 14 of 53 students do not know it does not apply, it was considered a good result since adolescent students do not let their negative emotions influence academic performance, which was used to give this success investigation. And it also relates to the following question.
5. If he is angry with a classmate, he can control himself and continue in classes normally 17 of 53 he knows and applies little, it was proven that the least amount of students are affected.
6. The following terms (Happiness, joy, motivation, pride) do you think it influences your school activities? 30 of 53 knows and applies it is verified and ratified that there is a low number of adolescent students who failed to understand the questions about knowledge and emotion management

VIII. CONCLUSION

Adolescence is a transitional stage that is highly destined for the instability of emotions for this reason this research concludes that the environment must be adaptable and compressible according to their emotional states. It was concluded that the most representative emotions in this age are: in the case of negative emotions, shame, dislike, boredom, anger, and positive emotions joy, enthusiasm, optimism, pride. As final information, we provide positive emotions that influence the academic result being favorable their grades and negative emotions do not influence school performance in teenage students of the Cascol Fiscal Education Unit.

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