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Artículos científicos

Percepciones estudiantiles sobre el regreso a clases bajo la modalidad presencial en una Universidad Pública

*Student perceptions about the return to classes under the face-to-face
modality in a Public University*

*Percepções dos alunos sobre o retorno às aulas na modalidade presencial
em uma Universidade Pública*

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Resumen

A raíz de la pandemia causada por el COVID-19, la modalidad educativa virtual fue una salida para continuar con las clases en un contexto de emergencia sanitaria. Sin embargo, esto trajo como consecuencia un cambio significativo en los procesos de enseñanza-aprendizaje, para los cuales ni los académicos ni los estudiantes estaban preparados. Además, se planeó un regreso a la modalidad presencial, lo que implicó una serie de cambios en la percepción de los estudiantes de nivel superior en cuanto a la incertidumbre de un posible regreso. Esto se debe a la falta de certeza en los protocolos sanitarios y al surgimiento de nuevas cepas del SARS-CoV-2. Con el fin de profundizar en este contexto, se realiza la presente investigación de tipo descriptiva, exploratoria y mixta, con un enfoque cuantitativo. El objetivo es analizar las percepciones de los alumnos teniendo en cuenta la adaptación a la modalidad virtual, identificando los factores de inquietud y aceptación ante el retorno a las aulas de la Facultad de Ciencias Administrativas y Sociales de la Universidad Veracruzana. Los resultados muestran que, a pesar de la incertidumbre, los estudiantes consideran propicio el regreso a clases presenciales, concluyendo que la relación entre las percepciones y vivencias de los estudiantes influye directamente en el interés de regresar a clases presenciales. Finalmente, la prueba de hipótesis estadística determina que más del 70% está de acuerdo con el regreso en modalidad presencial.



Palabras clave: Autoaprendizaje, aprendizaje social y emocional, aprendizaje en línea, formación profesional, métodos de enseñanza.

Abstract

As a result of the pandemic caused by COVID - 19, the virtual educational modality was an outlet to continue with classes in a context of health emergency, however all this has resulted in a significant change in the teaching-learning processes in which neither the academics nor students were prepared for it, coupled with this, a return to the face-to-face modality is planned, which implies a series of changes in the perception of higher-level students regarding the uncertainty of a possible this return due to the uncertainty of the sanitary protocols and the emergence of new strains of Sars Cov 2. In order to deepen this context, this descriptive, exploratory and mixed investigation is carried out, the objective of which is to analyze the experiences of the students taking into account the adaptation to the new virtual modalities, identifying the factors of concern and acceptance before and I return to the classrooms of the Faculty of Administrative and Social Sciences of the Universidad Veracruzana. The main results show that despite the uncertainty, students consider the return to face-to-face classes propitious, concluding that the relationship between the perceptions and experiences of the students directly influence the interest of returning to classes under the face-to-face modality. Finally, the statistical hypothesis test determines that more than 70% agree on the return in face-to-face mode.

Keywords: Self-study, Social and emotional learning, online learning, vocational training, teaching methods.

Resumo

Em decorrência da pandemia causada pelo COVID-19, a modalidade educacional virtual foi uma saída para dar continuidade às aulas em contexto de emergência sanitária. Porém, isso trouxe como consequência uma mudança significativa nos processos de ensino-aprendizagem, para os quais nem os acadêmicos nem os alunos estavam preparados. Além disso, foi planejado um retorno à modalidade presencial, o que implicou uma série de mudanças na percepção dos alunos de nível superior quanto à incerteza de um possível retorno. Isso se deve à falta de certeza nos protocolos de saúde e ao surgimento de novas cepas de SARS-CoV-2. Para aprofundar esse contexto, realiza-se uma pesquisa do tipo



descriptiva, exploratória e mista, com abordagem quantitativa. O objetivo é analisar as percepções dos alunos levando em consideração a adaptação à modalidade virtual, identificando os fatores de preocupação e aceitação antes do retorno às salas de aula da Faculdade de Ciências Administrativas e Sociais da Universidade Veracruzana. Os resultados mostram que, apesar da incerteza, os alunos consideraram favorável o retorno às aulas presenciais, concluindo que a relação entre as percepções e vivências dos alunos influencia diretamente no interesse pelo retorno às aulas presenciais. Por fim, o teste de hipótese estatística determina que mais de 70% concordam com o retorno na modalidade presencial.

Palavras-chave: Autoestudo, aprendizagem social e emocional, aprendizagem online, formação profissional, métodos de ensino.

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Introduction

After the arrival of the coronavirus COVID-19, education was affected by the health emergency, which implied the implementation of a health protocol to safeguard the integrity of the student, academic, and administrative body. It was decided to implement the distance education model, teaching virtual classes on the platforms of the educational institutions. In the case of the Universidad Veracruzana (UV), the use of the Eminus virtual educational platform was promoted, which turned out to be a success for the institution, allowing teachers to teach their classes and evaluate students under this modality.

Despite the fact that the initial measures carried out by the UV were correct for the development of the teaching-learning process of the students, as the months passed, the scenario that seemed strengthening for the virtual modality began to turn chaotic. Online classes wreaked havoc on students' preparation, as they faced gaps such as internet access, electrical issues, access and use of technological resources, among others. In addition to these existing gaps, other detracting factors arose, such as the prolongation of the pandemic, which generated uncertainty in university students by not knowing the possibility of returning to the classroom, and the emotional health of students was compromised by confinement.

Therefore, it is important to consider what Aguilar (2020) mentions about the learning process, which goes beyond school education. However, it is in the educational institution where the student learns to interact with other classmates who differ from him in various

aspects, such as beliefs, habits or customs. Therefore, the educational institution is part of the integral formation of the student until he obtains his philosophical space when relating to others.

In response to this problem, the present investigation raises some variables involved in the process of returning to classes at the UV, and specifically in the Faculty of Administrative and Social Sciences (FCAS), with the aim of knowing in depth the perceptions and daily experiences of students, as well as the measures and protocols implemented by the academic entity. It is understood that the outlook for the return to face-to-face classes was uncertain, for which reason the study carried out on the FCAS students will be analyzed, since it was necessary to consult the university students to incorporate their opinions and propose a protocol that would respond effectively to the needs of the students, guaranteeing a successful return to classes.

Therefore, the study aims to answer the research questions about the relationship between the perceptions and experiences of the students and how these influenced the interest in returning to face-to-face classes, and in a quantitative approach, how many of them considered it favorable.

Conceptual framework

Educational modalities

The World Health Organization (WHO) defines the global spread of a new disease as a pandemic (Gazca, 2020). SARS-CoV-2 originated on November 17, 2019 in China, with the first case coming from Hubei, Wuhan. As a result, the ways in which society interacted were modified, directly affecting the general population in various areas, such as finance, health, the economy, among others (Forbes, 2020).

One of the sectors most affected worldwide was education, since the health emergency caused a change in the pedagogical methods of educational systems, as well as the closure of institutions as a measure to contain the number of infections. This strategy not only represented a challenge for the traditional educational structure, but also generated changes in the perceptions of university students regarding the acceptance and adaptation of virtual classes.

Initially, we find the face-to-face modality, known as the "traditional form", which implies the attendance of students at universities for all classes according to the study plans (IPLACEX, 2022). This face-to-face modality is based on the social interactions that are

established within the educational classrooms. On the other hand, the blended modality has become popular in recent years and consists of education being carried out at home, with the exception of certain periodic sessions in which students must necessarily attend class (Medina, 2020). This modality has become a form of mediation in the new return to normality strategies, since the use of digital tools has implied a significant change in the establishment of educational strategies. In this sense, the virtual classroom has played a leading role, since it allows students to access the educational resources of the subject through the Internet, the monitoring of the facilitator and a variety of tools that support their learning process, such as content , forums, podcasts, videos, activities, among others. This facilitates an adequate teaching-learning process. (Barrera y Lugo-López, 2019).

Crisol-Moya, Herrera-Nieves and Montes-Soldado (2020) warn that learning under the online educational modality is carried out in the virtual classroom, considered as a technological platform for education with a knowledge management system in synchronous or asynchronous modality. In this environment, facilitators and students play new roles to achieve the pedagogical objective. Knowledge is transmitted through digital educational resources proposed by content experts, who are academics specialized in the discipline and participate in the development of subject content, activities, and assessments.

In other words, perception is understood as the "inner sensation that results from a material impression produced in the bodily senses" (DLE, 2014). Although this conceptualization arises from an analytical process, students' perceptions of virtual education are established in terms of adaptation or resilience.

According to Castellano, Almagro and Fajardo (2021), one of the elements that has boosted the acceptance and resilience of students towards virtual learning models is the role that information and communication technologies (ICT) have played in the higher level educational environment and in general in daily activities. These technologies are a fundamental tool that contributes to virtual education being accepted and incorporated into the teaching-learning processes.

Contextual Framework

Covid-19

At an international level, the reopening of the various schools in the different educational sectors has implied the increase in hygiene and protection measures against COVID-19, as well as the implementation of a strict safety protocol and vaccination strategies. According



to The New York Times (2020), the reopening of schools has been a step towards normality in a completely changed world, where the virus has killed more than 850,000 people and infected 25.4 million.

At the national level, the protocol designed by the Ministry of Public Education (SEP) stood out for the distribution of face masks, antibacterial gel and the availability of thermometers to measure the temperature before entering the school. Emphasis was also placed on constant hand washing (Morán, 2021). Social distancing was established, but it is not known how this rule was met if classes were attended in the same way as before the pandemic in the same spaces. Therefore, there was no clear action plan for a safe return.

The return to the classroom was established at the time as feasible by the federal government; however, most of the autonomous higher education institutions had deferred the return to face-to-face classes because they have the power to make decisions in such situations. In particular, some private institutions opted for a staggered return, while others of public origin established face-to-face attendance in order to carry out experimental practices or exams.

Regarding the return to face-to-face classes in higher education institutions, one of the main arguments in favor was the growing emotional disturbance experienced by students. This situation was present during the pandemic, as mentioned by Alarcón (2019), in which university students presented more intense cognitive and affective effects. In addition, behavioral disorders, aggressiveness, sexual promiscuity, withdrawal, mood swings, among others, were frequent. All of this leads to a prominent global burden of depressive illness, which can trigger suicidal thoughts or self-destructive acts.

In turn, social isolation as a side effect of health strategies has caused psychological impacts that increase exponentially. Pinargote-Baque and Cevallos-Cedeño (2020) mention that there are physical effects such as eye fatigue, tension, malnutrition, obesity, among others. In the psychological field, anxiety, depression, learning problems, among others; and, finally, in the social aspect, problems such as isolation, family conflicts, legal problems, among others, are identified.

Within the framework of the investigation, the return to classes in face-to-face mode was studied and analyzed to ensure a safe return to classrooms, both for students and for teachers and administrative staff of the Universidad Veracruzana (UV). Therefore, a space and a temporality must be delimited to describe these aspects from their local context. Therefore, the research is carried out at the Faculty of Administrative and Social Sciences (FCAS) of the Xalapa Region, which remained closed to face-to-face classes since mid-March 2019 due

to the COVID-19 pandemic until July 2022. The situation of the students generated uncertainty regarding the question of what the return to the classroom will be like, despite the fact that the pandemic has not ended according to the World Health Organization.

Referential framework

Veracruz University

Regarding the UV, we can point out that it is made up of five regions: Xalapa, Poza Rica-Tuxpan, Veracruz, Orizaba-Córdoba and Coatzacoalcos-Minatitlán. Of these regions, Xalapa has an enrollment of 27,113 students in the 2020-2021 period (Institutional Development Secretariat, 2021). As for FCAS, it is estimated that the total number of students who would return to face-to-face classes would be 1,246 students from the Political Science and Public Management, International Business Administration, Human Talent Development in Organizations, and Advertising and Public Relations careers.

Method

This research is a study based on descriptive, exploratory, explanatory and mixed approaches. From the contextualization of the main problem, under an investigative, theoretical and conceptual construction, it allowed generating a general deduction to one in particular. With the help of the UV and inspired by the instruments developed in the last month by the Academic Secretariat and the General Directorate of School Administration of this same institution, it was decided to create in a homogeneous way an instrument that would mainly capture the vision, perception, honesty and trust of the FCAS students belonging to the UV before the return to classes and face-to-face activities, identifying and including dimensions with specific indicators to the study.

Due to the above, the objective of the research is to analyze the perception of FCAS students at the UV in areas such as immunization to SARS-CoV-2, economic factors, capacity and protocol security of health in the faculty, as well as the adaptation of classes in virtual mode. Based on the results obtained, a diagnosis can be made regarding the need to return to face-to-face classes, suggesting that correct planning be carried out before the reincorporation of students in the institution.

Instrument design

The instrument that was used for data collection was structured based on a mechanism implemented by the Universidad Veracruzana (2021) called "Second survey on the safe return to face-to-face classes", which contemplated the questions that are displayed in table 1.

Table 1. Survey “Second survey on the safe return to face-to-face classes”

| Items | Options |
|---|--|
| 1.- Have you already been vaccinated against COVID-19? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 2.- Wich vaccine did you receive? | <input type="checkbox"/> Sinovac <input type="checkbox"/> Astra Zeneca <input type="checkbox"/> CanSino <input type="checkbox"/> Sputnik V <input type="checkbox"/> Pfizer/BioNTech <input type="checkbox"/> Moderna <input type="checkbox"/> Johnson & Johnson <input type="checkbox"/> Covaxin <input type="checkbox"/> None |
| 3.- Do you have the complete vaccination schedule? (Single dose or double dose depending on the vaccine received) | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 4.- During the last month, have you gotten sick from COVID-19? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 5.- Before the return to face-to-face classes, select the options that apply in your case | <input type="checkbox"/> My conditions are favorable to return to face-to-face classes. <input type="checkbox"/> I have to change my place of residence. <input type="checkbox"/> I have little time (I work, take care of a relative, etc.). <input type="checkbox"/> I need financial resources. <input type="checkbox"/> I am afraid of infecting myself. |

Source: Second survey on the safe return to face-to-face classes (Universidad Veracruzana, 2021).

Based on the items in Table 1, the instrument was adapted with six items, two of which involved criteria of categorical variables such as enrollment and gender, to establish

comparison parameters within the students that make up FCAS. On the other hand, the student perception of the change given by virtual classes in their daily lives was contemplated, as well as the conditions and intentions that led to the return to face-to-face classes. The complement of the items is shown in Table 2.

Table 2. Survey “Second survey on the safe return to face-to-face classes”

| Items | Opciones |
|---|--|
| 6.- Registration number | <input type="radio"/> S16 <input type="radio"/> S17 <input type="radio"/> S18 <input type="radio"/> S19 <input type="radio"/> S20 <input type="radio"/> S21 |
| 7.- Gender | <input type="radio"/> Female <input type="radio"/> Male |
| 8.- Do you think that the faculty has adequate facilities for the return to face-to-face classes? | <input type="radio"/> Yes <input type="radio"/> No |
| 9.- On a scale of 1 to 5, how would you feel in a classroom? | Very insecure (a) 1 2 3 4 Very safe (a) 5 |
| 10.- During the contingency period, did you adapt to classes in virtual mode? Yes, No, Why? | Open answer |
| 11.- Do you agree with the return to face-to-face classes? | <input type="checkbox"/> Yes <input type="checkbox"/> No |

Source: Self made

In the final version of the instrument, items with closed answers and two open ones were considered, with which data can be obtained for a quantitative and qualitative analysis. It was applied through the Google Forms platform, disseminated through social networks and applied to FCAS students.

Definition of the population and sampling

Higher level FCAS students were identified as the study population. The FCAS enrollment is 1,246 students from the period August 2021-January 2022, corresponding to the five educational programs offered by the faculty.

To calculate the sample, the simple random sampling method for finite populations was applied, following the provisions of García-García, Reding-Bernal and López-Alvarenga (2013). In this sense, the sampling assessment should determine the number of participants included in the analysis. Consequently, an accepted estimation error of 7% was considered, with a confidence level of 93%. As a result, a sample of 147 students was obtained.

Results

It corresponds to state the descriptive results of the applied survey, starting with the general data and later the variables. Table 3 illustrates the characterization of the sex and enrollment of the students participating in the survey. It stands out that 31.7% are men and 68.3% are women. A greater participation is observed on the part of the students of the S21 enrollment with 37.5%; subsequently, the S20 generation owns a 28.2% stake; enrollment S18 has 15.8% and S19 with 17.2%; Finally, there was a minimum percentage from the S16 enrollment, obtaining only 1.1% of student participation.

Table 3. Frequency of categorical variables

| Variable | | N | % | Variable | | N | % |
|----------|----------------|-----|------|----------------------------|-----|----|------|
| Genre | Male | 47 | 31.7 | Registrati on number | S16 | 2 | 1.1 |
| | Female | 100 | 68.3 | | S17 | 1 | 0.2 |
| | Did not answer | 0 | 0 | | S18 | 22 | 15.8 |
| Total | | 147 | 100 | | S19 | 25 | 17.2 |
| | | | | | S20 | 41 | 28.2 |
| | | | | | S21 | 55 | 37.5 |

Source: Self made (2021)

A significant fact is that 96.5% of the student population received some of the existing doses to counteract COVID-19, leaving 3.5% that did not receive any dose.

Table 4 shows the type of vaccine that the students have received, in which the Pfizer-BioNTech vaccine stands out with 62.2%, with Johnson & Johnson having the lowest application with only 0.3%.

Tabla 4. Vaccine applied to students

| Vaccine | Percentage % |
|-------------------|--------------|
| Pfizer-BioNTech | 62.2 |
| CanSino | 18 |
| Astra Zeneca | 14.2 |
| Sinovac | 2.4 |
| Moderna | 1.1 |
| Sputnik V | 0.5 |
| Johnson & Johnson | 0.3 |
| None | 1.3 |

Source: Self made (2021)

Regarding the complete vaccination scheme, whether single or double dose, 86.3% of the students have a complete vaccination scheme received in any of its doses. However, it is exposed that 13.7% do not fully have their vaccination process.

In the question about whether students have gotten sick from COVID-19 in the last month, almost the entire student population (98.4%) has not gotten sick, while a minimum percentage of 1.6% has been infected in the last month of October.

Regarding the question about the different alternatives that each student has to return to face-to-face classes, they responded that 57.8% of the students are in favorable conditions to return to face-to-face classes. In contrast, 28.2% opted for the option of having some fear of getting infected (public transport, faculty or classroom); subsequently, 26.9% established that they have to change their place of residence; 14% lack economic resources and, finally, 12.6% responded that they have limited time (caring for a relative, work, among others), which would complicate their return to face-to-face classes.

A fundamental aspect for the return to face-to-face activity was regarding whether the faculty has the adequate facilities for the return to classes under the new normality. In this sense, 71.8% of the student population commented that the faculty does have adequate facilities for the return to face-to-face classes, while 28.2% deduce that they do not have adequate spaces for a possible return to face-to-face classes.

In the question about giving an answer on a scale from 1 to 5, where 1 is very insecure and 5 very secure, it was identified that 22% responded with 5, later 27.3% with 4, 37% with 3, 10.7 % with 2, and 2.9% of the student population responded with 1.

Regarding the period of confinement, the adaptation to classes in virtual mode was questioned. The question applied to the students allowed them to openly express their opinion about the adaptation that they have generated throughout this time in their classes. Based on

the answers, the grouping of those that had similar elements was carried out and some favorable answers are presented below.

- Yes, because assistance was immediate and at the same time, more easily.
- Yes, because it is easy for me to work because my financial situation is complicated.
- Yes, I have internet access, as well as devices to be able to connect to my classes.
- Yes, teachers modify the lessons in such a way that they are understood.
- Yes, I consider that the information provided was useful for my adaptation, we also had a way to communicate with the staff in case there were any doubts, however, it does not eliminate the fact that it is not my desired modality.

Regarding the same questioning, there were negative responses to this modality of learning through digital platforms, the same action of grouping the similar responses of each student was carried out. The answers and positions of the students were the following:

- No, I get distracted a lot.
- It never stopped being complicated because of what it means to have the light of the computer in front of you for so many hours.
- I developed muscle pain in my neck and back.
- My stress levels were higher.
- No. Despite completing most of the activities, it was difficult for me to connect to all the classes due to connection problems in the area where I live, so I have to be constantly on the move.
- No because I don't have the same interaction with my teachers and classmates
- No, since the teaching and disposition on the part of the teachers was terrible, in addition to the fact that the modality required much more autonomy and despite the fact that we carried out research and activities, we needed the guidance of the teachers.
- ● No, studying in virtual classes doesn't really motivate me, it discourages me a lot and I think I don't learn the same way.
- No, because the pandemic has affected my mental health a lot and now it's too hard for me to concentrate and find motivation and energy for classes.
- No, they are stressful and I don't learn the same way.

In this sense, it is observed that 57.14% of the students had favorable experiences in the process of adapting to virtual classes, mostly thanks to the availability of ICT, while 40.81% did not perceive a favorable experience in this same mode.

Finally, one of the most important questions was regarding whether they agreed to return to face-to-face classes. The position held by the students focused on the issue of "return to school" reveals that 76.6% were in favor of returning to the face-to-face modality. On the other hand, 23.4% disagreed with their return to FCAS, which generated some controversy during the decision-making process.

Correlations between variables

Firstly, non-parametric inferential statistics were applied, making use of Kendall's Tau-b methodology for correlational calculations, since the variables that were analyzed are of the ordinal type in square tables.

The calculation of the correlation consisted of determining the existence of a relationship between the students who are vaccinated against COVID-19 and their preference in returning to school under the face-to-face modality. The hypotheses are the following:

H0: There is no relationship between the variable students who are vaccinated against COVID - 19 and the variable preference to return to classes in person.

H1: There is a relationship between the variable students who are vaccinated against COVID-19 and the variable preference to return to classes in person.

If the next p-value is <0.05 H0 is rejected; otherwise it is accepted.

Kendall's Tau-b Method

Table 5. Variable correlation of being vaccinated and preference to return to class under the face-to-face modality

| Correlations | | | | |
|------------------|---------------------|-------------------------|------------------|---------------------|
| | | | Being vaccinated | Face-to-face return |
| Tau_b de Kendall | Being vaccinated | Correlation coefficient | 1.000 | -.107 |
| | | Sig. (bilateral) | . | .198 |
| | | N | 147 | 147 |
| | Face-to fase return | Correlation coefficient | -.107 | 1.000 |
| | | Sig. (bilateral) | .198 | . |
| | | N | 147 | 147 |

Source: Self made SPSS (2021)

Based on the results, the p-value “Sig. (bilateral)” =.198 > .05, which proves that H0 must be accepted, which shows that there is no significant relationship between students who are vaccinated against COVID-19 and their preference to return to classes under the modality face-to-face Likewise, the value of the correlation coefficient $t=-.107$, which means very low negative correlation between the variables, so a relationship between the variables analyzed cannot be determined.

A second case of correlational analysis was to determine the relationship between the variable referring to whether the students consider that the faculty has adequate facilities for the return to face-to-face classes with the variable how safe the student feels in the classroom. classes, for this purpose non-parametric inferential statistics were again applied but, implementing Kendall's Tau-c methodology since the tables are not squared, the hypotheses are the following:

H0: There is no relationship between the variable adequate facilities for the return to class and the variable security of the students in the classrooms to return to classes under the face-to-face modality.

H1: There is a relationship between the variable adequate facilities for the return to class and the variable security of the students in the classrooms to return to classes under the face-to-face modality.

If the next p-value is <0.05 H_0 is rejected; otherwise it is accepted.

Kendall's Tau-c method

Table 6. Cross table between the variable adequate facilities for the return to class and the variable security of the students in the classrooms to return to classes under the face-to-face modality

| | | Variable security of students in classrooms | | | | | Total |
|-------------------------------|---|---|----|----|----|----|-------|
| | | 1 | 2 | 3 | 4 | 5 | |
| Variable adequated facilities | 1 | 0 | 4 | 28 | 44 | 27 | 103 |
| | 2 | 4 | 13 | 22 | 3 | 2 | 44 |
| Total | | 4 | 17 | 50 | 47 | 29 | 147 |

Source: Self made SPSS (2021)

Table 7. Symmetrical measurements

| | | Value | Asymptotic standard error ^a | T approximated ^b | approximate significance |
|--------------------|------------------|-------|--|-----------------------------|--------------------------|
| Ordinal by ordinal | Tau-c de Kendall | -.556 | .071 | -7.804 | .000 |
| N valid cases | | 147 | | | |

Source: Self made SPSS (2021)

As can be seen in Table 7, the result of the p-value “Sig. (bilateral)” $=.000 < .05$, therefore H_1 is accepted, stating that there is a relationship between the variable adequate facilities for returning to class and the variable security of students in the classrooms to return to classes under the face-to-face modality. In other words, the perception of the students is that the FCAS has adequate facilities for going back to school, so they feel safe in returning in person. Likewise, the value of the correlation coefficient is $-.556$, establishing a moderate negative correlation between the variables, so that a relationship can be determined between the variables analyzed.

Statistical hypothesis test

In other words, the research focused on verifying if the students agreed to return to classes under the face-to-face modality, consequently, a statistical hypothesis test was carried out on the preference of the students to return to said modality.

As indicated by Inzunsa and Jiménez (2013), hypothesis tests are established as a decision-making between two statements considering an alternative hypothesis (H1) that is the negation or complement of the null hypothesis (Ho), for which regions are specified. of rejection and non-rejection on the sampling distribution of the test statistic and the mistakes that can be made.

The statements of hypotheses defined are the following:

H0: Less than 70% of students did not agree to return to classes under the face-to-face modality

H1: 70% or more of the students agreed to return to classes in person.

Table 8. Statistics for a sample

| | N | Average | Desv. Desviation | Desv. Average error |
|--------------------------------|-----|---------|---------------------|---------------------|
| Results obtained from the test | 147 | 1.21 | .409 | .034 |

Source: Self made SPSS (2021)

Table 9. Test for a sample

| | Test value = .70 | | | | | |
|--------------------------------|------------------|-----|---------------------|--------------------------|--|----------|
| | t | gl | Sig. (bilateral) | difference of average | 95% confidence interval of the difference | |
| | | | | | Lower | Superior |
| Results obtained from the test | 15.132 | 146 | .000 | .511 | .44 | .58 |

Source: Self made

Based on the results shown in tables 8 and 9, the statistical test for proportions indicates that the null hypothesis H0 should be rejected, which points to the conclusion of accepting H1, therefore 70% or more of the students were agree to return to the modality of face-to-face classes, with a significance level of 5%.

Discussion

The purpose of this research was to distinguish and describe those perceptions that influence the academic activities of university students. It was intended to investigate the events that occurred in the daily lives of the sample studied in relation to university tasks. In this sense, the daily routines of students are affected by risk factors that hinder the processes of reintegration into the new normality.

In addition, the factors associated with stress, distraction, eye fatigue and learning problems that contribute to the rejection of the pedagogical methods of the virtual modality and, therefore, to the need for students to return to the classroom were recognized. In person, coinciding with the research by Pinargote-Baque and Cevallos-Cedeño (2020).

In order to have greater certainty about the return to classes under the face-to-face modality, it is necessary to continue with the present investigation in terms of assessing what the university authorities should consider for a safe return, implementing all the pertinent sanitary measures and applying the necessary protocols in case of detecting any type of contagion among students, teachers or administrative staff. This is especially important as winter approaches, when respiratory diseases are more common.

Conclusions

The research work concludes regarding the perceptions of the student body, which are divided into two aspects. On the one hand, the ease or complexity in the use of ICTs and the infrastructure they have are established, since the conditions are not the same, which made the teaching-learning processes difficult and, therefore, generated the need of a return to face-to-face classes.

Regarding the results obtained, it is observed that just over half of the students have had favorable experiences in virtual classes. However, approximately 7 out of 10 students were in favor of returning to face-to-face classes, although only 6 out of 10 stated that they were in favorable conditions to return. In addition, it can be concluded that a favorable situation for the return to face-to-face classes is that practically 9 out of 10 students have the complete vaccination scheme, which facilitated a safe return following the measures implemented in the "guidelines for a responsible return" protocol. to face-to-face university activities".

In the same sense, the correlation analyzes show, on the one hand, that the fact that students are vaccinated is not related to their interest in returning to classes in person. However, in the

case of those who perceive that the facilities are ready for the return to face-to-face classes, this provides them with security to avoid possible contagion of COVID-19 in the classrooms and spaces of the FCAS.

The findings of this research demonstrate the interest in examining the possibilities offered by the virtual modality from the experiences of the students, recognizing at all times the diversity of perceptions, circumstances and events that occur in online courses.

Finally, we can infer that, based on the results, it is concluded that FCAS students are in favor of returning to classes under the face-to-face modality. Therefore, it is up to the university authorities to generate favorable conditions, applying sanitary measures and protocols to avoid possible infections as much as possible.

Future lines of research

Based on the results, it corresponds to future lines of research to evaluate the learning that students have had under the virtual modality. In addition, socio-emotional studies should be carried out on the current learning process and the way in which they relate to their peers and the academic community in general.

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