

## Quality of university life in southern Sonora

### Calidad de vida universitaria del sur de Sonora

YOCUPICIO-BARRON, Josué†\*, QUIROZ-CAMPAS, Celia Yaneth and GAXIOLA-FLORES, Jesús Omar

*Instituto Tecnológico de Sonora, Unidad Navojoa, México.*

ID 1<sup>st</sup> Author: *Josué, Yocupicio-Barron* / ORC ID: 0000-0002-8254-4444

ID 1<sup>st</sup> Co-author: *Celia Yaneth, Quiroz-Campas* / ORC ID: 0000-0002-6068-1552, CVU CONAHCYT ID: 281305

ID 2<sup>nd</sup> Co-author: *Jesús Omar, Gaxiola-Flores* / ORC ID: 0000-0001-6690-7009

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#### Abstract

The objective of the study was to determine the quality of university life in southern Sonora through the application of a measurement instrument. The method used in the present investigation is mixed, non-experimental, transversal, for this work a sample of 372 students was selected, the confidence level was 1.96 (95%), the data collected through the questionnaire is made up of 32 questions in a Likert scale and 9 general multiple-choice questions on sociodemographic data. As a general result, an 83.76% quality of university life was obtained in students from the South of Sonora. In the general data obtained, 57.8% belong to the female sex and 41.7% to the male sex, with 0.5% identifying as non-binary, 60.5% corresponding to the age range between 18-20 years, 34.7% corresponds to the age range of 21-23 years, 2.2% is 27 years old, 1.6% corresponds to the age range of 24-26 years, 1.1% is less than 17 years old, 91.1% of the participants are single, 6.5% have a different marital status, while 2.4% are married.

#### Resumen

El objetivo del estudio fue determinar la Calidad de vida universitaria del Sur de Sonora a través de la aplicación de un instrumento de medición. El método utilizado en la presente investigación es mixto, no experimental, transversal, para este trabajo se seleccionó una muestra de 372 estudiantes, el nivel de confianza fue de 1.96 (95%), los datos recolectados mediante el cuestionario están conformado de 32 preguntas en una escala de Likert y 9 preguntas generales de opción múltiple en datos sociodemográficos. Se obtuvo como resultado general un 83.76% de calidad de vida universitaria en estudiantes del Sur de Sonora. En los datos generales obtenidos, el 57.8 % pertenecen al sexo femenino y el 41.7% del sexo masculino, habiendo un 0.5% que se identifica como no binario, el 60.5% corresponde al rango de edad entre los 18-20 años, el 34.7% corresponde al rango de edad de 21-23 años, el 2.2% tiene 27 años de edad, el 1.6% corresponde al rango de edad de 24-26 años, el 1.1% es menor a 17 años, el 91.1% de los participantes son solteros, el 6.5% tiene un estado civil distinto, mientras que el 2.4% es casado.

**Cross-sectional research, Trust, Quality of life**

**Investigación transversal, Confianza, Calidad de vida**

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\* Author's Correspondence (E-mail: [cjquiroz@itson.edu.mx](mailto:cjquiroz@itson.edu.mx), [celia.quiroz@itson.edu.mx](mailto:celia.quiroz@itson.edu.mx))

† Researcher contributing as first author.

## Introduction

It is of utmost importance to study the quality of life in university students, because nowadays, even with all the advances and existing facilities, there are many factors that influence young people that may not yet be known and it is believed that the quality of life is a factor that plays a very important role in different areas in the life of university students.

According to Medina et al., (2022) states that quality is vital in the life of a university student since during this stage people go through a very complex transition in which for some students many doubts arise in many aspects of their life.

Brito and Palacio (2016) mention that the quality of student life influences the academic performance of students, since a student with a better quality of life and with a good economic situation would have an outstanding academic performance or above average, in this study it was possible to demonstrate the opposite since the results of the research show that those young people who came from a low social stratum have a higher academic performance, this is related to the desire of young people to change their situation, and get ahead since they face with persistence and hope the difficulties, seeing in the study an opportunity to improve themselves; considering the most outstanding elements of the research carried out (Busón, 2023).

According to Peñaherrera et al, (2015), in recent years the quality of life has been playing an important role and increasingly gaining prominence as a factor that is a determinant in measuring productivity and quality of service of employees in their jobs, this is really worrying because it is said that quality of life has a great impact on job performance, in the particular case of this study is intended to assess the quality of life in university students and it would be important to detect how is the perception of the quality of life of students; considering conducting in-depth analysis regardless of the type of research to be performed (Felger, 2023).

In a research conducted by Quiroz et al (2021) found that the quality of working life of human capital is a fundamental pillar for any organisation.

Based on the research carried out on the problem of quality of student life in university students, it is necessary to apply corrective actions to reduce or overcome the intrigue of students in the process of adaptation from student to worker, as well as to find a job field within the area they specialise in; in addition to considering the quality of research as indicated by (Payne, 2023).

In recent years the quality of life of individuals has been related to the issue of financial education, taken relevance around the world, in addition to developing skills and attitudes (Felix et al., 2019); In addition to considering possible illustrative photographs of this type of research to make them more visual (Pesebre, 2023).

## Methodology to be developed

According to Sampieri (2018) this research is mixed since the objective of the research is to analyse the quality of student life in universities in southern Sonora. We worked with qualitative and quantitative data, considering a non-experimental design that will be applied transversally, since the research topic has sufficient theoretical support.

Lasa (2022) defines non-experimental research as research whose main objective is to describe the characteristics, attributes, traits and particularities of a population.

According to Cabezas et al. (2018), a non-experimental research is one in which the variables are not manipulated, and its purpose is to observe the phenomena and how they behave in their natural environment and then analyse them. In this sense, non-experimental research can be: cross-sectional and longitudinal.

The present research was designed under the methodological approach of the mixed approach, according to Hamui-Sutton (2013) since this is the one that best adapts to the peculiarities and needs of the study; since it provided an answer to the research question: What is the level of university quality of life of students in southern Sonora? and the hypothesis of Ho. The quality of university life of students from Southern Sonora is favourable and H1 The quality of university life of students from Southern Sonora is not favourable.

The statistical package SPSS version 26 was used, where a general numerical result of the study and the result of the variables taken from the instrument were obtained, which are: Quality of student life, university identity and academic performance.

According to Albán et al. (2020), the scope of this study was descriptive in that it aimed to analyse the characteristics of the student population of different universities without going into the relationship between them in depth.

The study population consisted of 1356 university students from various universities in the northwest of the country (Mexico), the relevant demographic characteristics of the study subjects are as follows: age, sex, marital status, educational institution to which they belong, type of university, educational programme to which they belong, semester they are studying, type of student (foreign-local), and whether they practice any sport.

Creswell (2012) defines a sample as a small set of data that the researcher will select or choose from the population by using a predefined selection method.

For this work a sample of 372 students was selected as according to Stevenson (1981) the Confidence Level of 1.96 (95%). Using the non-probability sampling method, which is defined as a sampling technique in which the researcher selects his sample based on a subjective research judgement, rather than by random selection which could be carried out by using specialised software, the non-probability method does not ensure that all subjects in the population have an equal chance of participating in the research.

Reliability index and confidence level:

The level of reliability and confidence level was calculated with the following formula (Stevenson, 1981).

$$n = \frac{D^2 pq N}{e^2 (N-1) + D^2 pq}$$

$$n = \frac{1.96^2 (0.5)(0.5)(8000)}{0.05^2 (8000-1) + 1.96^2 (0.5)(0.5)}$$

In which the following variables are involved:

Variables	Meaning	Values
N=	Population.	8000
D=	Standard deviation (Confidence level).	1.96
e=	Expected error.	5.0%
p=	Proportion in favour.	0.5
q=	Proportion against.	0.5
n=	Sample size.	367

**Table 1** Sample estimate of quality of life in Navojoa students

Values used for the study: The confidence level used in the study is 1.96 (95%). According to Martínez et al. (2017), a confidence interval (CI) represents a range of values calculated by a statistical method (population mean, median, variance, probability or other unknown quantity), theoretically including true parameters, after repeating the sampling with a certain probability. A confidence level of 95% means that the confidence interval covers 95 true values out of 100 studies conducted.

According to Briones (2002), reliability in qualitative research refers to the degree of confidence to the degree that a researcher's results can be accepted in accordance with the procedures used to conduct the research.

Validity is an important property to disclose because it allows the reader to know the level of precision and evidence of the instruments used (Ventura, 2017).

### Instrument

The instrument has 9 general questions and 32 questions divided into three dimensions, quality of student life (10 items), university identity (12 items), academic performance (10 items), etc. The types of answers with which the questions are evaluated is the Linkert scale (scale from 1 to 5) (in 32 questions), multiple choice (in 9 questions).

The reliability of the instrument was carried out through the Statistical Package for the Social Sciences SPSS version 26, determined from the Cronbach's alpha coefficient of .919, in the statistical package, 32 items of the instrument were entered, and more on the above will be developed soon.

The instrument used for this research has an alpha coefficient of .919 so we can say that the measurement instrument is excellent (George et al., 2003).

According to Simms et al., (2019), it was found that the more possible response options on the Linkert scale, the greater the coherence and reliability of the test in question, in this same study it was concluded that after six possible response options the benefits of using this type of scale decrease significantly, which is why for the conduct of this study we opted for a scale of 5 options to maximize the effectiveness and reliability of the instrument.

Matas (2018) mentions that if you want to obtain good quality data it is essential to make use of a Linkert scale, and one of the most effective and recommended formats for the development of this type of scales is the 5-choice scale.

The Linkert measurement scale used, which corresponds to the response options to the questionnaire, are:

Strongly agree

Procedure (Mixed process)

There is not really a pre-established process to follow when developing a mixed research work, as it is the result of a mixture of qualitative and quantitative approaches.

This type of study begins with the formulation of a problem that requires the use of both qualitative and quantitative approaches, and in order to do so, questions and objectives from both approaches must be formulated.

In the case of mixed research, a broad investigation is carried out, seeking to cover the largest amount of literature related to the problem posed, it is important to include qualitative, quantitative, mixed references and theories related to the research to be carried out, considering this whole process of added value with respect to the other techniques, due to the process used and the number of instruments applied.

Measuring or understanding human perceptions in any field may seem subjective. However, this type of research with methodological rigour makes it possible to strengthen them in the short, medium and long term (Galván et al., 2022).

Results and discussion.

This chapter shows the results obtained from 372 university students surveyed. The main objective is to obtain the percentage of quality of student life of university students, thus fulfilling the objective of this research, which was 83.76% within the total number of subjects surveyed, obtaining a good level of quality of student life.

In the general data obtained, 57.8% belong to the female sex and 41.7% to the male sex, with 0.5% identifying themselves as non-binary, 60.5% correspond to the age range between 18-20 years, 34.7% correspond to the age range of 21-23 years, 2.2% are 27 years old, 1.6% correspond to the age range of 24-26 years, 1.1% are younger than 17 years, 91.1% of the participants are single, 6.5% have a different marital status, while 2.4% are married, 68.8% do not play any sport and 31.2% play sport.

67.7% are local students, while 32.3% are foreign, 93% of the participants study in public universities, and the other 7% in private universities, 50.5% of the participants are ITSON students, 26.3% in UES, 11.6% in UNISON, 7.8% study in another university that is not listed, 1.6% study in ITH, 1.3% in VIZCAYA, 0.5% study in CEUNO and 0.3% of the students are from UAS.

24.5% are students of bachelor's degree in administration, 16.7% of bachelor's degree in education, 14% study another degree that is not listed, 12.9% bachelor's degree in public accounting, 8.3% industrial engineering, 5.6% software engineering, 5.4% bachelor's degree in psychology, 3.2% bachelor in law, 3% bachelor in civil engineering, 2.7% bachelor in international business, 1.6% bachelor in mechatronics engineering, 1.3% bachelor in economics and finance, 0.3% bachelor in business management, 0.3% bachelor in aerospace engineering, and 0.3 bachelor in chemical engineering.

25.5% are first semester students, 25.5% are fifth semester students, 23.4% are seventh semester students, 18.3% are third semester students, 3.2% are eighth semester students, 2.2% are fourth semester students, 1.6% are sixth semester students, 0.3% are second semester students.

### Results of the variables evaluated

Variables	Result
Quality of student life	4.02
University identity	4.25
Academic Performance	4.26

**Table 2** Results obtained from the variables of the instrument

Academic performance was the best evaluated variable with 4.26, followed by university identity with 4.25 and finally quality of student life with 4.02, considering that the highest value is 5.

### Conclusions

This research fulfilled the objective of evaluating the quality of life of university students and the general result was 83.76% of the level of quality of life in university students in southern Sonora, where the hypothesis of Ho is accepted. The quality of life of university students in southern Sonora is favourable.

The results of the three variables evaluated were as follows: Academic performance with 4.26%, followed by University identity with 4.25% and finally quality of student life with 4.02%,

Based on the results obtained by Blázquez et al., (2013) which obtained similar findings to the present study in some areas, they conclude as good quality of life based on the following parameters equal or greater than 80% is considered good quality of student life.

Comparing the results of this study with other similar studies in particular case with the region of Sonora, it stands out that the average value of overall quality of life was 8.3, with a high level of overall quality of life of students (Barreras et al., 2016).

The results obtained by González (2017) are lower than those of the present study, with an overall average of 70%, but they qualify this result as acceptable, since they found that students were satisfied with their university life and that these manifested a high degree of well-being in the variables studied.

According to studies conducted by Leong et al. (2021) on the quality of life in university students, they consider an average of 75% medium-high with similar characteristics to the research conducted in this study, so the results of this research are 83% overall average, emphasizing that it is in an accessible and high parameter, where other statistical tests can also be developed for further statistical interpretations such as artificial neural networks (Campas, et al., 2022).

Based on the results obtained and the analysis of these, the following recommendations are made:

The variable with the lowest results was quality of student life with a mean of 4.02, especially the items related to distance classes and the balance between student responsibilities and personal life, which is why it is recommended to teach as many classes as possible face-to-face, and always seek a balance between school activities and the student's personal life, so that the student is not absorbed by university responsibilities and this causes a poor quality of life for the student.

According to Lovón and Cisneros (2020) the mental health of students has been seriously affected by the virtualisation of classes, since based on a study at the Pontificia Universidad Católica del Perú (PUCP) 93.2% of students claim a greater academic load and many professors have not developed a good methodology for teaching this type of classes.

For other researchers it could be interesting in the future to do a similar research to this one. That is why certain points should be clear, this research was of mixed approach, the experimental design was used, which was applied in a cross-sectional and descriptive way, since it worked on true facts, so it is recommended that those interested in replicating or doing similar research, it is suggested to use a design similar to the one used in this research (Campas et al 2021).

Flores et al (2023) in their study found that the attitude towards doing research by students is not optimal.

The study conducted is an area of research that is updated from time to time according to the variables that affect the evolution of the human being. Its importance is not a subject that should be left aside, so the suggestion is to continue doing research according to the quality of student life, taking into account variables that arise over time, the work done is the tip of the iceberg on future research based on ideas for improving the quality of life of students.

Based on the results of the present study, the effects of the variables (quality of student life, academic performance and academic identity) on the quality of life of students are demonstrated, so that further investigation of the variables by specialists can generate a broader and more comprehensive picture of the things that affect students in their quality of life (Quiroz et al., 2022).

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