

Motivation and academic performance in adolescents

La motivación y el rendimiento académico en los adolescentes

CEPEDA-GONZALEZ, María Cristina †*, VILLARREAL-SOTO, Blanca, RAMOS JAUBERT, Roció Isabel and FLORES-OYERVIDES, Karen Fabiola

Universidad Autónoma de Coahuila, Facultad de Ciencia, Educación y Humanidades

ID 1st Author: *María Cristina, Cepeda-González* / ORC ID: 0000-0003-0676-2412, Researcher ID Thomson: T-1651-2018, CVU CONACYT ID: 567204

ID 1st Co-author: *Blanca Margarita, Villarreal-Soto* / ORC ID: 0000-0001-9314-8001, Researcher ID Thomson: X-2357-2018, CVU CONACYT ID: 947979

ID 2nd Co-author: *Rocio Isabel, Ramos-Jaubert* / ORC ID: 0000-0003-3289-5390, Researcher ID Thomson: T-1652-2018, CVU CONACYT ID: 201861

ID 3rd Coauthor: *Karen Fabiola, Flores-Oyervides*

DOI: 10.35429/JPDL.2022.21.7.9.12

Received March 20, 2022; Accepted June 30, 2022

Abstract

Adolescence is the period of growth between childhood and adulthood. This period of development, which goes from 13 to 18 years, is usually presented as critical, due to the profound modifications of physiological and psychological order in this research we worked with a sample of 60 students, from Secondary School No. 8, morning and evening shift. An instrument was made with 45 variables, 5 of them signalytic: age, gender, an average of the previous cycle, performing some extracurricular activity, and shift. The information was processed in the SPSS and STATISTIC programs. The conclusions showed that the student, by showing a need to learn, is able to develop different academic skills through different factors, such as motivation, thus improving their school performance. Thus proposes the development of an intervention model, for training teachers, on motivation methods in the classroom; As well as conferences on the importance of the topic of adolescent motivation and the factors involved in improving academic performance, teachers and parents will be taught and publicity will be developed on the importance of school motivation in adolescents and how it intervenes from home, at school and how this influences academic results.

Adolescence, Motivation, Academic performance, Learning, Family

Resumen

La adolescencia es el periodo de crecimiento entre la niñez y la edad adulta. Este periodo del desarrollo, que va de los 13 a los 18 años, se presenta habitualmente como crítico, debido a las profundas modificaciones de orden fisiológico y psicológico. En esta investigación se trabajó con una muestra de 60 alumnos, de la Escuela Secundaria No. 8, turno matutino y vespertino. Se realizó un instrumento con 45 variables, 5 de ellas signalíticas: edad, género, promedio del ciclo anterior, realizas alguna actividad extracurricular y turno. La información se procesó en los programas SPSS y STATISTIC. Las conclusiones arrojaron que el estudiante, al mostrar necesidad para aprender es capaz de lograr desarrolla diferentes habilidades académicas a través de diferentes factores, como lo es la motivación, mejorando así su desempeño escolar. Entre las propuestas se encuentra la elaboración de un modelo de intervención, en capacitación a los docentes, sobre los métodos de motivación en el aula; Así como conferencias sobre la importancia del tema de la motivación del adolescente y los factores que intervienen para mejorar en el rendimiento académico, se impartirá a los a docentes y padres de familia y elaborar publicidad sobre la importancia de la motivación escolar en los adolescentes y como interviene desde el hogar, en la escuela y como esto influye en los resultados académicos.

Adolescencia, Motivación, Rendimiento académico, Aprendizaje, Familia

Citation: CEPEDA-GONZALEZ, María Cristina, VILLARREAL-SOTO, Blanca, RAMOS JAUBERT, Roció Isabel and FLORES-OYERVIDES, Karen Fabiola. Motivation and academic performance in adolescents Journal of Philosophy and Daily Life. 2022. 7-21: 9-12

* Author Correspondence (e-mail: mnieves@uadec.edu.mx)

† Researcher contributing as first author.

Introduction

The present research will address the issue of how motivation and academic performance are related in adolescents in 3rd grade at Esc. Secundaria General No. 8 Adolfo López Mateos in the morning shift, in relation to the afternoon shift? 8 Adolfo López Mateos of the morning shift, in relation to the afternoon shift?

Adolescence is the period of growth between childhood and adulthood. This period of development, which ranges from 13 to 18 years of age, is often presented as critical, due to profound physiological and psychological changes. It is a developmental process that encourages young people to make their own decisions about how to think, feel and act. The most important and difficult decisions to make in their lives are, first of all, those related to family, followed by those related to their friends, studies and feelings (Gambara and Gonzalez, 2005).

Motivation is a fundamental aspect of life, including education and work, as it orients actions and thus becomes a central element that drives what the person does and towards what goals he or she is aiming for. According to (Santrock, 2002). In other words, motivation is a fundamental factor in everyday life; it is of great importance as it is the impulse that drives and helps every human being to achieve clear goals. Motivation causes learners to act or behave in certain ways (Leggett, 1988). To motivate the learner is to guide him/her in a direction and to ensure that the necessary steps are taken to achieve the goal(s).

Now, academic performance is an important factor as it helps to measure the development of learning in the student, as well as allowing the evaluation of the different variables that comprise it. Academic performance according to (Erazo, 2012) is the system that measures the achievements, as well as the knowledge constructions in students through qualitative and quantitative methods in a subject.

In this research we observe the understanding of the phenomenon and the behaviours of the environment where the adolescent develops, such as the school and how these factors influence the performance of school learning.

Theoretical framework

Throughout the ages it has been visualised how the human being is a complex being, and this requires certain needs to be met, in order to develop in an integral way; a factor that is the means for this process to be achieved effectively is motivation.

Motivation is a fundamental aspect in life, including education and work, as it orients actions and thus becomes a central element that drives what the person does and towards what goals he or she is aiming for. According to (Santrock, 2002). In other words, motivation is a fundamental factor in everyday life; it is of great importance as it is the impulse that drives and helps every human being to achieve clear goals. Etymologically, the term motivation comes from the Latin *motus*, which is related to that which mobilises a person to carry out an activity. Thus, motivation is the process by which the subject sets an objective, uses the appropriate resources and maintains a certain behaviour, with the purpose of achieving a goal (Naranjo Pereira, 2009). According to the author, motivation is that factor that is in constant movement, it does not allow to be in a static state, the one who has a correct motive, will achieve action.

Thus, motivation is that which will drive us to achieve a goal, whether in the short, medium or long term; it is the action or incentive that will produce mobility in life. Such motivation requires sufficient activation and energy, as well as the ability and willingness to maintain it. According to (Maslow, 1943) and Maslow's Pyramid theory, he states that within every human being there is a hierarchy of the following five needs to be fulfilled. These include: physiological: including hunger, thirst, shelter, sex and other bodily needs, security: including safety and protection from physical and emotional harm, social (affiliation): including affection, a sense of belonging, acceptance and friendship.

Recognition: includes internal factors of esteem, such as self-respect, autonomy and achievement; and external factors such as status and attention, (here is motivation) and finally self-actualisation: the drive to be what one is capable of being; it includes growth, reaching one's potential and self-satisfaction.

The sources of Motivation refer to the origin of the stimuli that cause an individual to become active. Motivation is also an internal state or condition that activates, directs and maintains behaviour. Motivation causes learners to act or behave in certain ways (Leggett, 1988). To motivate the learner is to point him/her in a direction and to ensure that the necessary steps are taken to achieve the goal(s). Motivation has arguably been a central issue in the field of psychology, given that it lies at the heart of biological, cognitive, and social regulation. Perhaps even more importantly, in the real world, motivation is highly valued because of its consequences: motivation produces (Ryan R. M., 2000). Motivation is necessary for any goal to be achieved.

School motivation is a relevant factor that leads to success in any area, "motivation (Tapia, 1991) who states that: wanting to learn and knowing are the basic personal conditions that allow the acquisition of new knowledge and the application of what has been learned effectively when needed. According to Tapia, the willingness and interest of the student is necessary to obtain learning, without neglecting the role of the teacher through stimulation of the actions achieved by the student, so that later the interest is sown in the student and the motivation of the teacher is effective in the student.

Motivation is the lever that moves all behaviour, which allows us to bring about changes both at school and in life in general. Motivation in the learning process helps to increase classroom performance.

On the other hand, academic performance is an important factor as it helps to measure the development of learning in the student, as well as to evaluate the different variables that comprise it. Academic performance according to (Erazo, 2012) is the system that measures the achievements, as well as the knowledge constructions in students through qualitative and quantitative methods in a subject.

The purpose of school or academic performance is to achieve an educational goal, learning (Lamas, 2015). Performance varies according to the circumstances, conditions and environments that determine aptitudes and experiences.

In other words, the entire context surrounding the student is part of the positive or negative results that he or she will obtain. In other words, according to the author, it involves the achievement of an educational purpose and this will be achieved through adequate motivation.

It can be mentioned that when the standard of academic performance is not met, academic underachievement arises and in adolescents it represents a reason for consultation in family therapy, as it is a source of concern for parents since it affects the development of the adolescent. School failure is a serious human, moral and social problem, according to (Delors, 1996), which often generates exclusions that will mark young people for the rest of their lives. People who doubt their abilities may believe that things are more difficult than they really are, a belief that generates tension, depression and a narrow view of problem solving (Schunk P. *et al.*, 2001).

Learners with a learning orientation have a greater desire to improve their competence and increase their knowledge through continuous learning effort and greater perseverance in study. In this sense, in the school context, teachers value effort more than ability. In other words, while a student expects to be recognised for his or her ability (which is important for his or her esteem), in the classroom his or her effort is recognised.

The issue of grades is not something new, since a measure is generally assigned to the work that has been done, but according to the author, I agree that having a high school grade does not mean that the teaching and learning received were of quality; that is why teachers need to take care of the importance of the teaching-learning process, to be meaningful and not just assign a number to each student for covering the guidelines that are requested.

According to Díaz (2010), he mentions that the measurement of school performance has been the focus of constant criticism, questioning whether the grade obtained in an assessment shows the true measure of the learning obtained by students. Other factors (family, society, teacher's teaching-learning activity) are of greater relevance in the optimal educational development of students.

One of the variables considered to influence academic performance is self-esteem, which according to (Vázquez, 1995) self-esteem is responsible for many academic successes and failures. Therefore, it is important to know the level of self-esteem in the study population and its relationship with academic performance in order to implement solutions to improve students' self-esteem, if necessary.

Thus, motivation and academic performance are factors of great importance that can be measured in the adolescent period in order to achieve significant changes in the lives of adolescents and find strategies for the benefit of these and society in general. These directly and indirectly affect the teaching-learning process. In order to better understand the axes of motivation and academic performance, it will be observed how these factors have an impact during the adolescent stage. Adolescence is the period of growth between childhood and adulthood.

This period of development, from 13 to 18 years of age, is usually presented as critical, due to profound physiological and psychological changes. It is a developmental process that drives young people to make their own decisions about how to think, feel and act. According to Gambara González, the most important and difficult decisions to make in their lives are firstly those related to family issues, followed by those related to their friendships, studies and feelings (González, 2005).

The present research was based on adolescents between 14 and 15 years of age, who are in the basic education sector, which is secondary school. Secondary education is the third level of basic education. It takes three years and aims to provide adolescents with the tools for lifelong learning through the development of competencies related to affective, social, natural and democratic life. The following variables were derived: Significant variables: age, gender, average of the previous cycle, extracurricular activity and shift. Motivational variables: behaviour, objective, will, interest, goals, satisfaction, need, direction, rewards, punishment, perseverance, expectation, results, achievement, power, self-sufficiency, affection, economic stability, coexistence, school rejection and family problems.

And academic performance variables: knowledge, student, teacher, content, organisation, didactic resources, evaluation, infrastructure, measurement, learning, skills, grades, capacities, teaching, repeating a course, responsibility, family, school, accrediting subjects, study strategies, missing classes and grades.

Results

Frequencies and percentages

The table above shows that 49% are represented by women, while 52% represent men. It can be inferred that the majority of the population are men, the most characterised in the study phenomenon.

The table above shows that 69% of the population is represented by 14 year olds, 30% by 15 year olds and 2% by 16 year olds. It can be inferred that 14 year olds are the largest population group from which the information can be extrapolated.

Correlation

With respect to the variable Objective it is observed that Satisfaction ($r=0.39$) in the student, as well as having Economic Stability ($r=0.31$), helps the acquisition of new Learning ($r=0.45$) and the development of Skills ($r=0.31$). It can be inferred that setting goals in life helps personal, financial and professional well-being.

With respect to the variable Will, it is observed that there is a sample of Interest ($r=0.46$) in the student to learn on their own, in addition to setting Goals ($r=0.34$) having Expectations ($r=0.34$) and thus achieving positive Results ($r=0.50$). It is inferred that the student who has a high desire of Will to carry out certain actions, will set goals and will be able to achieve effective purposes both at school and at work in the future.

Comparison

Comparison behaviour of the variable Goals. In the comparison reading, one of the dependent variables that represents a significant difference in the means is the variable Goals between the two populations, morning and afternoon shifts at Adolfo López Mateos Secondary School.

In the table of the T student Test for Independent Samples we read that the variable Goals presents a difference of means with respect to the other 40 variables (Morning= 8.10) (Afternoon= 6.93). It can be inferred that the morning shift shows a greater tendency to plan goals in order to achieve school purposes, as opposed to the afternoon shift. This will be reflected in academic performance.

Comparison behaviour of the dependent variable Power. In the comparison reading, one of the dependent variables that represents a significant difference in the means is the Power variable between the two populations, morning and afternoon shifts at Adolfo López Mateos Secondary School. In the table of the Student's T-test for Independent Samples we read that the variable Power presents a difference of means with respect to the other 40 variables (Morning shift $x = 6.14$) (Afternoon shift $x = 4.40$).

It is inferred that the students of the morning shift show greater security and are the ones who have greater authority inside the classroom in contrast to the afternoon shift.

Integrational

Factor 1 school skills is related to the following variables: objective= 0.60, goals= 0.28, satisfaction=0.42, rewards=0.29, perseverance= 0.35, knowledge= 0.32, teacher= 0.67, contents=0.69, organisation=0.85, didactics=0.71, evaluation=0.48, infrastructure=0.37, stress= -0.38, learning=0.40, family= 0-31 and school= 0.41; it is observed that the factor school skills shows a factorial load of 4.390103.

It is read that the student who sets clear objectives is the one who obtained the greatest amount of prior knowledge in the teaching process, through an organised manner with the help of the necessary didactic resources. It is inferred that the most effective teaching process is carried out through the use of concrete information and this has to be in a systematic way and with the use of the necessary tools within the classroom the student's learning will be enhanced.

Factor 2 Purposes is related to the following variables: will= 0.29 interest=0.27, perseverance= 0.29, expectations=0.28, results= 0.31, achievement=0.37, power= 0.75, self-sufficiency= 0.84= coexistence= -0.38, rejection= 0.29, rejection= 0.29, content= 0.27, stress= 0.27 and study strategies= 0.62 with a factor loading of 3.195477. It is read that the student who has willingness to learn and shows interest in class with constancy and having high expectations. It is inferred that the student who shows greater security in the classroom is the one who will have a better school performance, which will be reflected in his or her grades.

Conclusions

It is concluded that the majority of the population is male, the most characterised in the study phenomenon.

It is concluded that adolescents of 14 years old are the largest population group where the information can be extrapolated.

It is concluded that setting goals in life helps personal, financial and professional well-being.

It is concluded that students who have a high desire to perform certain actions, will set goals and achieve effective school and work purposes in the future.

It is concluded that the morning shift shows a greater tendency to plan objectives in order to achieve school goals than the afternoon shift. This will be reflected in academic performance.

It is concluded that students in the morning shift show greater confidence and have greater authority in the classroom than those in the afternoon shift.

It is concluded that the most effective teaching process is carried out through the use of concrete information and this has to be in a systematic way and with the use of the necessary tools within the classroom the student's learning will be enhanced.

It is concluded that the student who shows more confidence in the classroom is the one who will have a better school performance and therefore it will be reflected in their grades.

Proposals

Generate an intervention model for training teachers on methods of motivation in the classroom.

Lectures on the importance of adolescent motivation and the factors involved in improving academic performance. To be given to teachers and parents.

Publicity on the importance of school motivation in adolescents, how it intervenes at home and at school and how it influences academic results.

References

Benitez. (2000). www.uclm.es.

Brophy. (1988). Emotional Intelligence: Why it can matter more than IQ.

FABRA, E., HERNÁNDEZ, M, MARTINIC, S., MURILLO, F, PARDO, M., BARRERA, S. *et al.* (2003). La investigación sobre eficacia escolar en Iberoamérica: Revisión Internacional del Estado del Arte. Bogotá: Convenio Andrés Bello, Centro de investigación y Documentación Educativa

González, G. (2005). www.uclm.es. Obtenido de http://www.uclm.es/ab/educacion/ensayos/pdf/revista23/23_20.pdf

Guiselle, M. G. (2007). Revista de educación. Obtenido de <https://www.redalyc.org/pdf/440/44031103.pdf>

Hernández Sampieri Roberto 2001 metodología de la investigación.

Leggett, D. (1988). Obtenido de <https://www.redalyc.org/html/145/14502904/>

Maslow. (1943). Obtenido de <https://psicologiaymente.com/psicologia/piramide-de-maslow>

Naranjo Pereira, M. L. (2009). Revista Educación. Redalyc.

Ryan, R. M. (2000). Obtenido de https://selfdeterminationtheory.org/SDT/documents/2000_RyanDeci_SpanishAmPsych.pdf

Sánchez, L. A. (2007). Instituto Politecnico Nacional, http://www.revistaelectronica-ipn.org/Contenido/16/HUMANIDADES_16_000382.pdf.

Vázquez, M. y. (1995). Propósitos y Representaciones. Obtenido de <file:///E:/Mis%20Archivos/Dialnet-AutoestimaHabitosDeEstudioYRendimientoAcademicoEnE-5904759.pdf>

Programa STATISTICA

Programa SPSS