

Analysis of the trend of emotional disorders in new university students

Análisis de la tendencia de los trastornos emocionales en los universitarios de nuevo ingreso

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DOI: 10.35429/JHS.2023.17.7.1.16

Received January 10, 2023; Accepted June 30, 2023

Abstract

In the search to support the students who enter the university, from the psycho-pedagogical point, this article highlights and analyses the results obtained from the institutional tool for consulting and collecting information on the admission profile (SCOPI) of the Universidad Veracruzana, which allows making appropriate decisions for personalized academic support programs (tutorials) at the beginning of the student's academic life. The research focuses on analysing two variables: Stress-Anxiety and Depression. A quantitative and descriptive methodology allows for examining the behaviour trend of these two variables covering a period of 8 years (2015 to 2022). As a result, an increase in the affirmation by young people of admission to presenting these disorders is obtained, seeing themselves aggrieved during the sanitary quarantine of COVID-19. In addition, the data express that the students of the economic-administrative area are the ones whom most claim to have these psychopathies.

Resumen

En la búsqueda para apoyar a los alumnos que ingresan a la universidad, desde el punto psicopedagógico; el presente artículo resalta y analiza los resultados arrojados de la herramienta institucional de consulta y recopilación de información del perfil de ingreso (SCOPI) de la Universidad Veracruzana, la cual permite tomar decisiones apropiadas para los programas de acompañamiento personalizado académico (tutorías) en el inicio de la vida académica del estudiante. La investigación se enfoca en analizar dos variables: Estrés-Ansiedad y Depresión. Mediante una metodología cuantitativa y descriptiva que permita examinar la tendencia del comportamiento de estas dos variables abarcando un periodo de 8 años (2015 al 2022). Se obtiene como resultado un alza en la afirmación por parte de los jóvenes de ingreso en presentar estos trastornos, viéndose agraviado durante la cuarentena sanitaria del COVID-19, además los datos expresan que los alumnos del área económico administrativas, son los que más aseveran poseer estas psicopatías

Emotional disorders, University students, Information tools, COVID-19

Trastornos Emocionales, Universitarios, Herramientas de información, COVID-19

Citation: GRAJEDA-ROSADO, Ruth María, DIAZ-VEGA, María Eugenia, COUTIÑO-CLEMENTE, Asunción and HUERTA-ARIZMENDI, Guadalupe. Analysis of the trend of emotional disorders in new university students. Journal High School. 2023. 7-17:1-16.

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Introduction

The human body is a perfect work of engineering, a machine calibrated to maintain balance in its internal functions through the joint and interrelated work of some systems, such as the nervous system, whose task is to send signals to other systems of the organism for its functioning, the circulatory who is in charge of transporting blood with oxygen and nutrients to all the cells of the organism and conducting cellular waste to the lungs and the endocrine system that produces hormones or secretions supplied in the blood to manage bodily functions within the metabolism, sexual organs and tissues (UJAEN, 2022) other equally relevant systems are the digestive and immune systems. This set of systems works as an organized whole in a dependent and interdependent way to achieve its vital purpose, health. Within each system, multiple biological, psychological, and neurological processes are developed that make it possible for everyone to adapt to their social environment and develop intellectually and psychologically (Ramayo & General, 2017). A characteristic aspect of the human body is the synchronization of the production and functioning of each of the processes that occur within each system and organ and thus contribute to maintaining vital homeostasis.

The individual from birth is immersed in a social context where he learns to communicate and establish relationships with his environment. It does this through complex cognitive processes, which allow anticipation, development of attention, impulse control, self-regulation, mental flexibility, use of feedback, planning, organization, discrimination of strategies to solve problems, and monitoring (Anderson, 2008; Bausela-Herreras, 2014). The complexity of these mental abilities highlights their vital importance in regulating the individual's behaviour in different life scenarios.

Cognitive processes are classified into essential and superior. The basic ones are sensation, perception, attention, and memory; these are essential for the development of the superior ones; such as thought, attention, language, and intelligence; relevant in the teaching-learning process within the development of skills and competence necessary to achieve good academic performance.

School performance "*is the result of the complex world that surrounds the student: individual qualities (aptitudes, abilities, personality...), their social and family environment, their school reality (type of educational center, relationships with teachers and peers, teaching methods...)*" Op. cit (Morales et al., 1999 p.58). Another successful axiom is that of Montero, Villalobos, and Valverde (2007), where performance covers aspects such as teacher-student interaction, institutional, pedagogical, social, psychological, demographic, and not, limiting as an analytical product of an aptitude. Meanwhile, Isaza and Henao (2011) define it as a cause-effect training process in the participation of an educational situation versus the abilities of the educated. Becoming an indicator proportional to the level of learning and achievement of established objectives (Basto-Ramayo, 2017; Coello & Cachón, 2017).

Implication of emotional disorders in academic performance

The university student, as a biopsychosocial being and during his school career, can be altered in some or all dimensions, the emotional part being the most vulnerable and rarely identified, having physical, psychological, and behavioural manifestations (de León & Flores, 2018).

The disorders mentioned above that impact academic performance usually present with physical symptoms (fatigue), psychological (indecision, lack of concentration, distraction), and behaviourally (isolation, apathy, absenteeism, and increased drug interference (Suárez-Montes & Díaz-Subieta, 2015).

The most frequent disorders during this university stage are stress, anxiety, and depression, which are generally not taken seriously and are confused with a stage of adolescent development, significantly altering their academic performance.

Stress

Due to its importance in the 21st century, stress is classified by the World Health Organization (WHO) as suffering from the "*set of physiological reactions that prepares the body for action*" Op. cit (Torrades, S., 2007, p. 105), The Royal Academy Española adds that it is caused by overwhelming situations that cause 2natural reactions in the human body, psychosomatic. For 50 years (Epstein, 1972), the definition of a state of physiological imbalance in the organism with unpleasant emotional and cognitive components was coined. Nowadays, it is studied for the effects it produces in the different psychological and social aspects and the behavior of the human being. His statistics indicate that in society, around 25% of the world's population suffers from it, which is considered a psychological health problem (Farkas, 2002; Valadez, 1997).

Pillou (2017) explains that it consists of a set of reactions that the organism undergoes when it undergoes radical changes. Our body reacts to what it identifies as aggression or pressure, so each person defends himself differently, and according to the traumatizing experience they have experienced. In general, stress is a consequence of the tension caused by unresolved personal conflicts.

The types of stress can be divided into positive (eustress) and negative (distress); the first is the natural process of adaptation that consists of acute activation of the senses and reflexes for a short period to deal with a situation—exceptional threat or other types that requires more effort. Positive stress causes a satisfactory sensation after having performed a complicated task for the individual; the second exceeds the homeostasis potential and causes fatigue, irritability, anxiety, or anger (Barrio, García, Ruiz, & Arce, 2006).

According to its duration, stress is divided into three; a) acute, typical human response to the demands and pressures of the recent past with the near future; b) episodic acute, which occurs when acute stress is frequent, generally caused by a large number of responsibilities, resulting in a reaction uncontrolled, emotional and irritable (Avila, 2014) and; c) chronic, constant state of alarm, where the individual does not envision the appropriate solution to a situation, coming from long or endless periods of demands and pressure, where in some cases it is camouflaged with previous traumatic experiences (Orlandini, 2012).

School or academic stress

They are the psycho-pedagogical disorders that students suffer due to pressure from physical, emotional, interrelational, or environmental factors, which cause poor school performance, low competitiveness, and poor metacognitive ability to relate what they have learned with their reality, affecting their relationships, with peers and academics (Martínez-Díaz & Díaz-Gómez, 2009).

This type of stress is classified as systematic with an adaptive character because the student is subordinated to constant demands that, in his assessment, are considered stressful (input); When these inputs create an imbalance, generating symptoms, the person affected to restore the balance reacts by creating coping actions, outputs (Barraza, 2006). According to several authors Castillo, Walker, & Castillo, 2015; Pulido, et al. 2011), the student environment is one of the most studied and prone to present situations of this type because they affect performance in an obvious way, the student population is a vulnerable group prone to particularly stressful periods since as the student progresses in their studies, stress increases and reaches the highest levels when they are in the upper level.

Some events that trigger stress in students are the transition from secondary to university level, competitiveness, academic demands, and study habits acquired in the previous stages of the educational system, which are not always conducive to a good adaptation of the student to the new training facility (Herrera, Rodríguez, & Valverde, 2010).

It has been found that the most stressful moments in academic life are the entry into the first course of the degree and the time immediately before the exams (Léon-Rubio, 1992; Chacón, Rodríguez, & Tamayo, 2017). According to several authors (Bittar, 2008; Chacón-Centeno, Rodríguez-Feliciano, & Tamayo-Jimenes, 2018), the ability to manage stressors depends on the individual's personality, in other words, on how he perceives and interprets the events that cause stress; said conclusion derives from the very opposite responses among people, while some feel exhausted, overwhelmed and consumed, others feel stimulated, animated and excited.

Anxiety

The Diagnostic and Statistical Manual of Mental Disorders (APA, 2014) defines it as a disorder characterized by excessive concern about a series of events or activities. Specific criteria must be determined to consider that a pattern of behaviors should be framed as a Disorder of Mental Disorders—generalized anxiety. Anxiety is a disorder when it affects the patient's daily life because it creates a systematic structure of negative thoughts, excessive worries about the future, feelings of vulnerability, tension, apprehension, nervousness, and even manifestations of intense physical discomfort. These fears of failure, punishment, ridicule, or phobias have a subjective approach, identified as a "something," both tangible and social. This something is defined as an anxiety situation, and the intensity depends on the individual and the faithful quality of their perception of reality (Peralta & Cuesta, Trastorno depresivo y depresión en los trastornos del espectro esquizofrénico: ¿son lo mismo?, 2002; Ries, Castañeda Vázquez, Campos Mesa, & Del Castillo, 2012).

According to Peralta & Cuesta (2002), the terms anxiety and depression are terms usually confused because their limits are diffuse; sometimes, they are used as synonyms for anguish or fear (Sierra, Ortega, & Zubeidat, 2003; Martínez-Otero Pérez, 2014; Del Rio Olvera, Cabello Santamaría, Cabello García, & Aragón Vela, 2018).

Both are referred to as an immediate emotional state, symptom, syndrome, disease, or adaptation reaction to an adverse circumstance modifiable over time, where they were submitted to psychological studies; however, current medicine relates them to bodily expressions and causes of anemic symptoms. , where the mental reality of the person has lost contact with their body (Lowen, 2010). It is important to note that anxiety and somatic stress processes are the preludes to depression.

Anxiety can generate severe behavioural and personality problems; however, the important objective of this research is to understand the states of anxiety that individual experiences when facing a specific event or situation relevant to their life, such as education students. Media entering the superior, in which a mismatch is created, raised by the novelty, the constant doubt, and specific cases of anxiety, which cause this sensation of latent alert (Luengo, 2004).

The student associates anxiety with the imposed demands (other people's or their own) concerning their ability to understand and self-control. When academic situations overload him, he performs a self-evaluation of demands; if they overwhelm him, he ends up concluding that he cannot meet them; therefore, he feels that he is facing a situation of humiliation, even danger, justifying his rejection of school (Jadue, 2001).

Anxiety can be considered as a student's normal adaptive response to a threat. At acceptable levels, it can improve performance, even though it should not be the appropriate response, because it exceeds personal coping resources (Vitasari, Abdul Wahab, Othman, Herawan, & Kumar Sinnadurai, 2010; Castillo Pimienta, Chacón de la Cruz, & Díaz-Véliz, 2016). Affronting situations must adopt conscious strategies by the individual that measure their resources (Gantiva Díaz, Luna Viveros, Dávila, & Salgado, 2010). Affronting has two functions, a) regulating stressful emotions and modifying the person's problematic relationship with the anxiety-producing situation (Cabello Fernández et al., 2014).

Research indicates that groups with low socioeconomic levels have the highest anxiety rate, and the highest incidences are in adolescence and youth than in adulthood (Ortiz, 1997; Miguel-Tobal, Cano-Vindel, Casado-Morales, & Rodríguez-López, 1996). Reyes-Camona, et al. (2017) report that 13 to 15% of the population during their lives suffer from an anxiety disorder that is not diagnosed; This condition can be transitory or become a personality trait prompted by internal or external agents, stimulating physiological or behavioral reactions.

University students may suffer from anxiety to the multifaceted response of the threat of failure in learning assessments, resolution of activities, and problems, and due to the demands of a social and academic nature and their constant stressful environment (Cooper, Downing, & Brownell, 2018). According to Vitasari et al. (id. *ibid*) student anxiety is exhibited when they show a passive attitude, lack interest in learning, poor performance in assessments, and poor performance in their activities or tasks. The answers reduce efficiency, concentration, attention, and knowledge retention; in students inclined to suffer from it, the lack of assertive execution, lack of organization, insufficient adaptation to learning, and inability to follow instructions are included.

The work of Brown et. al. (2001) offers help to know the alternatives to these symptoms, with the study of the effectiveness of a test that evaluates disorders of this type with the Hamilton test, through 14 items, which describe the symptoms that the anxious patient presents, focusing on the recognition of physical symptoms such as muscle tension, insomnia, respiratory symptoms, among others. The test has 5 Likert values, ranging from the absence (1) to (5), defined as the maximum intensity of the symptom; if the result of the average score is greater than 30, the teste will be considered with anxiety problems. González and Hernández (2017, p. 1), investigated anxiety and performance; for data collection, they used the self-assessment anxiety scale and the personal, socioeconomic, and academic data of the students; In conclusion, they report that the total number of respondents, 15% have severe anxiety and 1% have a maximum degree.

Bertoglia (2005) reaches two conclusions regarding the relationship between anxiety and learning: a) the effect that anxiety has on learning depends on the type of task to be learned if the activity is of intellectual elaboration so that its learning requires understanding and creativity, anxiety plays a lesser role, explaining why some Educational Experiences can be more stressful than others, according to their skills and, b) the effect of interference in the conclusion a), is more intense in students who have a school competitiveness median. Interestingly, the student with average intelligence suffers more than the one with superior intellect because the first ones has greater emotional assertiveness to control anxiety. The average perceives the possibility of failure closer, requiring more positive reinforcement in classroom.

Depression

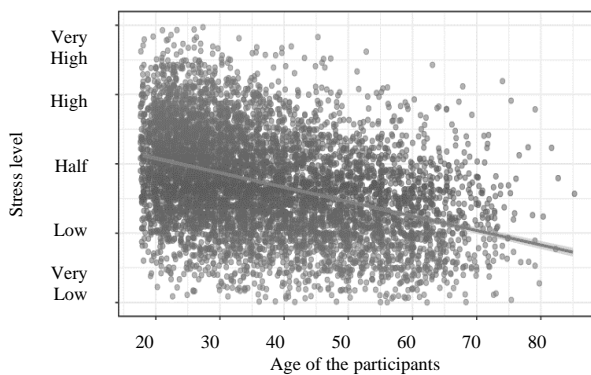
Depression is a condition accompanied by worry, decay, insecurity, sadness, and negative thoughts towards oneself (APA, 2014), accompanied by insomnia, lack of appetite, weight loss in extended periods, isolation, consumption of drugs, and markedly low self-esteem. Serrano et al. (2013) psychologically explain that when depression is present in the process of the mental stages that allow the individual to become aware of himself and the environment, they generate a distorted result caused by the existence of cognitive errors that lead the individual to perceive reality negatively. These errors are the selection, magnification, and generalization of negative information, such as errors and personal failures, leaving aside and minimizing the successes. Stress is considered the prelude to the anxious response, the fear of a state of tension due to a specific threatening event; however, anxiety leaves the exterior aside and settles as an essentially personal problema (Barquín, García, & Ruggero, 2013).

The World Health Organization reports that suicide is the fourth leading cause of death globally between the ages of 15 and 29 (OMS, 2021). In Mexico, almost six million adolescents between 12 and 22 face this symptomatology (DGDG, 2019), with possible suicidal solutions

COVID-19 and emotional disorders

Considering all these factors, the information received in student admission surveys must be analysed in detail due to the impact of the COVID-19 pandemic during the lockdown period that began at the end of 2019, causing risk situations in the population, such as the mandatory quarantine of approximately two years, fear, frustration, and perception of economic, health, and social threat (Bao, Sun, Meng, & Lu, 2020; Garfin, Silver, & Holman, 2020).

According to the International COVIDiSTRESS project, where a digital survey distributed in 50 countries was applied (with a total of 158,771 respondents and of these 6,427, corresponding to Mexico), it was reported that stress has higher levels among young people aged 20 to 30 years, being inversely proportional to age (Pérez-Gay Juárez et al., 2020 p. 2) (Graphic 1).



Graphic 1 Level of stress about the age of the respondent's

Source: (Pérez-Gay Juárez et al., 2020 p. 5)

The UNESCO International Institute for Higher Education in Latin America and the Caribbean (Alvarez, 2020, p. 16) reported that 75% of surveyed university students participating in levelling and support programs are the most vulnerable to experiencing anxiety and depression. In another investigation carried out in China, with a total of 89,588 university students, 41% presented anxiety symptoms, including second, third, and last-year students, poor economic situation, and low social support (Fu et al., 2020, p.16); ensuring that capacity in psychological skills must be strengthened to mitigate the problems caused by COVID-19.

Other studies focused on the impact of the pandemic show that after the crisis, the consequences in higher education will be reflected in academic performance and in the development of trajectories linked to university actions, according to the results of the survey applied to 297 students from the University of Social Sciences in Bogotá, Colombia (Navas, Chiriví, & Camargo, 2023). Even within a survey applied to nursing workers (60 people), the results show that 76.67% of those surveyed affirm an emotional impact on anxiety, fear, stress, anger, and depression (Cervantes Lupaca, 2021).

Methodology

Diagnostic-type tools for incoming students

Widespread use of these surveys in Mexican universities to find out information about their applicants for admission and to make decisions according to the profiles of the different students, both in the social, economic, and psychological strata.

The surveys can be conducted on various topics; for example, the Autonomous University of Chihuahua detected that the success of the students is a function of their positive self-perception (Ornelas, Blanco, Gastélum, & Chávez, 2012); in this study, the self-efficacy factors were resolved with questions about their communication, care, and excellence.

Another case is applied to new students from the Azcapotzalco and Cuajimalpa units of the Autonomous University of Mexico, where several characteristics require analysis, such as commuting, school history, academic practices in high school, cultural consumption, use of the internet, cultural resources, and materials available to them for their university studies. Among the interesting points of cultural consumption are attendance at sporting events, concerts of different musical genres, provision of books, and attendance at conferences, museums, art exhibitions, dance, opera, theatre, cinema, or festivals in towns or neighbourhoods.

From the use of the Internet, they generate questions about the use of email, chatting, searching for information, downloading music, buying online, receiving information, downloading software, watching videos, finding a partner, looking for a job, playing games, pornographic pages, watching movies or programs, listening to music, reading books, magazines or newspapers, discussion forums, file sharing, phone calls, social networks or blogging (De Garay, Miller, & Montoya, 2016).

The research offers an example of the importance of knowing these data by Prado et al. (2019) that relates the personality factor to learning styles, concluding that the predominant learning style is auditory in the administrative area for first grades and that these students are discreet, with a temperamental inclination, cautious in their emotional expressions, uncompromising and critical in their appearance.

In this exact order, Becerra and Plata (2021) present other characteristics that are considered to be evaluated in students prior to entering the university: the physical state through medical review, observation, and registration, student interests, motivation with which account at the entrance of the university, aptitudes to know their aspirations, the academic history and study habits. Within the Tutorial Action Plan, the Autonomous University of the State of Morelos (Plan de Acción Tutorial. (18-20), 2018) , the points considered for selecting its future students include their demographic, academic, socioeconomic profile, and vocational orientation.

The Student Income Profile Consultation System at the University of Guanajuato (SCOPI UGTO); allows obtaining information in a systematic and timely manner on young people who applied for admission through the registration of ID cards as well as on admitted students, based on the design of strategies to prevent falling behind and dropping out of school, as well as making decisions that facilitate a successful transition during their student career (UDG, 2022).

Internationally, the Institutional Repository of the Technological University of Panama is another institution that has a source of free access to data to know the profiles of applicants (UTP-Ridda2, 2022).

Information tool of the Universidad Veracruzana

The first descriptive and exploratory survey implemented by the Income Profile Consultation System (SCOPI) by the Universidad Veracruzana (UV) to applicants for upper secondary education who wish to enter their academic ranks, was in the year 1997, collecting information for 25 years to provide it to the General Directorate of School Administration. SCOPI had undergone modifications in its configuration since 2014, when it was put into practice. Currently, it is applied in the four regions, reporting aptitudes, personal characteristics, school of origin, minimum and maximum scores, and presentation of graphs of the information collected (UV-DGCU, 2022; UV-DGAE, 2022).

Furthermore, said mechanism is also available to area directors, faculties, and their academic secretaries, thus knowing the resources of the students for their studies, abilities, knowledge, expectations, and high school graduation profile. As in most of these types of surveys, the Likert style is used to evaluate the qualitative opinion; said survey is divided into four categories: personal, academic, background, and graduation profile (Figure 1).

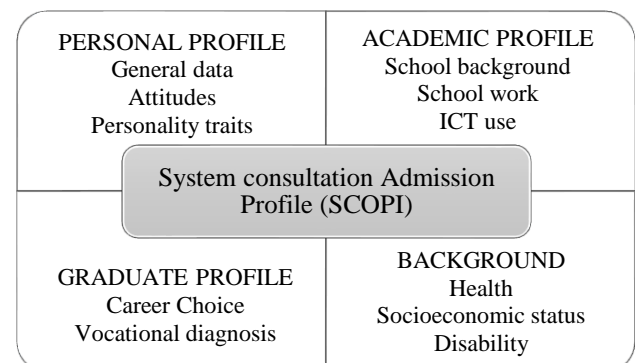


Figure 1 Integrating diagram of the profiles in SCOPI of the Universidad Veracruzana.

Source: Own elaboration

The Personal Profile, provides knowledge about a) communication skills and attitudes, b) attitudes, c) life project and approach to goals to be achieved, d) personality traits covering characteristic aspects of a biological, psychological, and philosophical nature that define an individual, e) health that integrates features of the different dimensions that make up the individual in an integral way (biological, neurological, physical, psychological, mental, among others), f) socioeconomic conditions, which allow satisfying fundamental needs for the sustenance of human life and g) self-management to know the capacity that the student must have to attend and follow up on their own, to their school affairs. In this category, the academic profile aims to understand the choice of career and obtain a vocational diagnosis.

School work or graduation profile allows one to know a student's study habits, which can set the tone to develop a successful school trajectory. The compliance and participation variable are integrated because the student's school irregularity may result from practicing a habit or pattern of indiscipline. If so, corrective measures can be applied from the tutorial. The recommended characteristic aspects are punctual attendance, paying attention, participating in class, carrying out class activities on time, following instructions in carrying out exercises in the classroom, planning school tasks, and organizing study time, and punctual delivery of tasks.

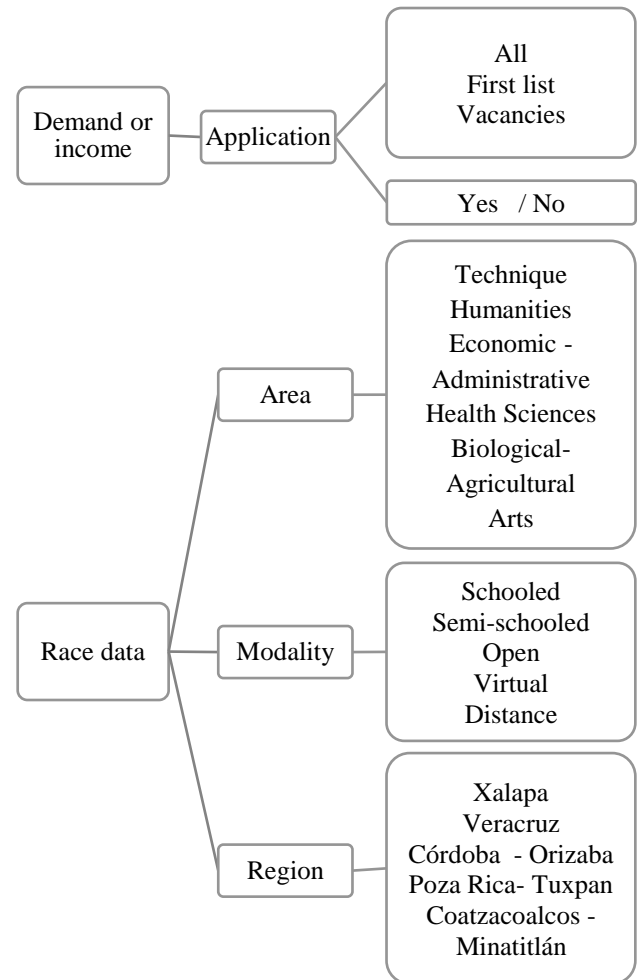


Figure 2 Independent variables correlated according to the dependent variables: Anxiety - Stress and Depression
Source: Own elaboration

The part of the history allows us to know aspects related to health; in them are the variables of Stress - Anxiety (StAn) and Depression. The SCOPI information system allows for collecting information from 2015 to date, with which the trend of these two variables of future university students was analyzed.

The information can be classified and subdivided among total applications, final registration, selection of the region of affiliation, area of knowledge, and course modality (Figure 2).

Results

The UV has received, since 2015, from 40,000 to 45,000 applications for admission from the state of Veracruz, Mexico, having the capacity to accommodate from 33 to 42%, that is, from 14,000 to 17,000 students, depending on its educational offer.

Table 1, contains the data of the affirmative answers to the variables StAn (Stress and Anxiety) and Depression, considering both the applicants and those finally enrolled. Both variables show an increasing trend; if the years 2015 and 2022 are compared, we observe that the variable StAn with a value of 647% in applicants and 591% enrolled, and Depression of 360% in applicants and 342% enrolled.

Year	Applicants (Students)	Inscribed (Students)	Applicants (%)	Inscribed (%)
Variable Stress-Anxiety (StAn)				
2015	1,585	627	3.8	4.2
2016	3,349	1,324	8.0	8.5
2017	3,279	1,289	7.6	8.3
2018	4,874	1,807	11.0	11.2
2019	5,599	2,136	12.7	13.5
2020	6,782	2,947	17.0	18.1
2021	9,319	3,519	20.7	21.0
2022	10,757	4,115	24.8	25.0
Variable Depression				
2016	949	386	2.1	2.2
2017	904	379	2.3	2.5
2018	1,296	532	2.1	2.4
2019	1,624	653	2.9	3.3
2020	2,121	958	3.7	4.1
2021	2,681	1,050	5.3	5.9
2022	3,209	1,254	6.0	6.3

Table 1. Values of the affirmative answers to StAn and Depression of the applicants to enter the UV.

Source: Own elaboration with data from SCOPI, Universidad Veracruzana

The most significant turning point was in 2020 (70% increase), concerning 2019, when the confinement due to the COVID-19 health pandemic began, without showing a decrease to date.

Area of Knowledge in the variables StAn and Depression

Graphic 2a is expressed the number of enrolled students who answered positively to the StAn variable, and Graphic 2b reports the results of the Depression variable. In both Graphics (2a and 2b), the proportionality is added based on the total of each subgroup (Eq. 1)

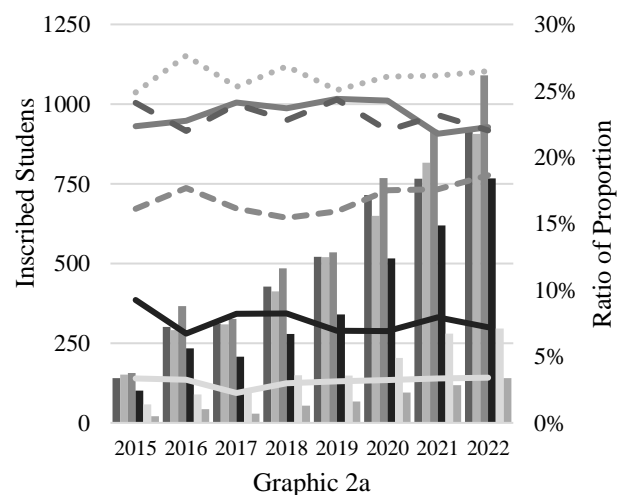
$$\text{Ratio (\%)} = \frac{\text{Students with a positive response}}{\text{Total students in each subgroup}} \quad (1)$$

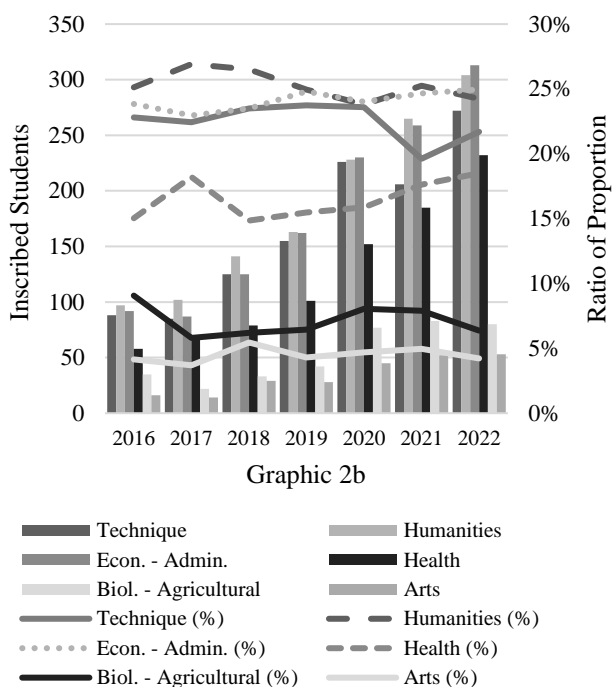
Similarly, Graphics 3 and 4 use the same graphic methodology to understand the results and draw conclusions, counting only the students finally enrolled.

This methodology offers recommendations that can be implemented in the process of academic accompaniment carried out by the university tutorial coordination.

Each graphic offers a different subdivision per inscribed student, being Graphic 2 corresponds to the division of knowledge area (Technical Area, Humanities, Economic - Administrative, Health Sciences, Biological - Agricultural and Arts), Graphic 3 by the modality of studies; the subdivisions: Schooled, Semi-schooled, Open, Virtual and Distance; and finally, Graphic 4 by region to which they decided to join, with subdivisions: Xalapa, Veracruz, Córdoba - Orizaba, Poza Rica - Tuxpan and Coatzacoalcos - Minatitlán.

According to Graphics 2a and 2b, it is the students enrolled in the Economic-Administrative area who report a significant increase in StAn and Depression symptoms, followed by Technical, at the midpoint this Health Sciences and below Arts although the appreciation of young people gives us as a result that the Depression is 50% less than StAn.





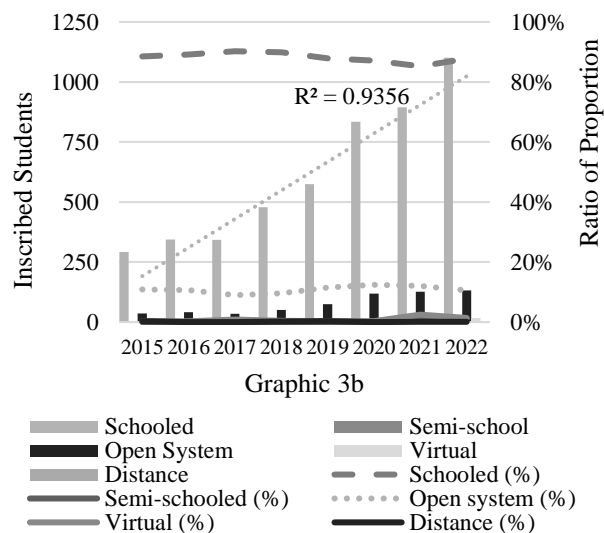
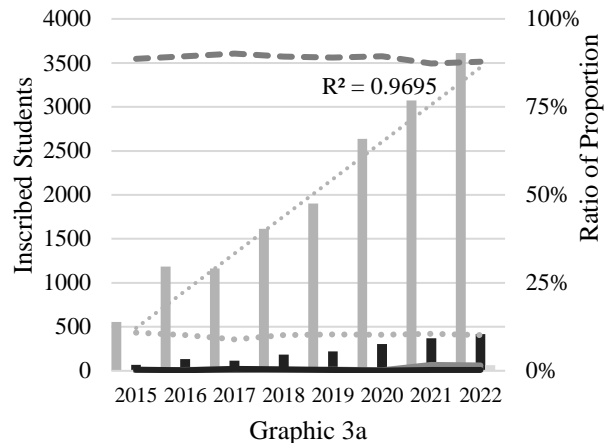
Graphic 2 a) Total values of students inscribed with StAn "Yes" and their Proportional Relationship and, b) Total values of students inscribed with Depression "Yes" and their Proportional Relationship, both depending on the Area of Knowledge
Source: Own elaboration

Regarding the proportion, it is observed that almost 25% of the inscribed students in Economic-Admin., Technical and Humanities suffer from StAn and Depression, followed by 17% in Health Sciences, Biological - Agricultural with 8% and finally, Arts with 3%.

Study modality in the StAn and Depression variables

In all cases, the school system presents the highest StAn and Depression, with Depression being almost 75% less than StAn; however, the trend is high in both cases because StAn presents an $R^2=0.9695$ and Depression an $R^2=0.9356$.

In both cases, the Open system corresponds to 10%, and the other cases (semi-school, virtual, and distance) have less than 2%. Although there are few values for the Semi-schooled category (2021 and 2022), since it was implemented with limited enrollment capacity and in response to COVID-19, it is interesting that it has a stable trend ($R^2=0.528$), even under the open system.



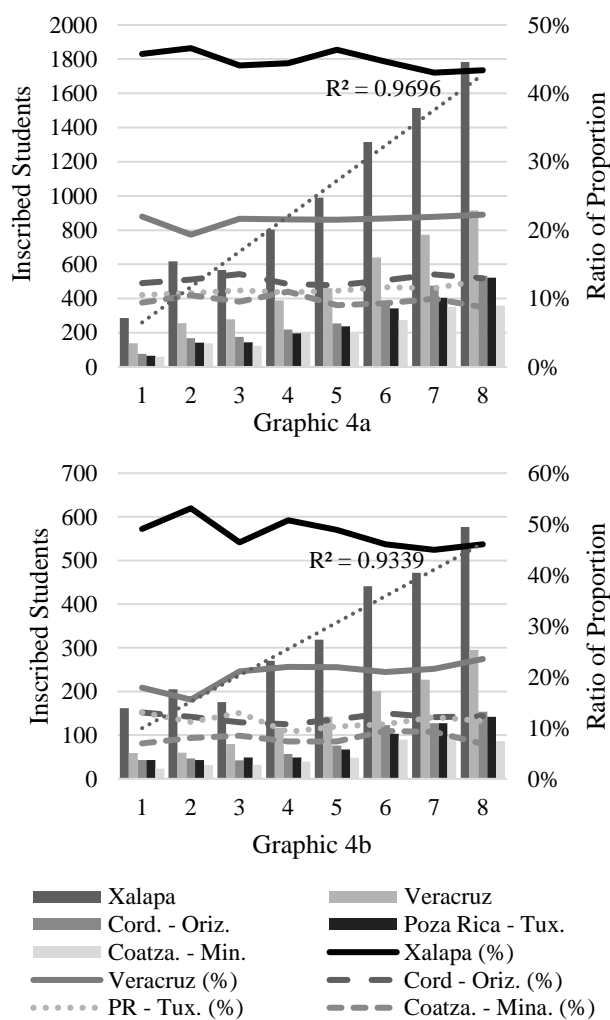
Graphic 3 a) Total values of students inscribed with StAn "Yes" and their proportional relationship, nb) Total values of students inscribed with Depression "Yes" and Proportional relationship, both depending on the Study Modality
Source: Own elaboration

Region of Ascription in the StAn and Depression variables

Of all the regions of affiliation, Xalapa, the capital of the State of Veracruz, is the one with the most significant educational capacity, both in terms of infrastructure and because it is where the rectory of the Universidad Veracruzana is located. In this region, the students refer to greater StAn and Depression.

In Graphic 4a, StAn has an $R^2=0.9696$; depression has a strong impulse from 2019 to 2020. In proportion, almost 50% of the students refer to StAn and Depression, followed by Veracruz with 20% of its enrolled enrollment, Córdoba -Orizaba and Poza Rica-Tuxpan from 11 to 13%, and Coatzacoalcos-Minatitlán with 1%.

It is necessary to recognize how the enrollment of foreign students (vulnerable group) influences the exposed values, where Xalapa contains a more significant number of students in this condition, where young people must solve their basic needs for housing, food, mobility, and services, as well as managing your financial and time resources.



Graphic 4. a) Total values of students enrolled with StAn "Yes" and their proportional relationship, b) Total values of students inscribed with Depression "Yes" and the proportional relationship, both depending on the Affiliation Region.

Source: Own elaboration

Acknowledgments

To the General Directorate of University Communication, the Institutional Tutoring System, and the Vice-Rector's Office of the Veracruz Region, instances corresponding to the Universidad Veracruzana, México

Funding

This work has been financed by CONACYT with the scholarship number 802541

Conclusions

The results show that the trends of these pathologies are on the rise; accordingly, the students are not in adequate conditions for the teaching-learning process, resulting in poor school performance, and dropping out of university studies as well as an anemic emotional state.

The literature indicates some physiological, emotional, and behavioral symptoms to observe in students, which allow us to detect, as in the case of depression, suicidal solutions. Therefore, the accompaniments or first tutoring contacts become the appropriate institutional resource to put this situation on alert and redirect it to specialists.

Of the Tutorial Action Plans, the Autonomous University of the State of Morelos (Plan de Acción Tutorial (18-24), 2021), applies a series of aspects that were already valued when the students had been staying at the university for a while; however, those that are mentioned can be rescued for diagnose prior to the stay: integration with colleagues, the definition of personal goals, construction of a life project, recognition of strengths and weaknesses as a student, assuming responsibilities towards academic commitments, independent and well-founded decision-making, straightforward communication of ideas and feelings and constructive, development of ethical attitude for professional training, time management, planning of school and extracurricular activities, acquisition of study habits, acquisition of skills for self-learning, independent work, and teamwork, development of skills to improve the performance and knowledge of different data sources and search for information.

Each category provides information necessary for decision-making prior to the development of the student's academic life.

Based on what was discussed in previous paragraphs and due to some very similar symptoms, there is a fragile line that "divides" the different emotional disorders such as stress, anxiety, or depression, which puts performance or academic performance at risk, also your health. Comprehensive, highlighting the need for timely detection of these conditions to take timely measures.

It is interesting to note that the student with average intelligence suffers more than the one with superior intellect because the latter have greater emotional assertiveness to control anxiety, and the average perceives the possibility of failure closer, therefore requiring more positive reinforcement in the classroom; therefore the need to pay attention to the two risk groups identified, foreigners and average to lower academic performance, as well as students from Administrative areas who report higher levels of stress, are highlighted.

A proposed solution is support groups generated within the safe spaces of the universities, which create an emotional support network to share similar experiences, generating the first contact opportunity to detect problems that can be treated psychologically (UV, 2023). The moderator of the support groups must have the relevant training to detect cases, and in this investigation, it is remembered that the treatments can be both psychotherapeutic and pharmacological.

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