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## School learning barriers in higher education students

## Barreras de aprendizaje escolar en estudiantes de educación superior

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#### **Abstract**

### The main objective of this article was to compare the perception that the college student has with the scholar learning barriers. The methodology that was used was the quantitative, observational, transversal, descriptive and comparative. The compilation of this info was carried out through an instrument with 11 learning barriers questions of the academic environment, with 320 surveys in phase 3 of the Covid-19 Pandemic, applied to the faculties of Ciencia, Educación y Humanidades, Sistemas, Ingeniería, Mercadotecnia and Jurisprudencia of the Universidad Autónoma of Coahuila, the method of sampling that was utilized was not probabilistic through the strategy of sampling for convenience. The statistical techniques that were applied were the descriptive through frequencies and percentages, comparative with Kruskal-wallis method for independent samples and Mann Whitney U for two independent samples. The contribution of the study lies in that the students from faculty de Sistemas differ from the ones of the faculties of Mercadotecnia, Educación, Ingeniería and jurisprudencia in that they consider in large extent that the educational and pedagogical practices during the hybrid modality for the COVID-19 Lockdown, has been a learning barrier.

#### Learning Barriers, School, College Education.

#### Resumen

El objetivo general del presente artículo fue contrastar la percepción que tiene el estudiantado de educación superior con las barreras de aprendizaje escolar, la metodología que se utilizó fue cuantitativa, observacional, transversal, descriptiva y comparativa. La recopilación de la información se realizó a través de un instrumento con 11 reactivos de barreras de aprendizaje del ámbito escolar, con 320 encuestas en la fase 3 de la pandemia por el COVID-19, aplicadas a las facultades de Ciencia, Educación y Humanidades, Sistemas, Ingeniería, Mercadotecnia y Jurisprudencia de la Universidad Autónoma de Coahuila, el método de muestreo que se utilizó fue no probabilístico mediante la estrategia de muestreo por conveniencia. las técnicas estadísticas que se utilizaron fueron la descriptiva por medio de frecuencias y porcentajes, comparativo con la kruskal-Wallis para muestras independientes y U de Mann Whitney para dos muestras independientes. La contribución del estudio radica en que los estudiantes de la Facultad de Sistemas difieren del estudiantado de las Facultades Mercadotecnia, Educación, Ingeniería y jurisprudencia; consideran que en mayor medida que la calidad educativa y las prácticas pedagógicas durante el proceso de modalidad hibrida por el confinamiento COVID-19, han sido una barrera de aprendizaje.

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Barreras de aprendizaje, escolar, educación superior

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# Introduction Recent guidelines from

This article shows the perception of higher education students about the barriers to school learning that they have and are facing due to the COVID-19 pandemic; which are very varied and not precisely because of a disability condition.

The concepts of diversity and inclusion are associated with all students, whether they have Special Educational Needs (SEN) or not, since it deals with the barriers that children and young people experience in the educational and social environment, and with the forms of marginalization, exclusion and poor performance to which they may be exposed (Ainscow 2009; Azorín et al., 2017; Blanco, 2006; Blanco & Duk 2019; García, 2009; Rosselló, 2010; cited in Pérez & Uribe 2022).

The statistical analyzes carried out serve to observe the needs of the student body, and from this, build solutions in favor of quality and efficiency in education.

With working hypothesis: There are differences of opinion among higher education students regarding learning barriers.

Now, it is known that the coronavirus of 2019 spread to the whole world, which resulted in the suspension of essential activities such as school activities that contributed to learning barriers.

Regarding learning barriers, in the first instance the concept of Booth and Ainscow (2015, p. 9) is presented, the essence of their educational approaches for a few decades, it continues to be a central axis to understand the disadvantages and inequalities that exist. they are forming in the educational system, in many cases, by limiting participation and the possibilities of learning, thus achieving the depersonalization of the teaching to which they allude Echeita & Domínguez (2011): "do all the same, at the same time, with the same means or appealing to identical forms of motivation" (p. 29).

Also, according to the authors (Corrales et. al., 2017) comment that learning barriers can be conceptualized as the presence of contextual factors that hinder or limit full access to education and learning opportunities for children and young people. (p.5)

It should be noted that Covarrubias (2019) detects a classification of educational limitations, identifying that barrier can occur in different contexts or be generated by the different actors that surround the students.

Recent guidelines from the European Student Council (2017) emphasize that equal opportunities are crucial but not enough, because it is necessary to pursue "equity" in the objectives, contents and teaching methodologies. However, the results of the study by Barron (2022) show that the narratives, experience and academic training of teachers reveal that the greater the academic training in the field of inclusion, diversity and evaluation of learning, the practice of teaching is becoming more efficient, flexible and reflective in a diverse and inclusive setting.

#### Methodology to develop

The information was collected through an instrument with 11 items, with the question: on a scale of 0-10, a measure that considers that during the hybrid modality process due to the COVID-19 confinement, the following aspects of the field school have been a barrier in their learning:

inequity in learning, school desertion, work activity of students that is spliced with class schedules, diagnosis to identify if students have the possibility of learning under the virtual modality, measures implemented by the educational authorities for learning, quality of the teaching, pedagogical practice, reduction of attachment to school, educational practices established at the appropriate times, normal schedules for virtual classes, virtual tutorial support, additional expenses when carrying out education under the virtual and face-to-face modality. in addition to 3 general data, age, gender and faculty.

320 surveys were applied in phase 3 of the COVID-19 pandemic, to the faculties of Ciencia, Educación y Humanidades, Sistemas, Ingeniería, Mercadotecnia and Jurisprudencia de la Universidad Autónoma of Coahuila the sampling method used was non-probabilistic through the convenience sampling strategy. the statistical techniques that were used were the descriptive one by means of frequencies and percentages, comparative with the kruskal-Wallis for independent samples and U de Mann Whitney for two independent samples.

### **Results**

#### Descriptive analysis. frequencies and percentages

From a total of 320 subjects, the reading of frequencies and percentages is presented from the processing of 3 general data questions: gender, age and faculty. The sample is characterized by 56.25% being female, which represents a frequency of 180 and 43.75% being male, with a total of 140 subjects, aged between 17 and 47 years; being the ages of 19 and 20 years with the highest percentage, which is verified with 46.88%.

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The sample is made up of university students attached to five faculties of the Universidad Autónoma de Coahuila, among which are the Faculty de Ciencia, Educación and Humanidades with 24.06% (n=77); the Faculty of Ingeniería that registers el 11.88% (n=38); the Faculty of Jurisprudencia with 5% (n=16); the Faculty of Mercadotecnia that denotes a percentage of 25.94% (n=83) and finally, the

Faculty of Sistemas, where the largest number of students is located, which is manifested in a 33.13% (n=106).

#### **Comparative Analysis**

### Kruskal-Wallis Test for Independent Samples

The medians are compared and the statistical processing of the Kruskal-Wallis test is performed for several independent samples, with a significance level of  $p \ge 0.05$ .

The significant differences between the perception of the students of 5 faculties with the barriers of school learning from the educational quality and the pedagogical practice are shown.

#### - Educational quality

The average ranges of all the observations of the faculties are: Sistemas Md=60, Mercadotecnia Md=38, Educación Md=37, Ingeniería Md=25 and Jurisprudencia Md=4.

It is inferred that the students of the Faculty of Systems, consider to a greater extent that the educational quality during the hybrid modality process due to the COVID-19 confinement, has been a learning barrier.

#### Pedagogical practice

The ranges of the medians of the faculties are: Sistemas Md=66, Mercadotecnia Md=44, Educación Md=39, Ingeniería Md=27 and Jurisprudencia Md=4.

It is inferred that the students of the Faculty of Systems, consider to a greater extent that the pedagogical practice during the hybrid modality process during to the COVID-19 confinement, has been a learning barrier.

# Prueba U of Mann-Whitney for two Independent Samples

In order to know the faculties that show a significant difference with the barriers of school learning, the contrast test is carried out for two independent samples. U of Mann-Whitney, with a significance level of  $p \ge 0.05\%$ .

ISSN 2523-2495 ECORFAN® All rights reserved. The first contrast is made with of Mercadotecnia and Faculty of Sistemas with the learning barriers.

The Faculty of Sistemas according to the sum of ranks shows that they consider to a greater extent than educational quality R=8653, pedagogical practices R=8688 and normal schedules for classes during the hybrid modality process R=8771 during to confinement COVID-19, have been data learning barriers that differ with the Faculty of Mercadotecnia.

The second contrast is made with the Faculty of Ciencia, Educación y Humanidades and the Facultad of Ingeniería with the Faculty of Marketing. The Faculty the Ciencia, Educación and Humanidades according to the sum of ranks shows that they consider to a greater extent than the pedagogical practices R= 4798 during the COVID-19 confinement, they have been learning barriers data that differ with the Faculty of Ingeniería.

#### **Conclusions**

The working hypothesis is affirmed: There are differences of opinion among higher education students regarding learning barriers.

It is concluded that the students of the Faculty of Sistemas differ from the student body of the faculties of Mercadotecnía, Educación, Ingenieria and jurisprudencia; they consider to a greater extent that educational quality and pedagogical practices during the hybrid modality process due to the COVID-19 confinement have been a learning barrier.

In addition, the Faculty of Mercadotecnía perceives to a lesser extent than the educational quality it has received, in addition to the pedagogical actions that this student community has been granted and their established schedules have been barriers to their learning.

It is noted that the Faculty of Ingenieria considers to a lesser extent that pedagogical practices have been barriers to their learning, unlike the student body of the Faculty of Ciencia, Educación and Humanidades.

Due to the above, it is proposed that, in each faculty of the Universidad Autónoma of Coahuila, a diagnosis of needs be carried out with the purpose of making it clear which are the aspects that the student body detects as educational quality and pedagogical practice, so that from the detection of needs begins with actions that reduce those factors that affect learning barriers.

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#### References

Booth, T. & Ainscow, M. (2015). Guía para la educación inclusiva. Desarrollar el aprendizaje y la participación en los centros escolares. FUHEM/ OEI. http://www.fuhem.es/media/educacion/File/Guia\_Educacion\_Inclusiva\_FUHEM.pdf

Consejo de Estudiantes (2017), Draft conclusions of the Council and the representatives of the governments of the member states.

 $file: ///Users/lily/Downloads/conclusions \%\,20 of \%\,20 the \%\,20 council \%\,20 and \%\,20 of \%\,20 the \%\,20 representatives-c\_06220170225 en 00030007.pdf$ 

Corrales, A., Fernández, O. y Salazar, A. (2017). Barreras de aprendizaje: percepción de estudiantes en situación de discapacidad intelectual de un liceo de la comuna de Lebu, Región del Bio Bio. Universidad de Concepción. http://repositorio.udec.cl/bitstream/11594/3036/4/Te sis\_Barreras\_de\_aprendizaje\_percepcion\_de\_estudiantes\_en\_situacion\_de\_discapacidad\_intelectual.Im age.Marked.pdf

Covarrubias Pizarro, P. (2019). Barreras para el aprendizaje y la participación: una propuesta para su clasificación. ensech.edu. http://ensech.edu.mx/pdf/maestria/libro4/TP04-2-05-Covarrubias.pdf

Echeita, G. & Domínguez, A. B. (2011). Educación inclusiva. Argumento, caminos y encrucijadas. Aula. Revista de Pedagogía de la Universidad de Salamanca, 17, 23-35. https://dialnet.unirioja.es/servlet/articulo?codigo=37 70733

Pérez, C. R., & Uribe, N. (2022). Representaciones Sociales Docentes sobre la Evaluación Educativa en Chile, ¿ Aporte o Barrera para el Proceso de Inclusión Escolar? Revista Latinoamericana de Educación Inclusiva, 16(1), 113-130. http://www.rinace.net/rlei/numeros/vol16-

Piffre de Voban Barrón, N. (2022). Aulas inclusivas en educación superior: creencias y prácticas en la formación de formadores.

https://repositorio.uc.cl/xmlui/bitstream/handle/115 34/64491/TFE%20Entrega%20final.docx.pdf?seque nce=1.

num1/art6.pdf